# 09_CEQA

CALIFORNIA COASTAL COMMISSION
SOUTH COAST DISTRICT
PO Box 1450
200 Oceangate, 10th Floor
LONG BEACH, CA 90802-4416
(562) 590-5071 FAX (562) 590-5084
**www.coastal.ca.gov**

PA-2004-169

August 18, 2009

# COASTAL DEVELOPMENT PERMIT EXTENSION

Re: Extension Request for Permit No. **5-07-085-E1**
Original Permit No. **5-07-085**
Original Permit Expiration Date: **September 5, 2009**
Extended Permit Expiration Date: **September 5, 2010**

Lennar Homes, Attn: Donna Kelly
Lm Cummings, Scala Real Estate Partners
18401 Von Karman, Suite 350
Irvine, CA 92612

Dear Lennar Homes, Attn: Donna Kelly

The Executive Director has determined that there are no changed circumstances affecting the conformity of the subject development with the California Coastal Act. No objections to this determination have been received at the Commission office. Therefore, the Executive Director grants an extension of the subject Permit, subject to the same conditions approved by the Commission, to expire on the Extended Permit Expiration Date indicated above.

Sincerely,
PETER M. DOUGLAS
Executive Director

By: KARL SCHWING
Orange County Area Supervisor

cc: Local Planning Dept.
Manatt, Phelps & Phillips, Attn: Susan Hori

RECEIVED BY
PLANNING DEPARTMENT
AUG 24 2009
CITY OF NEWPORT BEACH

**CALIFORNIA COASTAL COMMISSION**
South Coast Area Office
200 Oceangate, Suite 1000
Long Beach, CA 90802-4302
(562) 590-5071

**(5-07-085-E1)**

# NOTICE OF EXTENSION REQUEST FOR COASTAL DEVELOPMENT PERMIT

3 August 2009

Notice is hereby given that **Lennar Homes, Attn: Donna Kelly & LM Scala Real Estate Partners** have applied for a one-year extension of Coastal Development Permit **5-07-085**, granted by the California Coastal Commission on **September 5, 2007** for:

**Demolition of existing tennis complex and construction of 79 residential townhome units on a 4.25 acre site, including 3 buildings ranging from 50-60 feet in height above grade, totaling approximately 205,679 square feet and approximately 97,231 square feet of subterranean parking, landscaping, hardscaping, and open space, and payment of a $5,000,000.00 mitigation fee.**

At: **900 Newport Center Drive, Newport Beach (Orange County) APN 442-011-41**

Pursuant to Section 13169 of the Commission Regulations the Executive Director has determined that there are no changed circumstances affecting the proposed development's consistency with the Coastal Act. The Commission Regulations state that "if no objection is received at the Commission office within ten (10) working days of publishing notice, this determination of consistency shall be conclusive and the Executive Director shall issue the extension." If an objection is received, the extension application shall be reported to the Commission for possible hearing.

Persons wishing to object or having questions concerning this extension application should contact the district office of the Commission at the above address or phone number.

Sincerely,
PETER M. DOUGLAS
Executive Director

By: Karl Schwing
Supervisor, Regulation & Planning
Orange County Area

#0436-2006

# CITY OF NEWPORT BEACH

## PLANNING DEPARTMENT

PA 2004-169

August 20, 2008

Mr. Alfredo Ayuyao
Executive Vice President
Scala Real Estate
19200 Von Karman, Suite 400
Irvine, CA 92612

RE: Tentative Tract Map 16774 (Santa Barbara Condos)

Dear Mr. Ayuyao:

This is to confirm that Tentative Tract Map 16774 as approved by the City Council on January 10, 2006, and which would normally expire on January 10, 2009, per Condition # 3 of that approval, has been automatically extended for a period of 12 months per SB 1185 which added Government Code section 66452.21 to the Subdivision Map Act. This means that the expiration date for the map has been automatically extended to January 10, 2010. Government Code section 66452.6 also allows discretionary extensions for an additional year, which would extend the map until January 10, 2011.

Sincerely,

David Lepo

David Lepo,
Planning Director

cc: Jay Garcia, Zoning Administrator
Carol McDermott, Government Solutions

3300 Newport Boulevard · Post Office Box 1768 · Newport Beach, California 92658-8915
Telephone: (949) 644-3200 · Fax: (949) 644-3229 · www.city.newport-beach.ca.us

SCALA
REAL ESTATE PARTNERS

June 19, 2008

Rosalinh M. Ung
Associate Planner
**CITY OF NEWPORT BEACH**
3300 Newport Boulevard
Newport Beach, California 92663

**Subject:** **Santa Barbara Condominiums (PA2004-169)**
**900 Newport Center Drive**
**Development Agreement No. 2008-002**

Dear Ms. Ung:

Scala Real Estate Partners respectfully requests the June 19, 2008 scheduled hearing regarding the Development Agreement No. 2008-002 for the Santa Barbara Condominiums (PA2004-169) at 900 Newport Center Drive be continued to the Planning Commission meeting on July 17, 2008. The proposed continuance will allow Scala Real Estate Partners time to review and accept the proposed development agreement.

Thank you for your consideration of our request.

Respectfully submitted,

**SCALA REAL ESTATE PARTNERS**

Alfredo Ayuyao
Executive Vice President

cc Carol McDermott, Government Solutions

19200 VON KARMAN AVENUE | SUITE 400 IRVINE, CALIFORNIA 92612 tel 949.261.1400 fax 949.261.1401 www.scalarep.com

# CITY OF NEWPORT BEACH

## PLANNING DEPARTMENT

May 7, 2008

Carol Mentor McDermott
Government Solutions, Inc.
230 Newport Center Drive, Suite 210
Newport Beach, CA 92660

RE: Santa Barbara Condos – 900 Newport Center Drive, Newport Beach
Substantial Conformance Determination

Dear Ms. McDermott:

On February 8, 2007, the City of Newport Beach Development Review Committee (DRC) considered a request made by Government Solution, on behalf of Lennar Homes, for minor changes to the site plan and elevations that were approved by the City Council in January 2006, for the development of 79 condominiums known as the Santa Barbara Project located at 900 Newport Center Drive, in Fashion Island. The proposed modifications include the following:

- Installation of landscaped baffles on certain buildings along the golf edge.
- The elimination of balconies extending beyond the face of the building on the golf course edge.
- The elimination of the ground floor outdoor patios.
- The elimination of balconies on the mostsoutherly located building and replacing them with Juliet balconies.
- A minor reduction in the size of the plaza area.
- The pivoting of one of the buildings slightly away from the golf course.
- The shifting north of the remaining buildings approximately 10 feet.

These modifications were done to address the potential errant golf ball concerns raised by the Newport Beach Country Club. The DRC found the proposed modifications are minor; do not affect the overall project design, building placement and traffic and pedestrian circulation and therefore, determined the site plan is in substantial conformance with the original approval.

Sincerely,

Rosalinh M. Ung
Associate Planner

3300 Newport Boulevard · Post Office Box 1768 · Newport Beach, California 92658-8915
Telephone: (949) 644-3200 · Fax: (949) 644-3229 · www.city.newport-beach.ca.us

**CALIFORNIA COASTAL COMMISSION**
South Coast Area Office
200 Oceangate, Suite 1000
Long Beach, CA 90802-4302
(562) 590-5071

PA2004-169

August 16, 2007

# W12a

RECEIVED BY
PLANNING DEPARTMENT

AUG 24 2007

CITY OF NEWPORT BEACH

TO: Coastal Commissioners and Interested Persons

FROM: Sherilyn Sarb, Deputy Director, South Coast District
Teresa Henry, Manager, South Coast District
Karl Schwing, Supervisor, Regulation & Planning, Orange County Area
Ryan Todaro, Coastal Program Analyst

SUBJECT: **Concurrence with the Executive Director's determination that the action of the City of Newport Beach accepting certification with suggested modifications of the City's LUP Amendment NPB MAJ 1-06 Part A is legally adequate.**

## STAFF RECOMMENDATION

Staff recommends that the Commission concur with the Executive Director's determination that the City's action is legally adequate. Such concurrence is implied unless there is an objection by a majority of the Commissioners present.

## BACKGROUND

The Commission approved the City of Newport Beach's Land Use Plan Amendment NPB MAJ 1-06 Part A with suggested modifications at the public hearing held in San Luis Obispo on July 10, 2007. The amendment consists of a change in the land use designation of a 4.25 acre area (presently occupied by tennis courts) at the Marriott Hotel from Visitor-Serving Commercial to Medium Density Residential, at 900 Newport Center Drive, Newport Beach, Orange County. The proposed land use change would allow for the construction of condominiums (or other medium density residential) on the subject property.

The City of Newport Beach accepted, and agreed to the Commission's suggested modifications by passing resolution 2007-56 on July 24, 2007, incorporating the Commission's suggested modifications into the City's certified Land Use Plan (attached).

As provided for in Section 13544 of the California Code of Regulations, the Executive Director must determine whether the City's action is legally adequate and report that determination to the Commission. In this case, the Executive Director has determined that the City's action is legally adequate. Unless the Commission objects to the Executive Director's determination, the certification of the City of Newport Beach LUP Amendment NPB MAJ 1-06 Part A shall become effective.

RECEIVED

RESOLUTION NO. 2007-56

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF NEWPORT BEACH APPROVING LCP AMENDMENT NO. 2005-001 WITH MODIFICATIONS APPROVED BY THE CALIFORNIA COASTAL COMMISSION INCLUDING THE ADDITION OF A NEW POLICY TO CHAPTER 2, SECTION 2.3 (VISITOR-SERVING AND RECREATION DEVELOPMENT) OF THE COASTAL LAND USE PLAN FOR PROPERTY LOCATED AT 900 NEWPORT CENTER DRIVE**

**WHEREAS,** on January 10, 2006, the City Council approved Local Coastal Plan Amendment No. 2005-001 changing the Coastal Land Use Plan designation of a 4.25-acre site located at 900 Newport Center Drive from CV-B (Visitor-Serving Commercial) to RM-C (Medium Density Residential) allowing the development of 79 residential condominiums; and

**WHEREAS,** the City Council resolved that LCP Amendment No. 2005-001 shall not take effect until the City Council adopts any modifications proposed by the California Coastal Commission; and

**WHEREAS,** on July 10, 2007, the Coastal Commission approved the proposed Local Coastal Plan Amendment with the modifications contained in Exhibit 1 on grounds that the proposed amendment with suggested modifications will meet the requirements of, and be in conformity with, the policies of Chapter 3 of the California Coastal Act; and

**WHEREAS,** the City Council finds that the proposed amendment with the modifications is consistent with Section 30213 of the Coastal Act, which requires lower cost visitor and recreational facilities be "protected, encouraged, and where feasible, provided." In addition, the proposed amendment would not have an adverse effect on the priority "visitor-serving commercial recreational facilities" to be provided under Section 30222 of the Coastal Act for the following reasons:

1. The adoption of a new Coastal Land Use Plan policy requires a payment of a fee by Lennar Homes to mitigate for the loss of visitor-serving land in the Newport Center by providing funding in the amount of five million (5,000,000.00) dollars for the protection, enhancement and provision of lower-cost visitor-serving uses at Crystal Cove State Park.

2. The policy includes provisions to adjust the mitigation fee to account for inflation.

3. The implementation of the mitigation requirement would be carried out through the coastal development permit process with the California Coastal Commission.

COASTAL COMMISSION

EXHIBIT # 1

PAGE 1 OF 4

CERTIFIED AS A TRUE AND CORRECT COPY

LaVonne M. Harkless

CITY CLERK OF THE CITY OF NEWPORT BEACH

DATE: 7/25/07

**WHEREAS,** a Mitigated Negative Declaration (MND) has been prepared for the proposed project in accordance with the implementing guidelines of the California Environmental Quality Act (CEQA). The document was made available for public review and comment during a 30-day review period from July 15 to August 15, 2005 and subsequently approved by the City Council on January 10, 2006.

**NOW, THEREFORE, BE IT RESOLVED,** based on the aforementioned findings, the City Council hereby approves LCP Amendment No. 2005-001 with the modifications approved by the California Coastal Commission as contained in attached Exhibit 1.

This resolution shall take effect immediately upon adoption. Passed and adopted at a regular meeting of the City Council of the City of Newport Beach held on July 24, 2007, by the following vote, to wit:

AYES, COUNCIL MEMBERS Henn, Curry, Selich, Webb, Daigle, Gardner, Mayor Rosansky

NOES, COUNCIL MEMBERS None

ABSENT COUNCIL MEMBERS None

MAYOR

ATTEST:

LaVonne M. Harkless

CITY CLERK

CITY OF NEWPORT BEACH CALIFORNIA

**COASTAL COMMISSION**

EXHIBIT # 1

PAGE 2 OF 4

## EXHIBIT 1

**THE FOLLOWING ADDITION TO CHAPTER 2, SECTION 2.3 (VISITOR-SERVING AND RECREATIONAL DEVELOPMENT) OF THE CITY OF NEWPORT BEACH *LOCAL COSTAL PROGRAM COASTAL LAND USE PLAN*:**

2.3.1-8 LCP Amendment No. 2005-001 (NPB-MAJ-1-06 Part A) to the Coastal Land Use Plan changing a portion of land, not to exceed 4.25 acres in size, designated Visitor-Serving Commercial (CV) in Newport Center to a residential designation shall require a payment of a fee to mitigate for the loss of visitor-serving land. The mitigation fee shall be used for the protection, enhancement and provision of lower-cost visitor-serving uses at Crystal Cove State Park. The mitigation fee shall be in the amount of five million (5,000,000.00) dollars to off-set the loss of the priority land use in Newport Center. The mitigation fee shall be paid prior to issuance of any coastal development permit granted for any residential project within the newly designated area and to an entity, identified by the permitting agency, capable of implementing the mitigation at Crystal Cove State Park. Until paid in accordance with the terms and conditions of the coastal development permit, the amount shall be increased every July 1st by an amount calculated on the basis of the percentage change from the year 2007 in the California Consumer Price Index for Urban Consumers as determined by the entity that grants the coastal development permit.

COASTAL COMMISSION

EXHIBIT # 1
PAGE 3 OF 4

STATE OF CALIFORNIA }
COUNTY OF ORANGE } ss.
CITY OF NEWPORT BEACH }

I, LaVonne M. Harkless, City Clerk of the City of Newport Beach, California, do hereby certify that the whole number of members of the City Council is seven; that the foregoing resolution, being Resolution No. 2007-56 was duly and regularly introduced before and adopted by the City Council of said City at a regular meeting of said Council, duly and regularly held on the 24th day of July 2007, and that the same was so passed and adopted by the following vote, to wit:

Ayes: Henn, Curry, Selich, Webb, Daigle, Gardner, Mayor Rosansky

Noes: None

Absent: None

Abstain: None

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed the official seal of said City this 25th day of July 2007.

LaVonne M. Harkless
City Clerk
Newport Beach, California

(Seal)

**COASTAL COMMISSION**

EXHIBIT # 1
PAGE 4 OF 4

# CALIFORNIA COASTAL COMMISSION

South Coast Area Office
200 Oceangate, Suite 1000
Long Beach, CA 90802-4302
(562) 590-5071

FILE COPY

Date 6/7/07

6.19.07
Copied Carol McDermott + Homer Bludeau

Re: Application/Appeal No NPB-MAJ-1-06

## STATUS LETTER

re Hennan project

RECEIVED BY PLANNING DEPARTMENT
JUN 12 2007

July 10
14.A

The status of this matter is noted below.

✓ Your application was filed on 4/14/06. The public hearing is tentatively scheduled on JULY 11-13, in San Luis Obispo. This tentative scheduling information is being provided for your convenience and is subject to change. Written notification of final scheduling of the hearing, along with a copy of the staff report, will be mailed approximately 10 days prior to the hearing.
IMPORTANT: The enclosed Notice of Pending Permit must be posted on the site, in a conspicuous place, within 3 days of its receipt.

CITY OF NEWPORT BEACH

___ This application is incomplete and cannot be filed or processed until the items listed on the attached sheet have been completed and submitted to the District Office. If these items have not been received by the date indicated, the entire package will be returned to you.

Please be advised that the items needed to complete your application must be submitted to this office by _____.

___ This file is being returned as the application submitted is deemed incomplete. The required substantive documents are missing. Please see the attached sheet.

___ This appeal was received _____ and has been determined to be a valid appeal. You will be notified of the place and date of the public hearing.

___ This appeal was received _____ but has been determined invalid for the following reason:

_____

_____

If you have any questions, please contact this office at (562) 590-5071.

Staff Analyst RYAN TODARO

# MEMORANDUM OF UNDERSTANDING BETWEEN LENNAR HOMES OF CALIFORNIA, INC. AND CITY OF NEWPORT BEACH

This Memorandum of Understanding ("MOU") is entered into by and between Lennar Homes of California, Inc., ("Lennar") and the City of Newport Beach (City), a municipal corporation, through its duly elected, appointed, qualified or acting representatives.

## RECITALS

A. WHEREAS, on January 10, 2006 the Newport Beach City Council approved Resolution NO. 2006-2 adopting Mitigated Negative Declaration (SCH NO. 2005-071067) and approved General Plan Amendment No. 2004-005, Local Coastal Program Land Use Plan Amendment No. 2005-001, Tentative Parcel Map No. 2005-014, Tentative Tract Map No. 2004-004 (16774), Traffic Study No. 2005-002 and Coastal Residential Development Permit No. 2005-004 and adopted Ordinance No. 2006-1 approving Planned Community Development No. 2005-003 amending Zoning District Map No. (48) changing the subject property from CV-B to RM-C for property located at 900 Newport Center Drive (PA 2004-169); and

B. WHEREAS, on July 25, 2006 the City Council approved a comprehensive update of the City's General Plan, including changes in Affordable Housing Requirements under an updated Housing Element; and

C. WHEREAS, on March 27, 2007, the City Council adopted Ordinance No. 2007-6, amending provisions under which development agreements shall be required for residential development projects in the City to implement new policies and Land Use changes in the new General Plan and requiring development agreements for projects that require a legislative act and include more than 50 units; and

D. WHEREAS, on July 10, 2007 the California Coastal Commission approved City of Newport Beach Land Use Plan Amendment NPB-MAJ-1-06 Part A (Marriott Hotel VSC to MDR/Santa Barbara Condominiums) subject to modifications; and

E. WHEREAS, Lennar has requested approval of an Affordable Housing Implementation Plan (AHIP) which documents Lennar's commitment to the provision of 12 apartment units in the Moderate Income level for a period of 30 years and which will satisfy the intent of Condition No. 5 of Resolution No. 2006-2 for affordable housing; but will comply with the amended requirements for number of units of affordable housing under the updated Housing Element.

F. WHEREAS, concurrent with and as consideration for the approval of the AHIP under the provisions of the updated Housing Element, the two parties

wish to enter into a development agreement to vest the right to develop the project without additional public benefit contributions other than payment to the City of Newport Beach the amount of $5 million for the City to use for projects that provide a public benefit to the City as determined by the City Council.

**NOW, THEREFORE**, it is mutually agreed by and between the undersigned parties as follows:

**Section 1.** The City shall give prompt consideration to the necessary support language for Coastal Commission approval of the Coastal Development Permit, and to the Affordable Housing Implementation Plan (AHIP) required by the current Housing Element.

**Section 2.** The parties will expeditiously prepare and the Newport Beach Planning Commission and City Council will promptly consider approval of a development agreement that includes the following principal provisions. The development agreement must be approved and executed before the issuance of any grading or building permit for the project.

A. As a condition of the development agreement, Lennar shall pay $5 million to the City of Newport Beach. This amount shall be paid in two installments, $2 million to be delivered concurrently with the issuance of the first residential building permit and $3 million to be delivered concurrently with the issuance of the final occupancy permit for all 79 homes. If the certificate of occupancy for the 79$^{th}$ unit is not issued within in 12 months of the first certificate of occupancy then the $3 million shall be due on a pro rata per unit basis for those units for which a certificate of occupancy has been issued and payable on a pro rata basis for the ensuing units as each certificate of occupancy is issued. Upon payment of this amount, no other payment shall be required for public benefit to the City of Newport Beach.

B. The City will expeditiously review the Affordable Housing Agreement to implement the AHIP, and will provide expedited review of development plans for the project, in support of timely receipt of building permits and final occupancy permits.

C. City development approvals will be vested for a period not to exceed five (5) years.

**Section 3.** The terms of this MOU shall become effective upon execution by both parties and shall continue thereafter until the satisfactory completion of the obligations of the parties as described herein. The MOU may be altered, changed, or amended by mutual consent of the parties. Any changes or amendments must be in writing and signed by the parties before such change or amendment shall take effect.

**Section 4.** The MOU is executed in counterparts, each of which shall be considered a duplicate original.

**Section 5.** Notices: Any demand upon or notice required or permitted to be given by one party to the other shall be in writing, shall be made in the following manner, and shall be effective (a) upon receipt if given by personal delivery, (b) on the date indicated on the receipt if given by certified or registered mail, return receipt requested, or (c) on the succeeding business day after mailing or deposit if given by Express Mail or by deposit with a private delivery service of general use (e.g. Federal Express), postage or fee paid, as appropriate, addressed to the parties in Paragraph 6. Notice of a change of address shall be given by written notice in the manner set forth in this section.

**Section 6.** For the purposes of this MOU, all information, requests, or other business including any demand upon a party or notice pursuant hereto shall be coordinated through the following agency representatives:

City of Newport Beach
Homer Bludau, City Manager
3300 Newport Blvd.
Newport Beach, CA 92658-8915

Lennar Homes of California, Inc.
Mr. John Baayoun
Regional Vice President
25 Enterprise
Aliso Viejo, CA 92656

**Section 7.** This MOU shall be binding upon and shall inure to the benefit of the successors and assigns of the parties.

**Section 8.** This MOU shall be governed by, and construed and enforced in accordance with, the laws of the State of California.

APPROVED AS TO FORM:

By: _____
Robin Clauson
City Attorney

CITY OF NEWPORT BEACH,
A Municipal Corporation

By: _____
Steven Rosansky
Mayor

ATTEST:

By: LaVonne M. Harkless
LaVonne Harkless
City Clerk

Lennar Homes of California, Inc.

By: _____ 7-20-07
John Baayoun
Regional Vice President

# CITY OF NEWPORT BEACH

## PLANNING DEPARTMENT

Patricia L. Temple, Director

October 11, 2006

Ms. Teresa Henry
District Manager
California Coastal Commission
South Coast District
200 Oceangate, Suite 1000
Long Beach, CA 90802-4303

**Re: City of Newport Beach Land Use Plan Amendment NPB-MAJ-1-06 Part A (Santa Barbara Condominiums); Request for Postponement**

Dear Ms. Henry:

On behalf of Lennar Homes, the project proponent, the City of Newport Beach is hereby requesting that the Coastal Commission postpone consideration of this item to an early hearing in 2007. The project is currently scheduled for the Coastal Commission meeting on October 12, 2006.

The continuance is necessary for the project proponent to resolve potential land use compatibility issues with the Newport Beach County Club since one of the issues raised in the staff report is whether the proposed amendment would create a land use conflict between an existing recreational facility and the proposed residential development. The City believes that the discussions between the two parties have been very productive and that they are very close to a resolution of these issues. Additional time is needed; however, to allow the project proponent to fully explore mitigation opportunities to enhance visitor-serving uses and opportunities relating to the proposed project. This request is consistent with the Commission's actions to extend time for consideration of this Land Use Plan Amendment until July 2007, pursuant to Coastal Act Section 30517.

Your consideration of our request is greatly appreciated. Should you have any questions, I can be contacted at 949-644-3228 or Rosalinh Ung of my staff at 949-644-3208.

Sincerely,

Patricia L. Temple
Planning Director

cc: Peter Douglas, California Coastal Commission
Ryan Todaro, California Coastal Commission
Donna Kelly, Lennar Homes
Carol McDermott, Government Solutions

3300 Newport Boulevard · Post Office Box 1768 · Newport Beach, California 92658-8915
Telephone: (949) 644-3200 · Fax: (949) 644-3229 · www.city.newport-beach.ca.us

**CALIFORNIA COASTAL COMMISSION**
South Coast Area Office
200 Oceangate, Suite 1000
Long Beach, CA 90802-4302
(562) 590-5071

September 28, 2006

NEWPORT BEACH
PLANNING DEPARTMENT
OCT 02 2006
PM
5/6

# IMPORTANT PUBLIC HEARING NOTICE
# CITY OF NEWPORT BEACH LUP AMENDMENT
# NPB-MAJ-01-06 (Part A)

**HEARING DATE AND LOCATION:**

DATE: Thursday, October 12, 2006
TIME: 8:00 AM
PLACE: Hyatt Regency Long Beach
200 S. Pine Avenue
Long Beach, CA 90802

ITEM NO: **Th 11b**

**AMENDMENT DESCRIPTION AND STAFF RECOMMENDATION:**

Part A of the amendment consists of a request by the City of Newport Beach to change the land use designation of a 4.25 acre area (presently occupied by tennis courts) at the Marriott Hotel from Visitor-Serving Commercial to Medium Density Residential, at 900 Newport Center Drive, Newport Beach, Orange County. The proposed land use change would allow the construction of condominiums (or other medium density residential) on the subject property. A corresponding coastal development permit application (5-06-168, Lennar) has been submitted and will be considered at a subsequent hearing.

Commission staff recommends that the Commission deny Part A of the proposed amendment because the land use re-designation would result in a loss of one of the few sites designated Visitor-Serving Commercial in the certified LUP.

A more complete description of the staff recommendation is contained in the staff report which may be viewed on the Commission's web site at http://www.coastal.ca.gov/mtgcurr.html or you may view or request a copy of the report from the Commission's Long Beach office.

**HEARING PROCEDURES:**

This item has been scheduled for a public hearing and vote. People wishing to testify on this matter may appear at the hearing and/or may present their concerns in writing to the Commission before the hearing date.

**SUGGESTIONS FOR SUBMISSION OF WRITTEN MATERIALS:**

If you wish to submit written materials for review by the Commission, please observe the following suggestions:

- We request that you submit your materials to the Commission staff no later than three working days before the hearing (staff will then distribute your materials to the Commission).
- Mark the agenda number of your item, the application number, your name and your position in favor or opposition to the project on the upper right hand corner of the first page of your submission. If you do not know the agenda number, contact the Commission staff person listed on the bottom of this page.

- If you wish, you may obtain a current list of Commissioners' names and addresses from any of the Commission's offices and mail the material directly to the Commissioners. If you wish to submit materials directly to Commissioners, we request that you mail the materials so that the Commissioners receive the materials no later than Thursday of the week before the Commission meeting. **Please** mail the same materials to all Commissioners, alternates for Commissioners, and the four non-voting members on the Commission with a copy to the Commission staff person listed at the bottom of this page.

- You are requested to summarize the reasons for your position in no more than two or three pages, if possible. You may attach as many exhibits as you feel are necessary.

**PLEASE NOTE:**

While you are not prohibited from doing so, you are discouraged from submitting written materials to the Commission on the day of the hearing, unless they are visual aids, as it is more difficult for the Commission to carefully consider late materials. The Commission requests that if you submit written copies of comments to the Commission on the day of the hearing, that you provide 20 copies.

**ALLOTTED TIME FOR TESTIMONY:**

Oral testimony may be limited to 5 minutes or less for each speaker depending on the number of persons wishing to be heard.

**FINAL NOTES:**

No one can predict how quickly the Commission will complete agenda items or how many will be postponed to a later date. The Commission begins each session at the time listed and considers each item in order, except in extraordinary circumstances. Questions regarding the report or the hearing should be directed to, **Ryan Todaro** the Coastal Program Analyst assigned to the project, at the South Coast Area office at **562-590-5071**.

**CALIFORNIA COASTAL COMMISSION**
South Coast Area Office
200 Oceangate, Suite 1000
Long Beach, CA 90802-4302
(562) 590-5071

# Th 11b

September 21, 2006

**TO:** Commissioners and Interested Persons

**FROM:** Deborah Lee, Senior Deputy Director, South Coast District
Teresa Henry, District Manager, South Coast District
Karl Schwing, Supervisor, Regulation & Planning, Orange County Area
Ryan Todaro, Coastal Program Analyst

**SUBJECT:** **City of Newport Beach Land Use Plan Amendment NPB-MAJ-1-06 Part A (Marriott Hotel VSC to MDR/Santa Barbara Condominiums)**

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## SUMMARY OF STAFF REPORT

### DESCRIPTION OF THE SUBMITTAL

The amendment that is the subject of this report was submitted as part of a package with other Land Use Plan (LUP) amendments. This report deals only with "Part A" of the amendment. Part A of the amendment consists of a request by the City of Newport Beach to change the land use designation of a 4.25 acre area (presently occupied by tennis courts) at the Marriott Hotel from Visitor-Serving Commercial to Medium Density Residential, at 900 Newport Center Drive, Newport Beach, Orange County. (Part B of the amendment was acted on separately at the Commission's July 2006 hearing, and Part C was retracted, in part because the City Council had not authorized its original submittal.) The proposed land use change would allow the construction of condominiums (or other medium density residential) on the subject property. A corresponding coastal development permit application (5-06-168, Lennar) has been submitted and will be considered at a subsequent hearing.

The major issues raised by this amendment request are adequate provision of visitor-serving commercial development and public access.

### SUMMARY OF STAFF RECOMMENDATION

Commission staff recommends that the Commission **DENY** Part A of the proposed amendment because the land use redesignation would result in a loss of one of the few sites designated Visitor-Serving Commercial in the certified LUP. The motion to accomplish this is found on Page 3.

### ANTICIPATED AREAS OF CONTROVERSY

The City and the landowner object to the staff recommendation.

## ADDITIONAL INFORMATION

For further information, please contact **Ryan Todaro** at the South Coast District Office of the Coastal Commission at **(562) 590-5071**. The proposed amendment to the Land Use Plan (LUP) of the City of Newport Beach Local Coastal Program (LCP) is available for review at the Long Beach Office of the Coastal Commission or at the City of Newport Beach Planning Department. The City of Newport Beach Planning Department is located at 3300 Newport Boulevard in Newport Beach. **Rosalinh Ung** is the contact person for the City's Planning Division, and he may be reached by calling **(949) 644-3208**.

## EXHIBITS

1. City Council Resolution No. 2006-02 approved January 10, 2006
2. City Council Resolution No. 2006-26 approved March 28, 2006
3. Vicinity Map
4. Land Use Map

# I. COMMISSION RESOLUTION ON CITY OF NEWPORT BEACH LOCAL COASTAL PROGRAM AMENDMENT 1-06 (PART A)

Following a public hearing, staff recommends the Commission adopt the following resolution and findings.

**Motion for Part A**

*"I move that the Commission **CERTIFY** the City of Newport Beach Land Use Plan Amendment NPB MAJ 1-06 Part A as submitted."*

**Staff Recommendation**

Staff recommends a **NO** vote. Failure of this motion will result in denial of the land use plan amendment as submitted and adoption of the following resolutions and findings. The motion to certify as submitted passes only upon affirmative vote of a majority of the appointed Commissioners.

**Resolution**

The Commission hereby **DENIES** the City of Newport Beach Land Use Plan Amendment 1-06 Part A as submitted and adopts the findings stated below on the grounds that the amendment will not meet the requirements of and is not in conformity with the policies of Chapter 3 of the California Coastal Act. Certification of the Land Use Plan amendment would not comply with the California Environmental Quality Act as there are feasible mitigation measures and alternatives that would substantially lessen the significant adverse impacts on the environment that will result from certification of the land use plan amendment as submitted.

# II. PROCEDURAL PROCESS (LEGAL STANDARD FOR REVIEW)

## *A. Standard of Review*

The standard of review for land use plan amendments is found in Section 30512 of the Coastal Act. This section requires the Commission to certify an LUP amendment if it finds that it meets the requirements of, and is in conformity with, the policies of Chapter 3 of the Coastal Act. Specifically, Section 30512(c) states: *"The Commission shall certify a land use plan, or any amendments thereto, if it finds that a land use plan meets the requirements of, and is in conformity with, the policies of Chapter 3 (commencing with Section 30200). Except as provided in paragraph (1) of subdivision (a), a decision to certify shall require a majority vote of the appointed membership of the Commission."*

## *B. Procedural Requirements*

Pursuant to Section 13551(b) of Title 14 of the California Code of Regulations, a local government's resolution for submittal of a proposed LUP amendment must indicate whether the local coastal program amendment will require formal local government adoption after Commission approval, or is an amendment that will take effect automatically upon the Commission's approval pursuant to Public Resources Code Sections 30512, 30513 and 30519. The City of Newport Beach's submittal indicates that this LCP amendment will take effect upon Commission certification.

# III. BACKGROUND

The Land Use Plan (LUP) for the City of Newport Beach was effectively certified on May 19, 1982 and comprehensively updated October 13, 2005.

The subject amendment was initially submitted by the City of Newport Beach on March 6, 2006. On March 15, 2006, Coastal Commission staff notified the City of Newport Beach that the submittal was incomplete and that additional information would be required to complete the submittal. City staff submitted the information on April 14, 2006. On May 18, 2006, Coastal Commission staff notified the City that the amendment request was complete. The Commission approved a request for a one-year (1) time extension of the amendment on June 13, 2006. Part B of the amendment request, which involved a change in the land use designation of another parcel from Medium Density Residential to Open Space, was approved by the Commission on July 12, 2006. Part A of the amendment request is now being submitted for Commission action. Part A involves a change in land use designation at 900 Newport Center Drive from Visitor-Serving Commercial to Medium Density Residential.

## IV. SUMMARY OF PUBLIC PARTICIPATION

The City of Newport Beach approved this segment of the Land Use Plan amendment request (Part A) through a City Council public hearing on January 10, 2006. The item was originally scheduled for the Council hearing of November 22, 2005, but the item was continued to the December 13, 2005 hearing and finally approved on January 10, 2006. It was approved through City Council Resolution No. 2006-02, which approved General Plan Amendment No. 2004-005 and Local Coastal Plan Amendment 2005-001 (Exhibit 1). Prior to either the City Council approving the LUP amendment request, or the Planning Commission voting to recommend that the City Council do so, the Planning Commission held a public hearing on November 3, 2005. Notice was provided for both entities' hearings. Notice of the City Council's public hearing was mailed and posted on November 14, 2005 and published in the local newspaper on November 12, 2005. The City Council approved a subsequent resolution (Resolution No. 2006-26) on March 28, 2006 to correct procedural deficiencies in the original resolution related to the Coastal Act requirements (Exhibit 2).

One letter of opposition was received at the local level. The letter expresses concerns about increased density at the subject site. No oral comments were received during the public hearings held at the local level.

## V. FINDINGS FOR DENIAL OF PART A OF NPB-MAJ-1-06

The Commission hereby finds and declares as follows:

Site Description and Land Use Designation

The proposed land use redesignation will affect only one site—900 Newport Center Drive in the City of Newport Beach, Orange County. The 4.25-acre site is located in the Newport Center/Fashion Island area of the City, inland of Pacific Coast Highway (Exhibit 3). The site is currently operated as a private tennis club used by members and guests of the Newport Beach Marriott Hotel. There are eight outdoor tennis courts, a clubhouse and ancillary uses on the property. The property owner proposes to subdivide the subject site from the larger hotel parcel and develop a 79-unit condominium project.[1]

The site is currently designated Visitor-Serving Commercial (CV-B) in the City's Certified Land Use Plan, as depicted in Exhibit 4. The site is surrounded by a golf course to the west and north, hotel development to the south, and commercial offices to the east.

[1] Coastal Development Permit Application 5-06-168 (Lennar), which seeks authorization to develop the condominium project, will be considered by the Commission at a subsequent hearing.

Coastal Act Policies

As stated previously, the Coastal Act is the standard of review in the current analysis. The Coastal Act encourages the provision of lower cost visitor and recreational facilities and prioritizes visitor-serving commercial development over residential development. The proposed LUP amendment is not in conformity with the public access and recreation policies of the Coastal Act relating to the provision of visitor serving development. Applicable provisions of the Coastal Act include the following:

Section 30213 states, in pertinent part:

> *Lower cost visitor and recreational facilities shall be protected, encouraged, and, where feasible, provided. Developments providing public recreational opportunities are preferred.*

Section 30222 states:

> *The use of private lands suitable for visitor-serving commercial recreational facilities designed to enhance public opportunities for coastal recreation shall have priority over private residential, general industrial, or general commercial development, but not over agriculture or coastal-dependent industry.*

Land Use Plan Policies

2.3.1-3 *On land designated for visitor-serving and/or recreational uses, give priority to visitor-serving commercial recreational facilities designed to enhance public opportunities for coastal recreation over other commercial uses, except for agriculture and coastal-dependant industry.*

2.3.3-3 *Encourage visitor-serving and recreational developments that provide public recreational opportunities.*

Proposed Change in Land Use Designation

The proposed amendment (NPB MAJ 1-06, Part A) involves a request to change the land use designation of a 4.25-acre area of the Newport Beach Marriott Hotel from Visitor Serving Commercial to Medium Density Residential at 900 Newport Center Drive. No other properties are subject to the proposed land use change.

The proposed change will have an adverse affect on priority visitor-serving opportunities in the area. Residential development is the lowest priority use within the Coastal Zone. The City indicates that the loss of CV-B designated land at this location will not have an adverse affect on visitor-serving commercial or recreational activities. According to the amendment request, "*[t]he property is not located in close proximity to coastal resources, coastal recreational use or the water and the change in land use does not impact the adjacent visitor serving uses other than to eliminate the accessory tennis*

*courts, which is not a coastal dependent recreational activity."* Although the tennis courts are not considered a "coastal dependent" activity, tennis is a recreational activity, and the site is part of a larger commercial facility (Marriott Hotel) that serves visitors to the coast. Thus, although currently operated as a private tennis club serving only members and guests of the Newport Beach Marriott Hotel, that is nevertheless a visitor-serving recreational offering. In addition, the hotel is located in close proximity to popular visitor destinations, such as the Newport Dunes, Balboa Island and the beach. The site is located in a highly visible, well-traveled location and could potentially support some form of commercial and/or recreational development in the future. If the site were to be redesignated for residential development now, the opportunity for a future visitor-serving use that would be even more generally accessible or lower cost would be lost.

The City states that the loss of this visitor-serving commercial site as a result of the requested amendment would not significantly reduce the amount of visitor-serving land in the City. The City concludes that the project represents a reduction in visitor serving uses of 2% based on a table showing the portion of land currently designated as visitor serving commercial and what will remain after the 4.25-acre site is re-designated. The table is replicated below.

| **Visitor Serving Commercial Designation** | **Amount of Land** |
|---|---|
| CV-A (0.5—0.75) | 7.65 acres |
| CV-B (0.5—1.25) | 42.90 acres |
| Newport Coast Planned Community | 153.00 acres |
| **CITYWIDE TOTAL:** | 203.55 acres |
| Less project | -4.25 acres |
| **REMAINING CITYWIDE TOTAL:** | 199.30 acres |
| | (2% loss of CV-B) |

The City included the Newport Coast Planned Community in the above-referenced tabulation. However, Newport Coast is covered by a segment of the County of Orange certified LUP and is not within the boundary of the City of Newport Beach certified LUP. As such, the 153.00 acres of visitor serving commercially designated area referred to in the table is not covered by the LUP that is the subject of the current amendment request. In actually, the 4.25-acre loss represents an 8.4% [4.25/(7.65+42.90)]--not 2%-- reduction in visitor-serving land in the portion of the City covered by this LUP.

In addition, the subject site is one of only five sites designated Visitor-Serving Commercial (CV) in the City's certified LUP. Many land uses that are in fact visitor-serving are located within the General Commercial (CG) or Neighborhood Commercial (CN) designation and could thus cease to provide a visitor-serving function. According to the LUP, [t]*he CV designation is intended to provide for accommodations, goods, and services intended to primarily serve the needs of visitors of Newport Beach."* Hotels, and their ancillary development, clearly fit this designation and should be protected consistent with Section 30222 of the Coastal Act. The LUP includes policies that encourage visitor-serving and recreational developments that provide public recreational opportunities. Although the tennis courts are part of a private club, they

are available for use by hotel guests. Hotel guests are typically members of the public that are visitors to the area.

The agent for the corresponding CDP application states that the tennis courts are underutilized and replacing the courts *"does not remove a publicly accessible, widely-used recreation facility from the coastal zone."* The Commission acknowledges that the property owner is in no way obligated to retain the tennis court use of the site. However, under the current land use designation, the site can only be developed with uses allowed under the CV designation. Commercial development of the site could serve potential visitors to the coast. The location is conducive to commercial recreational development and consistent with the adjacent hotel use and the nearby commercial development. Residential development at the subject site would serve no purpose to members of the visiting public and would potentially establish a precedent for residential conversions in the subject area.

Concerns have also been raised that the proposed residential land use is inconsistent with the neighboring Newport Beach Country Club golf course because of potential safety issues. Due to the configuration of the golf course holes adjacent to the subject site, golf balls are periodically hit into the tennis court area. A substantial fence has been erected to prevent injuries. This, in conjunction with the limited use of the tennis courts, has minimized potential hazard. However, with a proposed residential development, such as the one proposed through CDP application 5-06-168, there would be a greater probability that an errant ball could result in injury. As such, the proposed amendment may create a serious land use conflict between an existing recreational facility and residential development.

The proposed land use conversion proposed as Part A of the City's amendment request is inconsistent with Section 30213 of the Coastal Act, which requires lower cost visitor and recreational facilities be *"protected, encouraged, and, where feasible, provided."* The proposed amendment will also have an adverse effect on the priority *"visitor-serving commercial recreational facilities"* to be provided under Section 30222 of the Coastal Act. Therefore, Part A of the amendment must be denied.

## VI. CONSISTENCY WITH THE CALIFORNIA ENVIRONMENTAL QUALITY ACT

Section 21080.9 of the California Environmental Quality Act (CEQA) exempts local governments from the requirement of preparing an environmental impact report (EIR) in connection with a local coastal program (LCP). Instead, the CEQA responsibilities are assigned to the Coastal Commission. Additionally, the Commission's Local Coastal Program review and approval procedures have been found by the Resources Agency to be functionally equivalent to the environmental review process. Thus, under Section 21080.5 of CEQA, the Commission is relieved of the responsibility to prepare an environmental impact report for each local coastal program submitted for Commission review and approval. Nevertheless, the Commission is required when approving a local

coastal program to find that the local coastal program does conform to the provisions of CEQA and to base the certification on a specific factual finding supporting the conclusion that the proposal *"meets the requirements of [CEQA] Section 21080.5(d)(2)(i) . . .*," which requires that an activity will not be approved or adopted as proposed if there are feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse impact which the activity may have on the environment. 14 C.C.R. §§ 13555(b) and 13540(f).

The amendment involves a request to change the land use designation of a 4.25 acre area (presently occupied by tennis courts) at the Marriott Hotel from Visitor-Serving Commercial to Medium Density Residential. As proposed, the change in land use proposed in Part A is inconsistent with the public access and recreation policies of the Coastal Act and must be denied.

The Commission finds that approval of Part A of the Land Use Plan amendment will result in significant adverse environmental impacts under the meaning of the California Environmental Quality Act. In addition, the Commission finds that there are feasible alternatives under the meaning of CEQA, including the no project alternative, which would reduce the potential for significant adverse environmental impacts which have not been explored. The proposal must therefore be denied.

**RESOLUTION NO. 2006-2**

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF NEWPORT BEACH ADOPTING MITIGATED NEGATIVE DECLARATION (SCH NO. 2005-071067) AND APPROVING GENERAL PLAN AMENDMENT NO. 2004-005, LOCAL COASTAL PROGRAM LAND USE PLAN AMENDMENT NO. 2005-001, TENTATIVE PARCEL MAP NO. 2005-014, TENTATIVE TRACT MAP NO. 2004-004 (16774), TRAFFIC STUDY NO. 2005-002 AND COASTAL RESIDENTIAL DEVELOPMENT PERMIT NO. 2005-004 FOR PROPERTY LOCATED AT 900 NEWPORT CENTER DRIVE (PA 2004-169)**

**WHEREAS,** an application was filed by Lennar Homes with respect to property located at 900 Newport Center Drive, and legally described as Parcel 1, as per map filed in Book 75 pages 33 and 34 of parcel maps, in the office of the County Recorder to construct 79 residential condominiums on a 4.25-acre site presently developed with tennis courts operated by the adjacent Newport Beach Marriott Hotel. The applicant requests approval of: a General Plan Amendment and an Amendment of the 1990 Local Coastal Plan Land Use Plan (LCPLUP) to change the land use designations of the 4.25-acre site from Administrative, Professional & Financial Commercial to Multiple-Family Residential; an Amendment of the 2004 LCPLUP to change the land use designation from Visitor-Serving Commercial (CV-B) to Medium Density Residential C (RM-C); a Zone Change to rezone the subject property from APF to the PC District; adopt a Planned Community Development Plan to establish permitted use and development regulations; consider a waiver of the 10-acre minimum land area requirement for Planned Community District adoption; a Parcel Map to subdivide the subject property from the hotel development for financing and development purposes; a Tract Map for the condominium ownership (79 residential units); a Traffic Study pursuant to the Traffic Phasing Ordinance (TPO) and a Coastal Residential Development Permit regarding the provision of affordable housing in accordance with the Municipal Code and the General Plan Housing Element.

**WHEREAS,** on November 3, 2005, the Planning Commission held a noticed public hearing in the City Hall Council Chambers, 3300 Newport Boulevard, Newport Beach, California at which time the project applications, the Mitigated Negative Declaration and comments received thereon were considered. Notice of time, place and purpose of the public hearing was given in accordance with law and testimony was presented to, and considered by, the Planning Commission at the hearing. With a vote of 6 ayes (one recused), the Planning Commission recommended approval of the above-mentioned applications to the City Council.

**WHEREAS,** the property is located in the Block 900 – Hotel Plaza of the Newport Center (Statistical Area L1) of the Land Use Element and has a land use designation of Administrative, Professional & Financial Commercial (APF) and zoned APF (Administrative, Professional, Financial).

**WHEREAS,** pursuant to Section 20.94 of the Newport Beach Municipal Code, the City Council held a noticed public hearing on November 22, 2005, which was continued to December 13, 2005 without testimony, to consider the proposed applications and the recommendations of the Planning Commission.

COASTAL COMMISSION
NPB 1-06 Part A
EXHIBIT # 1
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**WHEREAS**, a General Plan Amendment and an Amendment of the 1990 Local Coastal Plan Land Use Plan (LCPLUP) to change the land use designations of the site from Administrative, Professional & Financial Commercial to Multiple-Family Residential is necessary as the proposed residential use is not permitted in the APF designation. A change in land use would result in a 4.25-acre reduction in land available to be potentially used for office uses consistent with the APF designation. However, within the Newport Center, there is approximately 200 acres designated APF and the two percent (2%) reduction proposed by the project is not a significant reduction.

**WHEREAS**, the residential condominium project is consistent with the proposed Multi-Family Residential land use designation. The proposed residential condominium project would be compatible with the residential developments to the south and northeast of the site. The proposed project is viewed as incompatible with the office uses across Santa Barbara Street and is also compatible with the adjacent hotel and golf course

**WHEREAS**, the 2004 LCP Land Use Plan designates the site for Visitor Serving Commercial uses. This designation was applied due to the existing use of the Marriott Hotel complex. A change in land use designation from CV-B (Visistor-Serving Commercial) to RM-C (Medium Density Residential C) is necessary for the proposed residential development. The change in land use designation will reduce the land available for visistor-serving commercial uses by 4.25 acres. Although this reduction in area would occur, the opportunity to construct the remaining hotel room entitlement of 79 rooms would not be lost and they could be constructed nearby within a portion of Newport Center within the Coastal Zone.

**WHEREAS**, Section 30250(a) of the California Coastal Act (CCA) provides criteria for the location of new development. The Coastal Act provides for the protection of coastal resources by requiring that new development be located in close proximity to existing development with available public services to minimize the impacts associated with the extension of infrastructure and services. The project is located within Newport Center, which is a development area with all public services (utilities, roads, police, fire etc.) presently provided.

**WHEREAS**, Section 30252(4) requires new development within the Coastal Zone to provide adequate parking facilities or provide substitute means of serving the development with public transportation. The proposed development provides an adequate number of on-site parking spaces. The project also will be conditioned so that the parking structures will have adequate dimensions, clearances, and access to insure their proper use.

**WHEREAS**, Section 30212, requires public access must be provided from the nearest public roadway to the shoreline and along the coast in new development. The subject property is not adjacent to the ocean or bay; therefore, coastal access easements are not required.

**WHEREAS**, Section 30222 requires the use of private land suitable for visitor-serving commercial recreational facilities for coastal recreation must have priority over private residential, general industry, or general commercial development. Although, the change in land use designation will reduce the land available for visistor serving commercial uses by 4.25 acres; the opportunity to construct the remaining hotel room entitlement of 79 rooms would not

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be lost and they could be constructed nearby within the portion of Newport Center that is located within the Coastal Zone.

**WHEREAS**, the City's General Plan indicates that the City shall maintain suitable and adequate standards for landscaping, sign control, site and building design, parking and undergrounding of utilities and other development standards to ensure that the beauty and charm of existing residential neighborhoods are maintained, that commercial and office projects are aesthetically pleasing and compatible with surrounding land uses. The proposed PC Text contains one classification of land use and provides the development standards for the entire subject property. The draft PC Text contains development regulations for the subject site which includes definitions and information concerning requirements for development site coverage, building height, setbacks, off-street parking, vehicular access, signing, lighting, storage, and screening and landscaping to ensure that the project would be compatible with the surrounding land uses consistent with the objectives of the Land Use Element.

**WHEREAS**, to be consistent with the Housing Programs 2.2.1 and 2.2.3 of the City's Housing Element, the project is required to provide a minimum of 20% of the total units (16 units) for affordable income households for a minimum of 30 years. The applicant is requesting that the affordable housing provision be off-site, at an approved location within the City, as affordable housing is not feasible at the subject site. According to the applicant, the project's Home Owner's Association fees are expected to be a minimum of $1,500 per month, which is a substantial multiple of the statutory mortgage payment limits for affordable housing when combined with acquisition costs and taxes. With this provision, the applicant will be required to enter into an agreement with the City to provide said units off-site within the City's limits. The agreement will be reviewed and approved by the City Attorney and will be executed prior to the recordation of tract map or the issuance of a building or grading permit for the proposed project.

**WHEREAS**, an approval of the project is implementing Housing Program 3.2.4 that allows the City to consider and approve rezoning of property from non-residential to residential uses when appropriate to extend housing opportunities to as many renter and owner occupied households as possible in response to the demand for housing in the City.

**WHEREAS**, Charter Section 423 requires all proposed General Plan Amendments to be reviewed to determine if the square footage, peak hour vehicle trip or dwelling units thresholds have been exceeded and a vote by the public is required. This project has been reviewed in accordance with Council Policy A-18 and a voter approval is not required as the project represents an increase of 39 – A.M. and 35 – P.M. peak hour trips for a new 79 dwelling unit development. These increases, when added with 80% of the increases attributable to two previously approved amendments, result in a total of 47 – A.M. peak hour trips and 43.8 – P.M. peak hour trips; 3,640 square feet of non-residential floor area and 79 dwelling units do not cumulatively exceed Charter Section 423 thresholds for a vote.

**WHEREAS**, the project is located within Newport Center where public services and infrastructure are available to serve the proposed development. Additionally, all applicable improvements required by Section 19.28 (Subdivision Improvements) of the Subdivision Code are to be satisfied by the applicant.

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**WHEREAS**, the parking requirement for a multiple-family residential zoned project is two spaces per unit, including one covered, plus 0.5 spaces for guest parking for developments of four or more units. A total of 158 spaces are required for the residences and a minimum of 40 spaces are required for guest parking. A total of 201 spaces are proposed to serve the project, and therefore, the project meets the parking requirements of the Municipal Code. In addition to the provision of adequate on-site parking, the project is conditioned that the parking designs meet all City requirements regarding parking stall width, depth, grade, and aisle-turning radii.

**WHEREAS**, pursuant to Section 19.12.070 of the City Subdivision Code, the following standard findings must be made to approve the Tentative Parcel Map and Tract Map.

1. The proposed Tentative Maps are consistent with the Newport Beach Subdivision Code (Title 19) and applicable requirements of the Subdivision Map Act. Conditions of approval have been included to ensure compliance with Title 19 and the Subdivision Map Act.

2. Lot 1 of the Parcel Map is being proposed for the residential development and is of sufficient size for the intensity of development and the site is physically suitable for the project. The project provides an adequate number of parking spaces as required by the Zoning Code. Access to the site can be provided through the proposed driveways along Santa Barbara Drive. Additionally, no earthquake faults were found on-site. There is no known incidence of landslide, lateral spreading, subsidence, liquefaction, or collapse on-site or near the site; however, existing soils will be required to be excavated and re-compacted to create stable soil conditions to support the proposed development. The implementation of mitigation measures identified in the draft Mitigated Negative Declaration would reduce any potential impacts. The site is, therefore, physically suitable for development.

3. Lot 2 of Parcel Map is proposed to retain a General Plan land use designation of Administrative, Professional & Financial Commercial. Lot 2 is not proposed for new development and this parcel will continue to be used as a hotel and it is of sufficient size to support its existing use.

4. Under the proposed Parcel Map, Lot 2 does not include any improvements and the development of Lot 1 as a residential use is not expected to cause serious public health problems given the use of typical construction materials and practices. No evidence is known to exist that would indicate that the proposed subdivisions will generate any serious public health problems. All mitigation measures will be implemented as outlined in the Mitigated Negative Declaration to ensure the protection of the public health.

5. No public easements for access through, or use of, the property have been retained for the use by the public at large. Public utility easements for utility connections that serve the project site are present and will be modified, if necessary, to serve the proposed project.

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6. Title 24 of the Uniform Building Code requires new construction to meet minimum heating and cooling efficiency standards depending on location and climate. The Newport Beach Building Department enforces Title 24 compliance through the plan check and field inspection processes.

7. The proposed subdivision facilitates the creation of 79 new residential units. The provision of 16 affordable units will assist the City in meeting its housing needs as identified in the Regional Housing Needs Assessment. Public services are available to serve the proposed development of the site and the Mitigated Negative Declaration prepared for the project indicates that the project's potential environmental impacts are expected to be less than significant.

8. Waste discharge into the existing sewer system will be consistent with residential use of the property which does not violate Regional Water Quality Control Board (RWQCB) requirements.

9. The proposed subdivision is entirely within the coastal zone and the site subject to the tentative maps is not presently developed with coastal-related uses, coastal-dependent uses or water-oriented recreational uses. The project is consistent with the City's 1990 Local Coastal Program Land Use Plan and the recently modified and approved LCPLUP that will replace the 1990 certified LUP. The subject site to be subdivided does not abut the ocean or bay, and does not provide public access to coastal resources; therefore, no impacts to coastal access are anticipated. Recreation policies of the Coastal Act require that site resources for water-oriented recreational activities that cannot be supplied inland must be protected. These policies prioritize water-oriented recreational activities over other land uses and encourage aquaculture and water-oriented recreational support facilities. The project site proposed to be subdivided is not suitable for water-oriented recreational activities due to its size and location, approximately 1.5 miles from the shoreline.

**WHEREAS**, the entire project is located within the Coastal Zone and requests the construction of 79 units. Pursuant to Chapter 20.86 of the Zoning Code, when a project proposes to create 10 or more units within the coastal zone, affordable housing must be included within the project unless it can be determined infeasible. The Housing Element of the General Plan determines the number and type of affordable housing that is required. In accordance with the Housing Element, 16 affordable housing units would be required to be provided.

**WHEREAS**, a Traffic Study has been prepared by Kunzman Associates under the supervision of the City Traffic Engineer pursuant to the TPO and its implementing guidelines (Appendix D of the Mitigated Negative Declaration), CEQA analysis for cumulative projects and intersection capacity utilization (ICU), and General Plan analysis. The project will result in a net increase of 330 new average daily trips, 42 vehicle trips during morning (AM) peak hour and 39 vehicle trips during the afternoon (PM) peak hour. The study concluded that the proposed project will not cause a significant impact at the study area intersections; therefore, no improvements are required at these intersections.

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**WHEREAS**, an Initial Study and Mitigated Negative Declaration (MND) have been prepared in compliance with the Environmental Quality Act (CEQA), the State CEQA Guidelines, and City Council Policy K-3. The Draft MND was circulated for public comment between July 15 and August 15, 2005. Comments were received from the California Coastal Commission, Airport Land Use Commission and Mr. Terek Saleh of Costa Mesa. The contents of the environmental document, including comments on the document, have been considered in the various decisions on this project. Since then, it was determined that the most appropriate zoning designation for the property would be PC (Planned Community). This new zoning designation does not affect the size, scope or design of the project that would potentially create additional physical environmental impacts. As result, it has been determined that the MND adequately describes the potential impacts of the project and does not require additional recirculation and review of the MND. An addendum has been prepared to address the change in the zoning designation and made it a part of the MND.

**WHEREAS**, on the basis of the entire environmental review record, the proposed project will have a less than significant impact upon the environment and there are no known substantial adverse affects on human beings that would be caused. Additionally, there are no long-term environmental goals that would be compromised by the project, nor cumulative impacts anticipated in connection with the project. The mitigation measures identified are feasible and reduce potential environmental impacts to a less than significant level. The mitigation measures are applied to the project and are incorporated as conditions of approval.

**WHEREAS**, General Plan Amendment No. 2004-005, Planned Community Development Plan No. 2005-003, Tentative Parcel Map No. 2005-014, Tentative Tract Map No. 2004-004 (16774), Traffic Study No. 2005-002 and Coastal Residential Development Permit No. 2005-004 shall only become effective upon the approval of LCP Land Use Plan Amendment No. 2005-001 by the California Coastal Commission.

**NOW, THEREFORE, BE IT RESOLVED**, that the City Council of the City of Newport Beach does hereby adopt Mitigated Negative Declaration (SCH No. 2005-071067); approve General Plan Amendment No. 2004-005 by amending the Land Use Element, Statistical Area L1, Block 900-Hotel Plaza and the Estimated Growth for Statistical Area L1 Table of the General Plan as depicted in Exhibit "A" and Land Use map in Exhibit "B", LCP Land Use Plan Amendment No. 2005-001 by revising Land Use map as depicted in Exhibit "C", Tentative Parcel Map No. 2005-014, Tentative Tract Map No. 2004-004 (16774), Traffic Study No. 2005-002 and Coastal Residential Development Permit No. 2005-004, subject to the conditions of approval listed in Exhibit "D"

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This resolution shall take effect immediately upon adoption. Passed and adopted by the City Council of Newport Beach at a regular meeting held on the 10th day of January 2006 by the following vote to wit:

AYES, COUNCIL MEMBERS Heffernan, Selich, Rosansky, Ridgeway, Daigle, Nichols, Mayor Webb

NOES, COUNCIL MEMBERS None

ABSENT, COUNCIL MEMBERS None

MAYOR

ATTEST:

LaVonne M. Harkless

CITY CLERK

CITY OF NEWPORT BEACH CALIFORNIA

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RESOLUTION NO. 2006-26

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF NEWPORT BEACH DECLARING THAT LOCAL COAST PROGRAM LAND USE PLAN AMENDMENT NOS. 2005-001 AND 2006-001 ARE INTENDED TO BE CARIED OUT IN FULL CONFORMANCE WITH THE CALIFORNIA COASTAL ACT**

**WHEREAS,** on January 10, 2006, the City Council approved Coastal Land Use Plan Amendment No. 2005-001 changing the coastal land use designation of a 4.25-acre site locates at 900 Newport Center Drive from CV-B (Visitor-Serving Commercial) to RM-C (Medium Density Residential) allowing the development of 79 residential condominiums.

**WHEREAS,** on February 14, 2006, the Council approved Coastal Land Use Amendment No. 2006-001 changing the coastal land use designation of a 14.25 acre site located at 4850 West Coast Highway from RM-B (Medium Density Residential) to OS (Open Space) to facilitate the development of a public park.

**WHEREAS,** the approval of these two amendments should have included a finding that the amendments are intended to be carried out in full conformance with the California Coastal Act and they should have specified when the amendments become effective.

**NOW, THEREFORE, BE IT RESOLVED**

Section 1. Coastal Land Use Plan Amendment Nos. 2005-001 and 2006-001 are intended to be carried out in full conformance with the California Coastal Act.

Section 2. Coastal Land Use Plan Amendment Nos. 2005-001 and 2006-001 shall take effect automatically upon Coastal Commission action unless the Coastal Commission proposes suggested modifications. In the event that the Coastal Commission proposes revisions, the LCP Land Use Plan Amendments shall not take effect until the City Council adopts the Commission suggested modifications.

Section 3. This resolution shall take effect immediately upon adoption.

Passed and adopted by the City Council of Newport Beach at a regular meeting held on the 28th day of March 2006 by the following vote to wit:

AYES, COUNCIL MEMBERS Curry, Selich, Rosansky, Ridgeway, Daigle, Nichols, Mayor Webb

NOES, COUNCIL MEMBERS ---

ABSENT, COUNCIL MEMBERS ---

MAYOR

ATTEST:

LaVonne M. Harkless

CITY CLERK

COASTAL COMMISSION
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STATE OF CALIFORNIA }
COUNTY OF ORANGE } ss.
CITY OF NEWPORT BEACH }

I, LaVonne M. Harkless, City Clerk of the City of Newport Beach, California, do hereby certify that the whole number of members of the City Council is seven; that the foregoing resolution, being Resolution No. 2006-26 was duly and regularly introduced before and adopted by the City Council of said City at a regular meeting of said Council, duly and regularly held on the 28th day of March 2006, and that the same was so passed and adopted by the following vote, to wit:

Ayes: Curry, Selich, Rosansky, Ridgeway, Daigle, Nichols, Mayor Webb

Noes: None

Absent: None

Abstain: None

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed the official seal of said City this 29th day of March 2006.

LaVonne M. Harkless
City Clerk
Newport Beach, California

(Seal)

EX. 2
2/2

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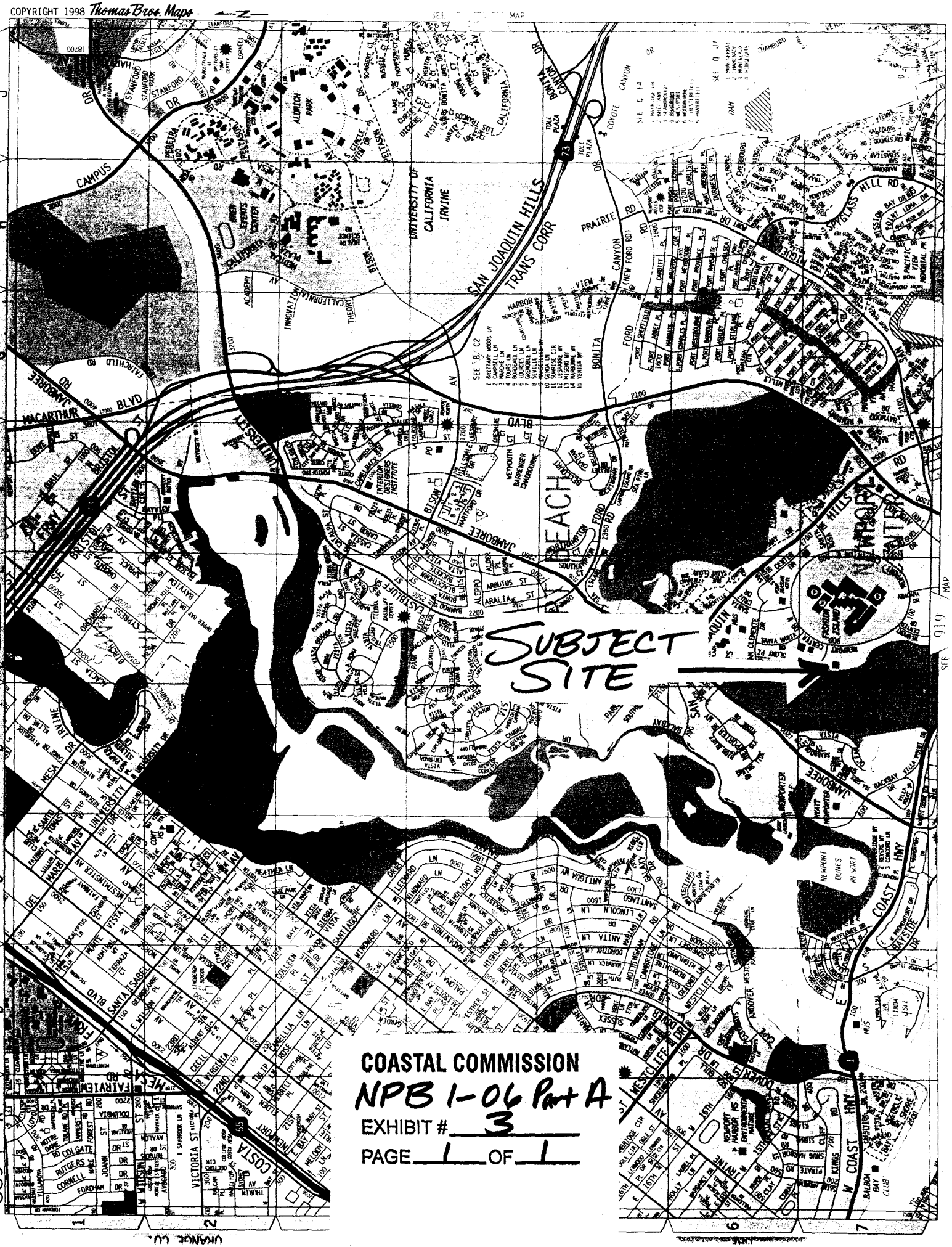



COASTAL COMMISSION

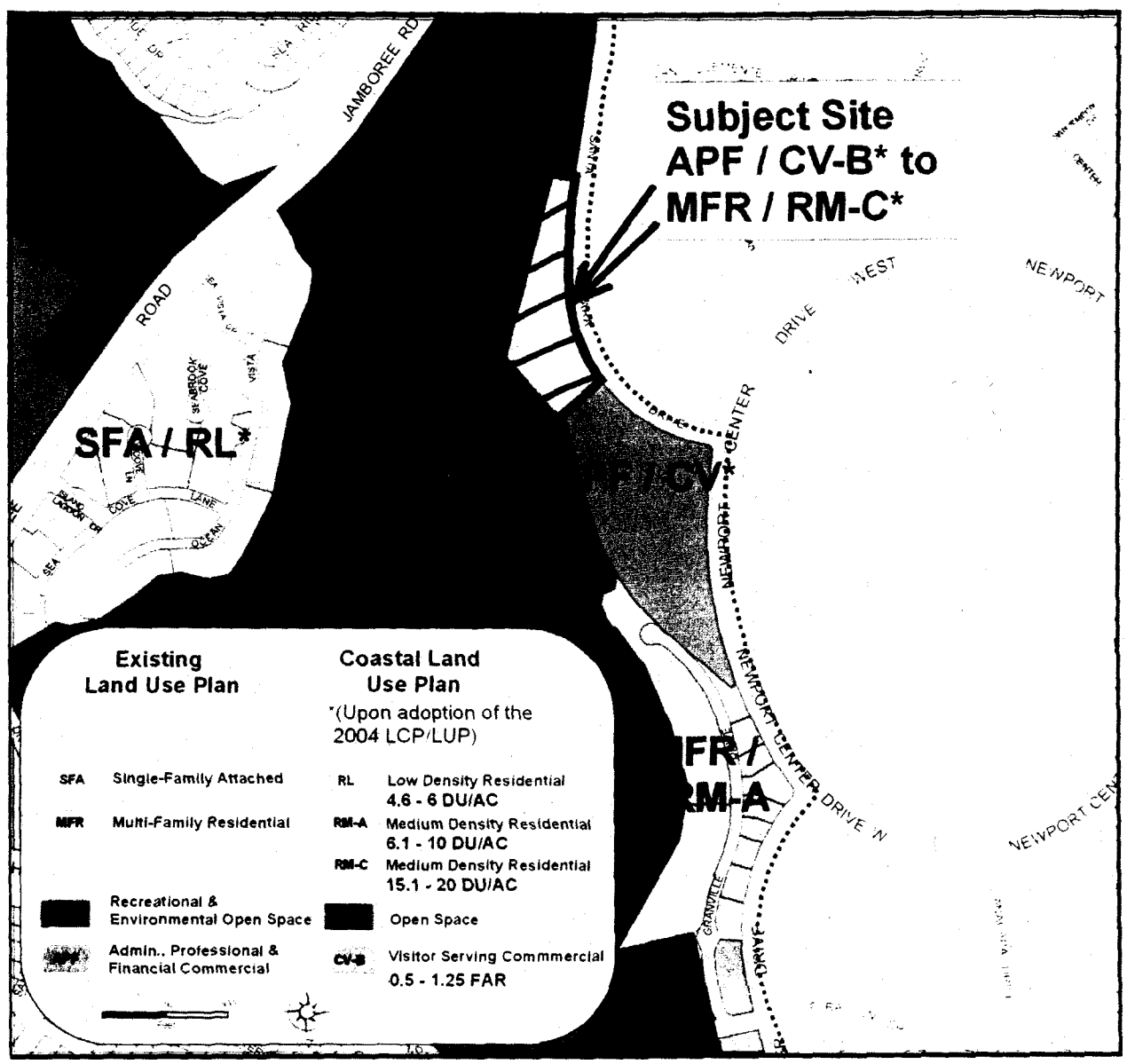
NPB 1-06 Part A

EXHIBIT # 3

PAGE 1 OF 1

# Exhibit "C"

## PROPOSED CHANGE TO THE 1990/2004 LOCAL COASTAL LAND USE MAP FROM APF/CV-B TO MFR/RM-C




COASTAL COMMISSION
NPB 1-06 Part A
EXHIBIT # 4
PAGE 1 OF 1

# CALIFORNIA COASTAL COMMISSION

South Coast Area Office
200 Oceangate, Suite 1000
Long Beach, CA 90802-4302
(562) 590-5071

RE[illegible]NT
PLA[illegible]
CITY O[illegible]CH

Date 8/8/06

SEP 1 4 2006

Re: Application/Appeal No NPB-MAJ-1-06
Santa Barbara Condos

## STATUS LETTER

The status of this matter is noted below.

Oct 12 Hyatt Recency Long Beach

X Your application was filed on 4/14/06.
The public hearing is tentatively scheduled on Oct. 11-13, 2006 in Long Beach. This tentative scheduling information is being provided for your convenience and is subject to change. Written notification of final scheduling of the hearing, along with a copy of the staff report, will be mailed approximately 10 days prior to the hearing.
IMPORTANT: The enclosed Notice of Pending Permit must be posted on the site, in a conspicuous place, within 3 days of its receipt.

___ This application is incomplete and cannot be filed or processed until the items listed on the attached sheet have been completed and submitted to the District Office. If these items have not been received by the date indicated, the entire package will be returned to you.

Please be advised that the items needed to complete your application must be submitted to this office by _____.

___ This file is being returned as the application submitted is deemed incomplete. The required substantive documents are missing. Please see the attached sheet.

___ This appeal was received _____ and has been determined to be a valid appeal. You will be notified of the place and date of the public hearing.

___ This appeal was received _____ but has been determined invalid for the following reason:

_____

_____

If you have any questions, please contact this office at (562) 590-5071.

Staff Analyst Ryan Todaro

**CALIFORNIA COASTAL COMMISSION**
South Coast Area Office
200 Oceangate, Suite 1000
Long Beach, CA 90802-4302
(562) 590-5071

# T8b

July 20, 2006

**TO:** Commissioners and Interested Persons

**FROM:** Deborah Lee, Senior Deputy Director, South Coast District
Teresa Henry, District Manager, South Coast District
Karl Schwing, Supervisor, Regulation & Planning, Orange County Area
Anne Blemker, Coastal Program Analyst

**SUBJECT:** **City of Newport Beach Land Use Plan Amendment NPB-MAJ-1-06 Part A (Marriott Hotel VSC to MDR/Santa Barbara Condominiums)**

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## SUMMARY OF STAFF REPORT

### DESCRIPTION OF THE SUBMITTAL

The amendment that is the subject of this report was submitted as part of a package with other Land Use Plan (LUP) amendments. This report deals only with "Part A" of the amendment. Part A of the amendment consists of a request by the City of Newport Beach to change the land use designation of a 4.25 acre area (presently occupied by tennis courts) at the Marriott Hotel from Visitor-Serving Commercial to Medium Density Residential, at 900 Newport Center Drive, Newport Beach, Orange County. (Part B of the amendment was acted on separately at the Commission's July 2006 hearing, and Part C was retracted, in part because the City Council had not authorized its original submittal.) The proposed land use change would allow the construction of condominiums (or other medium density residential) on the subject property. A corresponding coastal development permit application (5-06-168, Lennar) has been submitted and will be considered at a subsequent hearing.

The major issues raised by this amendment request are adequate provision of visitor-serving commercial development and public access.

### SUMMARY OF STAFF RECOMMENDATION

Commission staff recommends that the Commission **DENY** Part A of the proposed amendment because the land use redesignation would result in a loss of one of the few sites designated Visitor-Serving Commercial in the certified LUP. The motion to accomplish this is found on Page 3.

### ANTICIPATED AREAS OF CONTROVERSY

The City and the landowner object to the staff recommendation.

## ADDITIONAL INFORMATION

For further information, please contact **Anne Blemker** at the South Coast District Office of the Coastal Commission at **(562) 590-5071**. The proposed amendment to the Land Use Plan (LUP) of the City of Newport Beach Local Coastal Program (LCP) is available for review at the Long Beach Office of the Coastal Commission or at the City of Newport Beach Planning Department. The City of Newport Beach Planning Department is located at 3300 Newport Boulevard in Newport Beach. **Rosalinh Ung** is the contact person for the City's Planning Division, and he may be reached by calling **(949) 644-3208**.

## EXHIBITS

1. City Council Resolution No. 2006-02 approved January 10, 2006
2. City Council Resolution No. 2006-26 approved March 28, 2006
3. Vicinity Map
4. Land Use Map

# I. COMMISSION RESOLUTION ON CITY OF NEWPORT BEACH LOCAL COASTAL PROGRAM AMENDMENT 1-06 (PART A)

Following a public hearing, staff recommends the Commission adopt the following resolution and findings.

**Motion for Part A**

*"I move that the Commission **CERTIFY** the City of Newport Beach Land Use Plan Amendment NPB MAJ 1-06 Part A as submitted."*

**Staff Recommendation**

Staff recommends a **NO** vote. Failure of this motion will result in denial of the land use plan amendment as submitted and adoption of the following resolutions and findings. The motion to certify as submitted passes only upon affirmative vote of a majority of the appointed Commissioners.

**Resolution**

The Commission hereby **DENIES** the City of Newport Beach Land Use Plan Amendment 1-06 Part A as submitted and adopts the findings stated below on the grounds that the amendment will not meet the requirements of and is not in conformity with the policies of Chapter 3 of the California Coastal Act. Certification of the Land Use Plan amendment would not comply with the California Environmental Quality Act as there are feasible mitigation measures and alternatives that would substantially lessen the significant adverse impacts on the environment that will result from certification of the land use plan amendment as submitted.

# II. PROCEDURAL PROCESS (LEGAL STANDARD FOR REVIEW)

## *A. Standard of Review*

The standard of review for land use plan amendments is found in Section 30512 of the Coastal Act. This section requires the Commission to certify an LUP amendment if it finds that it meets the requirements of, and is in conformity with, the policies of Chapter 3 of the Coastal Act. Specifically, Section 30512(c) states: *"The Commission shall certify a land use plan, or any amendments thereto, if it finds that a land use plan meets the requirements of, and is in conformity with, the policies of Chapter 3 (commencing with Section 30200). Except as provided in paragraph (1) of subdivision (a), a decision to certify shall require a majority vote of the appointed membership of the Commission."*

## *B. Procedural Requirements*

Pursuant to Section 13551(b) of Title 14 of the California Code of Regulations, a local government's resolution for submittal of a proposed LUP amendment must indicate whether the local coastal program amendment will require formal local government adoption after Commission approval, or is an amendment that will take effect automatically upon the Commission's approval pursuant to Public Resources Code Sections 30512, 30513 and 30519. The City of Newport Beach's submittal indicates that this LCP amendment will take effect upon Commission certification.

# III. BACKGROUND

The Land Use Plan (LUP) for the City of Newport Beach was effectively certified on May 19, 1982 and comprehensively updated October 13, 2005.

The subject amendment was initially submitted by the City of Newport Beach on March 6, 2006. On March 15, 2006, Coastal Commission staff notified the City of Newport Beach that the submittal was incomplete and that additional information would be required to complete the submittal. City staff submitted the information on April 14, 2006. On May 18, 2006, Coastal Commission staff notified the City that the amendment request was complete. The Commission approved a request for a one-year (1) time extension of the amendment on June 13, 2006. Part B of the amendment request, which involved a change in the land use designation of another parcel from Medium Density Residential to Open Space, was approved by the Commission on July 12, 2006. Part A of the amendment request is now being submitted for Commission action. Part A involves a change in land use designation at 900 Newport Center Drive from Visitor-Serving Commercial to Medium Density Residential.

## IV. SUMMARY OF PUBLIC PARTICIPATION

The City of Newport Beach approved this segment of the Land Use Plan amendment request (Part A) through a City Council public hearing on January 10, 2006. The item was originally scheduled for the Council hearing of November 22, 2005, but the item was continued to the December 13, 2005 hearing and finally approved on January 10, 2006. It was approved through City Council Resolution No. 2006-02, which approved General Plan Amendment No. 2004-005 and Local Coastal Plan Amendment 2005-001 (Exhibit 1). Prior to either the City Council approving the LUP amendment request, or the Planning Commission voting to recommend that the City Council do so, the Planning Commission held a public hearing on November 3, 2005. Notice was provided for both entities' hearings. Notice of the City Council's public hearing was mailed and posted on November 14, 2005 and published in the local newspaper on November 12, 2005. The City Council approved a subsequent resolution (Resolution No. 2006-26) on March 28, 2006 to correct procedural deficiencies in the original resolution related to the Coastal Act requirements (Exhibit 2).

One letter of opposition was received at the local level. The letter expresses concerns about increased density at the subject site. No oral comments were received during the public hearings held at the local level.

## V. FINDINGS FOR DENIAL OF PART A OF NPB-MAJ-1-06

The Commission hereby finds and declares as follows:

Site Description and Land Use Designation

The proposed land use redesignation will affect only one site—900 Newport Center Drive in the City of Newport Beach, Orange County. The 4.25-acre site is located in the Newport Center/Fashion Island area of the City, inland of Pacific Coast Highway (Exhibit 3). The site is currently operated as a private tennis club used by members and guests of the Newport Beach Marriott Hotel. There are eight outdoor tennis courts, a clubhouse and ancillary uses on the property. The property owner proposes to subdivide the subject site from the larger hotel parcel and develop a 79-unit condominium project.[1]

The site is currently designated Visitor-Serving Commercial (CV-B) in the City's Certified Land Use Plan, as depicted in Exhibit 4. The site is surrounded by a golf course to the west and north, hotel development to the south, and commercial offices to the east.

[1] Coastal Development Permit Application 5-06-168 (Lennar), which seeks authorization to develop the condominium project, will be considered by the Commission at a subsequent hearing.

Coastal Act Policies

As stated previously, the Coastal Act is the standard of review in the current analysis. The Coastal Act encourages the provision of lower cost visitor and recreational facilities and prioritizes visitor-serving commercial development over residential development. The proposed LUP amendment is not in conformity with the public access and recreation policies of the Coastal Act relating to the provision of visitor serving development. Applicable provisions of the Coastal Act include the following:

Section 30213 states, in pertinent part:

> *Lower cost visitor and recreational facilities shall be protected, encouraged, and, where feasible, provided. Developments providing public recreational opportunities are preferred.*

Section 30222 states:

> *The use of private lands suitable for visitor-serving commercial recreational facilities designed to enhance public opportunities for coastal recreation shall have priority over private residential, general industrial, or general commercial development, but not over agriculture or coastal-dependent industry.*

Land Use Plan Policies

2.3.1-3 *On land designated for visitor-serving and/or recreational uses, give priority to visitor-serving commercial recreational facilities designed to enhance public opportunities for coastal recreation over other commercial uses, except for agriculture and coastal-dependant industry.*

2.3.3-3 *Encourage visitor-serving and recreational developments that provide public recreational opportunities.*

Proposed Change in Land Use Designation

The proposed amendment (NPB MAJ 1-06, Part A) involves a request to change the land use designation of a 4.25-acre area of the Newport Beach Marriott Hotel from Visitor Serving Commercial to Medium Density Residential at 900 Newport Center Drive. No other properties are subject to the proposed land use change.

The proposed change will have an adverse affect on priority visitor-serving opportunities in the area. Residential development is the lowest priority use within the Coastal Zone. The City indicates that the loss of CV-B designated land at this location will not have an adverse affect on visitor-serving commercial or recreational activities. According to the amendment request, "*[t]he property is not located in close proximity to coastal resources, coastal recreational use or the water and the change in land use does not impact the adjacent visitor serving uses other than to eliminate the accessory tennis courts, which is not a coastal dependent recreational activity.*" Although the tennis courts are not considered a "coastal dependent" activity, tennis is a recreational activity,

and the site is part of a larger commercial facility (Marriott Hotel) that serves visitors to the coast. Thus, although currently operated as a private tennis club serving only members and guests of the Newport Beach Marriott Hotel, that is nevertheless a visitor-serving recreational offering. In addition, the hotel is located in close proximity to popular visitor destinations, such as the Newport Dunes, Balboa Island and the beach. The site is located in a highly visible, well-traveled location and could potentially support some form of commercial and/or recreational development in the future. If the site were to be redesignated for residential development now, the opportunity for a future visitor-serving use that would be even more generally accessible or lower cost would be lost.

The City states that the loss of this visitor-serving commercial site as a result of the requested amendment would not significantly reduce the amount of visitor-serving land in the City. The City concludes that the project represents a reduction in visitor serving uses of 2% based on a table showing the portion of land currently designated as visitor serving commercial and what will remain after the 4.25-acre site is re-designated. The table is replicated below.

| **Visitor Serving Commercial Designation** | **Amount of Land** |
|---|---|
| CV-A (0.5—0.75) | 7.65 acres |
| CV-B (0.5—1.25) | 42.90 acres |
| Newport Coast Planned Community | 153.00 acres |
| **CITYWIDE TOTAL:** | 203.55 acres |
| Less project | -4.25 acres |
| **REMAINING CITYWIDE TOTAL:** | 199.30 acres |
| | (2% loss of CV-B) |

The City included the Newport Coast Planned Community in the above-referenced tabulation. However, Newport Coast is covered by a segment of the County of Orange certified LUP and is not within the boundary of the City of Newport Beach certified LUP. As such, the 153.00 acres of visitor serving commercially designated area referred to in the table is not covered by the LUP that is the subject of the current amendment request. In actually, the 4.25-acre loss represents an 8.4% [4.25/(7.65+42.90)]--not 2%-- reduction in visitor-serving land in the portion of the City covered by this LUP.

In addition, the subject site is one of only five sites designated Visitor-Serving Commercial (CV) in the City's certified LUP. Many land uses that are in fact visitor-serving are located within the General Commercial (CG) or Neighborhood Commercial (CN) designation and could thus cease to provide a visitor-serving function. According to the LUP, *[t]he CV designation is intended to provide for accommodations, goods, and services intended to primarily serve the needs of visitors of Newport Beach."* Hotels, and their ancillary development, clearly fit this designation and should be protected consistent with Section 30222 of the Coastal Act. The LUP includes policies that encourage visitor-serving and recreational developments that provide public recreational opportunities. Although the tennis courts are part of a private club, they are available for use by hotel guests. Hotel guests are typically members of the public that are visitors to the area.

The agent for the corresponding CDP application states that the tennis courts are underutilized and replacing the courts *"does not remove a publicly accessible, widely-used recreation facility from the coastal zone."* The Commission acknowledges that the property owner is in no way obligated to retain the tennis court use of the site. However, under the current land use designation, the site can only be developed with uses allowed under the CV designation. Commercial development of the site could serve potential visitors to the coast. The location is conducive to commercial recreational development and consistent with the adjacent hotel use and the nearby commercial development. Residential development at the subject site would serve no purpose to members of the visiting public and would potentially establish a precedent for residential conversions in the subject area.

Concerns have also been raised that the proposed residential land use is inconsistent with the neighboring Newport Beach Country Club golf course because of potential safety issues. Due to the configuration of the golf course holes adjacent to the subject site, golf balls are periodically hit into the tennis court area. A substantial fence has been erected to prevent injuries. This, in conjunction with the limited use of the tennis courts, has minimized potential hazard. However, with a proposed residential development, such as the one proposed through CDP application 5-06-168, there would be a greater probability that an errant ball could result in injury. As such, the proposed amendment may create a serious land use conflict between an existing recreational facility and residential development.

The proposed land use conversion proposed as Part A of the City's amendment request is inconsistent with Section 30213 of the Coastal Act, which requires lower cost visitor and recreational facilities be *"protected, encouraged, and, where feasible, provided."* The proposed amendment will also have an adverse effect on the priority *"visitor-serving commercial recreational facilities"* to be provided under Section 30222 of the Coastal Act. Therefore, Part A of the amendment must be denied.

## VI. CONSISTENCY WITH THE CALIFORNIA ENVIRONMENTAL QUALITY ACT

Section 21080.9 of the California Environmental Quality Act (CEQA) exempts local governments from the requirement of preparing an environmental impact report (EIR) in connection with a local coastal program (LCP). Instead, the CEQA responsibilities are assigned to the Coastal Commission. Additionally, the Commission's Local Coastal Program review and approval procedures have been found by the Resources Agency to be functionally equivalent to the environmental review process. Thus, under Section 21080.5 of CEQA, the Commission is relieved of the responsibility to prepare an environmental impact report for each local coastal program submitted for Commission review and approval. Nevertheless, the Commission is required when approving a local coastal program to find that the local coastal program does conform to the provisions of CEQA and to base the certification on a specific factual finding supporting the conclusion that the proposal *"meets the requirements of [CEQA] Section*

*21080.5(d)(2)(i) . . .*," which requires that an activity will not be approved or adopted as proposed if there are feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse impact which the activity may have on the environment. 14 C.C.R. §§ 13555(b) and 13540(f).

The amendment involves a request to change the land use designation of a 4.25 acre area (presently occupied by tennis courts) at the Marriott Hotel from Visitor-Serving Commercial to Medium Density Residential. As proposed, the change in land use proposed in Part A is inconsistent with the public access and recreation policies of the Coastal Act and must be denied.

The Commission finds that approval of Part A of the Land Use Plan amendment will result in significant adverse environmental impacts under the meaning of the California Environmental Quality Act. In addition, the Commission finds that there are feasible alternatives under the meaning of CEQA, including the no project alternative, which would reduce the potential for significant adverse environmental impacts which have not been explored. The proposal must therefore be denied.

*H:\Staff Reports\Aug06\NPB-MAJ-1-06(part a).doc*

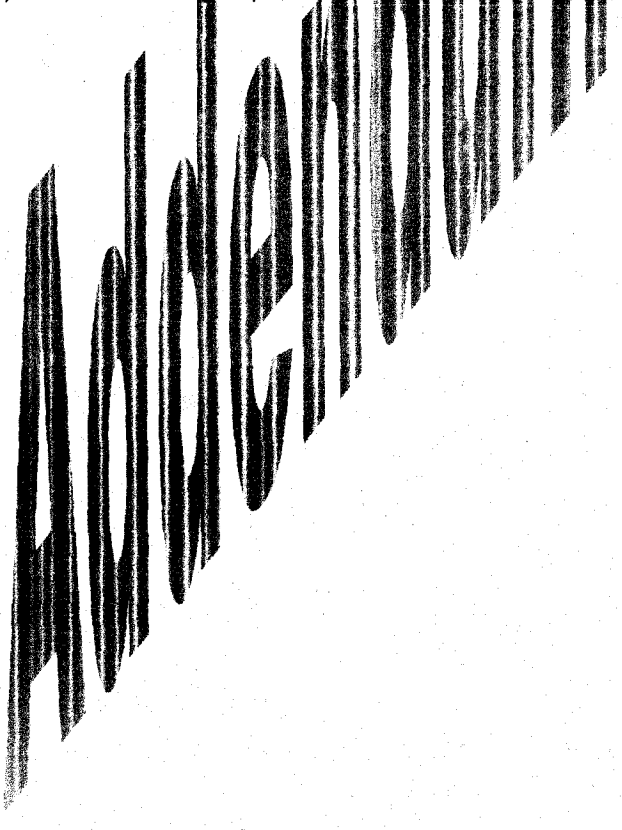
# FRIDAY, OCTOBER 13, 2006

8. **NEW APPEALS.** See AGENDA CATEGORIES description on page 21.

   c. **Appeal No. A-1-HUM-06-41 (Fennell,** Humboldt Co.) Appeal by Commissioners Meg Caldwell & Sara J. Wan from decision of County of Humboldt granting permit with conditions to Michael & Sharon Fennell to divide approximately 3.7 acre parcel into three parcels of approximately 15,000 sq. ft., 15,670 sq. ft., and 2.95 acres and construct single family residences on Parcels 1 and 3 that are each two story, a maximum of 30 ft. high and 2,000 sq. ft. in area, with attached two car garages approximately 440 sq. ft. in size, at 1505 Peninsula Drive, Manila, Humboldt County. (RSM-E)

10. **PERMIT AMENDMENTS.** See AGENDA CATEGORIES description on page 21.

   a. **Permit No. 1-94-113-A3 (Kaufman & Saunders,** Mendocino Co.) Request by Paul Kaufman & Myra Saunders to construct an approximately 3,400 sq. ft., single-family residence with attached 600-sq. ft. garage, entry path and decks, underground utilities, pump house, propane tank, water storage tank and generator and relocate existing driveway, well, and septic system, at 4330 North Highway One, Little River, Mendocino County. (TST-E)





## FUTURE AGENDA ITEMS

The items listed below may be coming before the Commission during the next few months. Publication of this list is provided for the purpose of facilitating public participation in the Commission's activities and is not required by law. The list's inclusion in this Meeting Notice also does not constitute, nor substitute for any of the notice requirements contained in the Coastal Act and Commission regulations. Also, please be aware that the details of a submittal may change as staff review proceeds, and that not all submittals of potential significance may appear on the listing below.

**Statewide Planning & Federal Consistency Unit**

**CD-80-04 Corps of Engineers**, Los Angeles District construct a submerged artificial reef comprised of sand-filled geotextile bags 200 yards offshore of Mussel Shoals, Ventura Co.
**CC-14-05 Verizon Wireless** construct 17 miles of underground fiber optic communications line within Highway 1 corridor between Timber Cove and Sea Ranch, Sonoma Co.
**Transportation Corridor Agencies,** South Orange County Infrastructure Improvement Project, located in southern Orange County and northern San Diego County (Camp Pendleton Marine Corps Base, San Mateo Creek watershed), a 16 mile extension of the Route 241 Foothill Toll Road, from I-5 north to Ortega Blvd.
**Caltrans High Speed Rail**, LOSSAN Mass Transit, High Speed Train throughout California (south of Sacramento to the San Francisco Bay Area, the Central Valley, and southern California) with one component, which may be separate or combined with it, is LOSSAN, Passenger Rail Improvements, Los Angeles to San Diego (LOSSAN) Rail Corridor
**Navy, San Clemente Island Range Complex**, a Master Plan for the underwater submarine testing range offshore of San Clemente Island
**Corps of Engineers** - Bolinas Lagoon Restoration
**GGNRA**, Marin County, Big Lagoon, Restoration
**Corps of Engineers**, Pajaro River Flood Control Project

**Energy & Ocean Resources Unit**
**Cabrillo Port Liquefied Natural Gas (LNG) Receiving Terminal and Regasification Facility.** Consistency certification by BHP Billiton to construct and operate (1) a floating storage and LNG regasification unit (FSRU) in federal waters about 14 miles offshore of the coasts of Ventura and Los Angeles counties and (2) two 21-mile long 24-inch diameter natural gas pipelines in federal and State waters landing at the Reliant Energy Ormond Beach Generating Station. The FSRU would receive 2-3 LNG tanker shipments per week and deliver about 800 million cu.ft. feet per day of natural gas to shore. Projected for January 2007.
**Poseidon Huntington Beach** desalination project.
Appeals of City of Carlsbad's decision on **Poseidon desalination** project

**North Coast District**
**North Central Coast District**
**Half Moon Bay LCP** Update

**Central Coast District**
**San Luis Obispo County Local Coastal Program Amendment No. 1-05, Part 1 (Port San Luis Masterplan).** Proposal by San Luis Obispo County to amend provisions of the San Luis Bay Area Plan regarding development at Port San Luis in a manner that incorporates recent updates to the Port San Luis Master Plan.
***Pleasure Point Parkway and Seawall Project.*** *Santa Cruz County proposal to redevelop East Cliff Drive* at Pleasure Point in the Live Oak beach area of Santa Cruz County. Proposal includes recreational trail and roadway improvements and two faux bluff seawalls between 32nd and 41st Avenues.

**Application No. 3-06-24 (City Of Pacific Grove, Public Works Department,** Pacific Grove) Application of City Of Pacific Grove, Public Works Department to repair, maintain, and replace existing shoreline structures adjacent to the Pacific Grove Recreation Trail at eighteen locations.
**UCSC CLRDP.** University of California at Santa Cruz (UCSC)'s proposed Coastal Long Range Development Plan (CLRDP) for an expanded Marine Science Campus on the University's 100-acre Terrace Point property at the western border of the City of Santa Cruz.

**FUTURE AGENDA ITEMS Continued**

**South Central Coast District**

**UCSB LRDP Amendment MAJ-1-06 and NOID 1-06 (North & West Campus Housing, UCSB)** Amendment to the University's Long Range Development Plan and related Notice of Impending Development to allow construction of 437 housing units.

**Appeal No. A-4-STB-04-124 (Santa Barbara County Public Works Dept.,** Santa Barbara Co.) De Novo permit action for project appealed by Commissioners Caldwell & Wan, Bruce Murdock and Surfrider Foundation from decision of County of Santa Barbara granting permit to Santa Barbara County Public Works Department for implementation of a Managed Parking Program in the public rights-of-way in Isla Vista, Santa Barbara County.

**South Coast District**

**Application No. 5-06-327 Shea Homes (Parkside Estates)** creating 170 residential lots, roads and park; construction of 170 single family homes, related infrastructure, 8.2 acre public active park, 6.3 acre open space, new storm drain, new pump facility at the Slater/Wintersburg storm water pump station, improvements to the flood control channel, replace sewer pump, and new sewer force-main, occurring within a vacant 50 acre area in Huntington Beach.

**Huntington Beach Amendment No. 1-06 (Parkside)** to certify an approximately 45 acre area adjacent to Graham Street, south of Kenilworth that was deferred certification at the time the rest of the LCP was certified and to certify an adjacent approximately 5 acre area that was recently annexed by the City, at an area known as Parkside Estates (previously known as the MWD site).

**Application No. 5-06-226 (City of Santa Monica,** Santa Monica) Application of City of Santa Monica for improvements to public beach facility including: construction of 2-story, approximately 7,000 sq. ft. Pool House with locker and changing rooms, multi-purpose room, staff offices and storage; 1-story, approximately 700 sq. ft., entry pavilion; approximately 500 sq. ft., public restroom; three volleyball courts, 2 paddle tennis courts; family picnic and child's water play area; children's play ground; two lateral beach boardwalks; one handicap access for vertical access; 1,000 sq. ft. beach concession building; 6,200 sq. ft. Event House; addition of 117 new parking spaces for total of 279 spaces, at 415 Pacific Coast Highway, Santa Monica, Los Angeles County. (AP-LB)

**San Diego Coast District**

**San Diego LCP Amendment No. 3-05B (Brush Mgmt. Regs)** to modify the current brush mgmt. regulations and increase the combined brush mgmt. Zone One and Zone Two from up to 85 ft. (max.), to a full 100-ft. fuel modification area between all habitable structures and any native or naturalized vegetation, with other changes to brush mgmt. reqts. city-wide.

**Encinitas LCP Amendment No. 1-06 (Vacation Rentals)** to prohibit short-term vacation rentals in residential zones.

ADDENDUM
OCTOBER 11-13, 2006

# WEDNESDAY, OCTOBER 11, 2006

**CLOSED SESSION**. At a convenient time during the meeting, the Commission (CCC) will have a closed session to discuss items of pending litigation, including:

Communications Relay Corp. et al. v. CCC et al. (Govt. Code § 11126(e)(2)(A).
Witter v. CCC et al. (Govt. Code § 11126(e)(2)(A).
CCC v. Witter et al. (Govt. Code § 11126(e)(2)(A).
McAllister v. CCC (Laube & Engel et al. RPI) (Monterey County Superior Court Docket No. M73043) (Govt. Code § 11126(e)(2)(A).
Security National Guaranty, Inc. v. State of California, CCC. (Govt. Code § 11126(e)(2)(A).
Kretowicz v. CCC. (Govt. Code § 11126(e)(2)(A).

The Commission is authorized to discuss these matters in a closed session pursuant to Government Code Sections 11126(e)(2)(A) and (2)(C). In addition, the Commission may consider matters which fall under Government Code Section 11126(e)(2)(B) or (2)(C).

9. **LOCAL COASTAL PROGRAMS (LCPs).** See AGENDA CATEGORIES description on page 21.

   c. **San Luis Obispo Co. LCP Amendment No. SLO-MAJ-1-06 Parts 1 and 2 (Cambria/San Simeon Acres Community Plans & Fiscalini Ranch Amendment) Time Extension.** Public hearing and action to extend time limit to act on request by San Luis Obispo County to incorporate Cambria/San Simeon Acres Community Plans and Fiscalini Ranch Amendment in to the North Coast Area Plan and Coastal Zone Land Use Ordinance. (JB-SC)

   d. **Pismo Beach LCP Amendment No. PSB-MAJ-2-06 (Secondary Dwelling Units) Time Extension.** Public hearing and action to extend time limit to act on request by City of Pismo Beach to modify LCP standards for construction of secondary dwelling units. (MW-SC)

# THURSDAY, OCTOBER 12, 2006

4. **ADMINISTRATIVE PERMIT APPLICATIONS.** See AGENDA CATEGORIES description on page 21.

   c. **Application No. 5-06-306 (Teazis,** Huntington Beach) Application of Theo Teazis to remove and replace existing wooden cantilevered deck with approximately 85 ft.-long concrete deck cantilevered over bulkhead with 7 ft.-high tempered glass windscreen, at 4021 Diablo Circle, Huntington Beach, Orange County. (MV-LB)

   d. **Application No. 5-06-315 (McGee,** Newport Beach) Application of Mary Gay Wassall McGee to remove and replace existing boat dock with same configuration as existing boat dock. Proposed dock will include new 14 ft. x 17 ft. float, 3 ft. x 24 ft. gangway, re-deck existing 10 ft. x 14 ft. pier platform and pier. Five 14 in. diameter, concrete "T" piles are proposed to replace existing five "T" piles supporting pier. Two 12 in. diameter concrete piles are proposed to replace existing two piles supporting float, at 409 Edgewater Place, Newport Beach, Orange County. (MV-LB)

11. **LOCAL COASTAL PROGRAM (LCP).** See AGENDA CATEGORIES description on page 21.

   d. **City of Dana Point LCP Amendment No. DPT-MAJ-2-06. Time Extension.** Public hearing and action on request to extend the sixty-day time limit for a period of one year for Commission action on City of Dana Point LCP Amendment Request No. 2-06 (modifying height regulations to address the unique constraints posed by hillside lots). (FSY-LB)

b. **City of Newport Beach (Part A) LCP Amendment No. NPB-MAJ-1-6.** Public hearing and action on request by City Of Newport Beach To change land use designation of 4.25 acre tennis court area at Marriott Hotel from Visitor-Serving Commercial to Medium Density Residential, at 900 Newport Center Drive, Newport Beach, Orange County. (RT-LB)

c. **City of Redondo Beach LCP Amendment No. RDB-MAJ-1-06** Public hearing and action on request to amend certified Local Coastal Program (LCP) by 1) amending geographic segmentation to add lots on east side of Catalina Avenue between Pacific Coast Highway and Beryl Avenue to certified area (Area One); 2) Change land use designation of lots located on east side of Catalina Avenue between North Gertruda Ave and North Elena Avenue from commercial to multi-family residential on certified Land Use Plan (LUP) Map and designate lots R-3A residential and RMD residential on certified Local Implementation Program (LIP) Zoning Map; 3) Amend zoning map to add Planned Development Overlay (PLD) zone on property located at 528-542 North Francisca Avenue; 4) Add definition of "habitable" and "non-habitable" accessory buildings to Coastal zoning ordinance., Redondo Beach, Los Angeles County. (PE-LB)

12. **COASTAL PERMIT APPLICATIONS.** See AGENDA CATEGORIES description on page 21. **Attention:** Items appearing in this section of the agenda may be moved to the Consent Calendar for this area by the Executive Director when, prior to taking up the Consent Calendar, staff and the applicant are in agreement on the staff recommendation. If an item is moved to the Consent Calendar it will be processed in the same manner as other Consent Calendar items (See AGENDA CATEGORIES) except that if that item is subsequently removed from the Consent Calendar by a vote of three or more commissioners, the item will be acted upon at the meeting in the order in which it originally appears on this Meeting Notice and in the manner Coastal Permit Applications are processed. The purpose of this procedural change is to expedite the Commission's coastal development permit process.

a. **Application No. 5-05-361 (Orange County Sanitation District,** Newport Beach) Application of Orange County Sanitation District to replace two (2) force main lines and abandon a third, at 5810 W Coast Highway, Newport Beach, Orange County. (FSY-LB)

b. **Application No. 5-06-23 (City Of Long Beach Water Department,** Long Beach) Application of City of Long Beach Water Department to install and remove two temporary experimental seawater intake wells and six temporary monitoring wells for aquifer test on public beach adjacent to public beach parking lot, at Bixby Park Public Beach Parking Lot (2000-2300 E. Ocean Blvd.), including adjacent public beach, Long Beach, Los Angeles County. (CP-LB)

c. **Application No. 5-06-31 (Miller,** Pacific Palisades) Application of Andrew Miller to construct 32 ft-high, 15,135 sq. ft., 2-story over basement level, single-family home, studio, pool, spa, landscaping and tennis court on vacant lot, at 17433 W Tramonto Dr., Pacific Palisades, Los Angeles County. (RT-LB)



d. **Application No. 5-06-38 (Seal Beach Animal Care Center,** Seal Beach) Application of Seal Beach Animal Care Center to construct 2,500 sq. ft., 1-story cat facility and 384 sq. ft., 1-story shed, 508 cu. yds. of grading for recompaction purposes, at 1700 Adolfo Lopez Drive, Seal Beach, Orange County. (FSY-LB)

e. **Application No. 5-06-42 (Pacific Jewish Center, L A/Santa Monica/Marina Del Rey)** Application of Pacific Jewish Center to attach 20 ft.-high, 1 5/8" diameter pole extenders to County information signs at 19 locations at street ends on Ocean Front Walk between Catamaran and Via Marina (Venice); stretch 200 lb test monofilament line between existing street lights and pole extenders between Seaside Way, Santa Monica and Marina del Rey entry channel fence; install 1" x 10" streamers on line in vicinity of least tern nesting area to increase visibility for birds; conduct weekly inspections, remove downed line and repair breaks as required, at existing light poles and 19 lifeguard signs at street ends on beach and at Ocean Front Walk between Seaside Way, Santa Monica and Via Marina, Venice, Cities of Santa Monica and Los Angeles, Los Angeles County. (PE-LB)

f. **Application No. 5-06-117 (Newport Beach, Beach Nourishment)** Application of City Of Newport Beach for beach nourishment of up to 20,000 cu. yds. per year of suitable dredged material from existing dock areas; and replacement in-kind or construction of an alternative alignment of residentially associated piers, docks, gangways, at Lower And Upper Newport Bay, Newport Beach, Orange County. (KFS-LB)

g. **Application No. 5-06-226 (City of Santa Monica,** Santa Monica) Application of City of Santa Monica for improvements to public beach facility including: construction of 2-story, approximately 7,000 sq. ft., Pool House with locker and changing rooms, multi-purpose room, staff offices and storage; 1-story, approximately 700 sq. ft., entry pavilion; approximately 500 sq. ft., public restroom; three volleyball courts, 2 paddle tennis courts; [illegible] play area; children's play ground; two lateral beach boardwalks; one handicap access for vertical access; 1,000 sq. ft. beach concession building; 6,200 sq. ft. Event House; addition of 117 new parking spaces for total of 279 spaces, at 415 Pacific Coast Highway, Santa Monica, Los Angeles County. (AP-LB)

POSTPONED

13. **FEDERAL CONSISTENCY.** See AGENDA CATEGORIES description on page 21.

a. **Consistency Certification No. CC-31-06 (City Of Newport Beach,** Newport Beach) Consistency Certification for maintenance dredging under existing docks and off-shore disposal of up to 20,000 cu. yds. of dredge material a year, at Lower and Upper Newport Bay, Newport Beach, and at ocean disposal site LA-3 located 4 miles southwest of the entrance to Newport Harbor, Orange County, and at ocean disposal site LA-2 located 6 miles offshore southwest of Point Fermin, Los Angeles County. (KFS-LB)

14. **DISPUTE RESOLUTION** See AGENDA CATEGORIES description on page 21

a. **Permit No. 5-06-349-EDD (Saint Catherine Of Siena Catholic School,** Laguna Beach) Public hearing on appealability to Commission of City of Laguna Beach's pending coastal development permit (application #06-40) to demolish existing 25,421 sq. ft. school facility and construct new 42,420 sq. ft. school facility, at 30516 Coast Highway, Laguna Beach, Orange County. (RT-LB)

## ENERGY, OCEAN RESOURCES and WATER QUALITY

15. **ENERGY, OCEAN RESOURCES and WATER QUALITY REPORT.** Report by the Deputy Director on permit waivers, emergency permits, immaterial amendments & extensions, matters not requiring public hearings, and status report on offshore oil & gas exploration & development. (ALW-SF)

16. **CONSENT CALENDAR.** See AGENDA CATEGORIES description on page 21.

17. **NEW APPEALS.** See AGENDA CATEGORIES description on page 21.

    a. **Appeal No. A-3-MCO-06-384 (California American Water).** Appeal by Commissioners Kruer and Shallenberger from decision of County of Monterey granting permit with conditions to California American Water for a temporary pilot desalination facility in Moss Landing, Monterey County. (TL-SF)

## SOUTH CENTRAL COAST DISTRICT

18. **DEPUTY DIRECTOR'S REPORT.** Report by Deputy Director on permit waivers, emergency permits, immaterial amendments & extensions, LCP matters not requiring public hearings, and on comments from the public. For specific information contact the Commission's Ventura office at (805) 585-1800.

19. **CONSENT CALENDAR (removed from Regular Calendar).** See AGENDA CATEGORIES description on page 21.

20. **LOCAL COASTAL PROGRAMS (LCPs).** See AGENDA CATEGORIES description on page 21.

    a. **City of Malibu LCP Amendment MAJ 1-06.** Public Hearing and action on request by City of Malibu for focused amendment to the City's Local Coastal Program for various changes to the policies and provisions of the Land Use Plan and Local Implementation Plan, including those regarding, view corridors, basements, beach stringlines, wireless communication facilities, seasonal grading restrictions, bluff setbacks, shoreline protective structures, public access, and onsite wastewater treatment systems. Finally, the proposed amendment includes changes to the LUP Land Use Map and the LIP Zoning Map. (BJC-V)



## ENFORCEMENT

6. **ENFORCEMENT REPORT.** Report by Chief of Enforcement on Statewide Enforcement Program. (LAH-SF)

7. **Commission Cease and Desist Order No. CCC-06-CD-10** (California Department of Transportation – Van Duzen River Bridge at Highway 101, Humboldt County) Public hearing and Commission action on proposed Cease and Desist Order directing the California Department of Transportation to cease and desist from conducting any further unpermitted [redacted] River Bridge construction project and to comply with [redacted] Coastal Development Permit No. 1-04-014; on property located at Highway 101 Bridge over the Van Duzen River, Humboldt County. (ANM-SF)

**POSTPONED**

8. **Commission Cease and Desist Order No. CCC-06-CD-12** (Tennis Estates Homeowners Association – Huntington Harbor/City of Huntington Beach, Orange County) Public hearing and Commission action on proposed Cease and Desist Order directing Tennis Estates Homeowners Association to cease and desist from conducting any further unpermitted development including removal or trimming of trees located on the subject property that support active or inactive heron or egret nesting or roosting; on property located at the corner of Humboldt Dr. and Saybrook Ln. (APN 178-601-64), Huntington Harbor/City of Huntington Beach, Orange County. (ANM-SF)

## SOUTH COAST DISTRICT

9. **DEPUTY DIRECTOR'S REPORT.** Report by Deputy Director on permit waivers, emergency permits, immaterial amendments & extensions, LCP matters not requiring public hearings, and on comments from the public. For specific information contact the Commission's Long Beach office at (562) 590-5071.

    a. **City of Long Beach LCP Amendment No. LOB-MAJ-2-05. Certification Review.** Concurrence with Executive Director's determination that action of City of Long Beach accepting certification of LCP Amendment No. 2-05 (to amend development standards of Subarea 4 of Downtown Shoreline Planned Development District Six) with modifications is legally adequate, Downtown Shoreline Area (PD-6, Subarea 4), Long Beach, Los Angeles County. (CP-LB)

10. **CONSENT CALENDAR (removed from Regular Calendar).** See AGENDA CATEGORIES description on page 21.

11. **LOCAL COASTAL PROGRAM (LCP).** See AGENDA CATEGORIES description on page 21.

    a. **City of Huntington Beach LCP Amendment No. HNB-MAJ-2-6.** Amendment request by City of Huntington Beach to allow timeshare uses within Visitor Serving Commercial districts in the coastal zone in the City of Huntington Beach, Orange County. (MV-LB)

County. (FSY-LB)

b. **Application No. 5-06-78 (City of Long Beach Marine Bureau**, Long Beach) Application of City of Long Beach Marine Bureau to remove 3,284 sq. ft., timber Harbormaster Dock and install 3,362 sq. ft., concrete Harbormaster Dock in same location, including relocation of eight piles. No new piles, at 205 Marina Drive, Long Beach, Los Angeles County. (CP-LB)

c. **Application No. 5-06-210 (Cross Communities**, Newport Beach) Application of Cross Communities to demolish existing single-family residence and construct new 3,258 sq. ft., 3-story single family residence with attached 489 sq. ft., 2-car garage. Grading of 275 cu. yds. for recompaction purposes. In addition, the applicant is requesting after-the-fact permit for construction of existing bulkhead, including new cap to bulkhead, at 1711 East Bay Avenue, Newport Beach, Orange County. (FSY-LB)

d. **Application No. 5-06-318 (City of Long Beach**, Long Beach) Application of City of Long Beach to fence in portion of paved marina parking area (until Memorial Day weekend 2007) for temporary dry-boat storage, at 5489 E. Ocean Blvd., Alamitos Bay Marina Basin Seven, Long Beach, Los Angeles County. (CP-LB)

e. **Application No. 5-06-320 (Siebert,** Venice) Application of Raymond & Eleanor Siebert to demolish one-story, 552 sq. ft., single-family residence and detached garage, and construct new 3-level, 30-ft. high, 2,330 sq. ft. single-family residence with an attached 2-car garage on canal-fronting lot, at 2309 Eastern Court, Venice, City of Los Angeles, Los Angeles County. (CP-LB)

f. **Application No. 5-06-331 (Arnall**, Venice) Application of James & January Arnall to demolish 1-story, 1,560 sq. ft., duplex, and construct 3-level, 30 ft.-high, 2,266 sq. ft., single-family residence with attached 3-car garage on canal-fronting lot, at 2630 Strongs Drive, Venice, Los Angeles, Los County. (CP-LB)



21. **NEW APPEALS.** See AGENDA CATEGORIES description on page 21.

a. **Appeal No. A-4-SBV-06-51 (Surfer's Point Managed Retreat,** City of Ventura) Appeal by Commissioners Caldwell & Kruer from decision of City of Ventura granting coastal development permit for construction of Surfer's Point Managed Shoreline Retreat project landward of mean high tide line, including reconfiguration of Shoreline Drive, relocation of parking areas, and realignment of public bikeway at Surfer's Point, City of Ventura, Ventura County. (LF-V)

POSTPONED

22. **COASTAL PERMIT APPLICATIONS.** See AGENDA CATEGORIES description on page 21. **Attention:** Items appearing in this section of the agenda may be moved to the Consent Calendar for this area by the Executive Director when, prior to taking up the Consent Calendar, staff and the applicant are in agreement on the staff recommendation. If an item is moved to the Consent Calendar it will be processed in the same manner as other Consent Calendar items (See AGENDA CATEGORIES) except that if that item is subsequently removed from the Consent Calendar by a vote of three or more commissioners, the item will be acted upon at the meeting in the order in which it originally appears on this Meeting Notice and in the manner Coastal Permit Applications are processed. The purpose of this procedural change is to expedite the Commission's coastal development permit process.

a. **Application No. 4-05-148 (Surfer's Point Managed Retreat,** City of Ventura) Application of City of Ventura and 31st Agricultural District for tidelands portion of managed shoreline retreat project including restoration of dune habitat and public access improvements, at Surfer's Point, City of Ventura, Ventura County. (LF-V)

POSTPONED

b. **Application No. 4-05-149 (Hooshang & Ghaffari,** Los Angeles County) Application of Dr. Hooshang and Zahra Ghaffari to construct 5,925 sq. ft., single-family home with 780 sq. ft. attached garage, driveway, turnaround, swimming pool, and septic system at 25044 Mulholland Highway, Los Angeles County. (DC-V)

c. **Application No. 4-05-153 (Stoney Heights LLC,** Los Angeles County) Application of Stoney Heights LLC to construct 2-story, 6,221 sq. ft. single family home, 566 sq. ft., detached 3-car garage, 2-story, 690 sq. ft. guesthouse, swimming pool, well, water tank, septic system, landscaping, driveway, improvements to Puerco Motorway, as-built stabilization of existing oak tree, and approximately 13,735 cu. yds. of grading at 2151 Puerco Motorway, Santa Monica Mountains, Los Angeles County. (LF-V)

d. **Application No. 4-05-201 (Malibu Ocean Ranches, LLC,** Malibu) Application of Malibu Ocean Ranches, LLC to construct a two story, 28 foot high, 8,312 sq. ft. single family residence, 746 sq. ft. 3-car garage on ground floor with 553 sq. ft. guest suite above, swimming pool, septic system, 4,300 cubic yards of cut and 550 cubic yards of fill, 3,750 cubic yards of export, and landscaping located at 2870 Corral Canyon Road, Malibu, Los Angeles County (JCJ-V).

e. **Application No. 4-05-202 (Aurora Family, LLC**, Topanga) Application of Aurora Family, LLC to construct 6,216 sq .ft., 32 ft-high, 2-story, single family home with 785 sq. ft., attached 2-car garage and 475 sq. ft., attached 1-car garage; 735 sq. ft., 22 ft-high, barn; 3,500 sq. ft., corral; pool; jacuzzi; solar panels; perimeter fencing; entry gates; septic system; water storage tanks; rainwater harvesting system; drainage structures and catch basins, filter, pipe and riprap; landscaping, two temporary

construction trailers; and request for after-the-fact approval of as-built water well, access road to well, and temporary placement of as-built plastic water tank. In addition, project includes 5,544 cu. yds. of grading (2,918 cu. yds. of cut and 2,282 cu. yds. of fill, 292 cu. yds. of shrinkage and 344 cu. yds. of export); new onsite access driveway with turnaround; improve and widen 610 ft.-long segment of approximately 12-20 ft.-wide Harrow and Betton Roads to 20 ft. in width; revegetation/restoration of as-built 80 ft.-long access road to water well and restore 160 ft. portion of existing 360 ft.-long road along southwest portion of property; and lot line adjustment between subject parcel (2.51 acres in size) and adjacent parcel (2.53 acres in size) to reduce subject parcel by 0.28 acres in size resulting in 2.25 acre lot and 2.79 acre lot at 2746 Harrow Road & 2685 Vista Del Mar Road, Topanga, Los Angeles County (JCJ-V).

f. **Application No. 4-06-091 (Storke Ranch HOA,** Goleta). Application of Storke Ranch Master Homeowners' Association to implement a Habitat Restoration and Monitoring Plan including excavation of two vernal pools totaling 0.19 acres, planting of vernal pool and 10-20 ft. buffer with appropriate native plants, tarplant restoration, restoration of habitat buffer through excavation and revegetation, and 302 cu. yds. of grading (151 cu. yds. cut, 151 cu. yds fill) at the East Storke Ranch Open Space, near Sweetwater Way, Goleta, Santa Barbara County. (SLG-V)

g. **Application No. 4-06-97 (UCSB North and West Campus Housing,** Santa Barbara County). Application of the University of California at Santa Barbara for construction of 45 of the 172 faculty housing units (Intersection of Phelps and Canon Green Roads), 23 of the 151 family student units (Intersection of Whittier and Storke Roads), associated road improvements, parking, paths and trails, recreation amenities, stormwater management, utilities, and grading proposed as part of the North and West Campus Housing project for portion of project located within the area of retained jurisdiction. The project also includes restoration of Phelps creek and Devereux Creek, construction of a 20 foot wide, 42 foot long, and 9 feet high span bridge culvert over Phelps Creek, and replacement of the existing Devereux Creek culvert at Venoco Road with a 26 foot wide, 42ft-long, 7 foot high span bridge. All project components are located on the reconfigured West and North Campuses proposed at U.C., Santa Barbara, Santa Barbara County (MCH-V).

POSTPONED

23. **RECONSIDERATIONS.** AGENDA CATEGORIES description on page 21.

a. **Application No. 4-05-151-R (Witter,** Los Angeles County) Madalon Witter, denied permit to adjust lot line at 2100 McReynolds Road, Santa Monica Mountains, Los Angeles County. (LF-V)

24. **LONG RANGE DEVELOPMENT PLAN.** AGENDA CATEGORIES description on page 21.

a. **UCSB Long Range Development Plan Amendment 1-06 (North and West Campus Housing)** Public hearing and action on request by University of California at Santa Barbara to amend its LRDP to incorporate 174-acre North Campus into LRDP including new land use designations, policies and two housing developments; modify land use designations, policies and public access; modify LRDP policies to allow for open space, ESHA designations, public access, trails, and habitat enhancement and restoration planning on North and West Campuses; and modify various general campus-wide policies, University of California Santa Barbara, Santa Barbara County (MCH-V)

POSTPONED



# 8:00 a.m.

# THURSDAY, OCTOBER 12, 2006

1. **CALL TO ORDER.**

2. **ROLL CALL.**

## SOUTH CENTRAL COAST DISTRICT

3. **CONSENT CALENDAR.** See AGENDA CATEGORIES description on page 21.

## SOUTH COAST DISTRICT

4. **ADMINISTRATIVE PERMIT APPLICATIONS.** See AGENDA CATEGORIES description on page 21.

a. **Application No. 5-06-132 (California Department of Fish And Game,** Playa Del Rey) Application of California Department of Fish And Game to install informational signs at five locations on periphery of wetland, remove unauthorized signs including "no trespassing" and "private property" signs, install trash and recycling receptacles in four locations: (1) at Gordon's Market, (near western end of Jefferson), (2) at Freshwater Marsh on Jefferson Boulevard; (3) in Area C adjacent to maintenance gates at Ballona Creek Bike path and (4) at La Villa Marina Avenue; repair and replace existing fencing; install new 48 in. fencing along westernmost property line; install 48 in. split rail fence and/or removable barriers at several locations along Culver and Jefferson Boulevards to prevent unauthorized vehicular access, at Ballona Wetlands, Adjacent To Fiji Way, Marina Del Rey, and along Ballona Creek, Near Lincoln, Culver and Jefferson Boulevards, Playa Del Rey, Los Angeles County. (PE-LB)

b. **Application No. 5-06-206 (Balboa Coves,** Newport Beach) Application of Balboa Coves to remove and replace dock system "like-for-like" consisting of 5' x 44' pier, 3' x 24' gangway, 4' x 143' center walk, fourteen (14) 3' x 26' fingers, 12' x 20' landing with 4' sides and 11' angle cuts and four (4) 12" diameter concrete piles, at 9-23 Balboa Coves, Newport Beach, Orange County. (FSY-LB)

5. **CONSENT CALENDAR.** See AGENDA CATEGORIES description on page 21.

a. **Application No. 5-05-157 (Ramona Ward,** Corona Del Mar) Application of Ramona Ward for demolition of 1-story single-family home over garage (2-story all together) and construction of new 2,787 sq. ft., 2-story single-family home over 1,090 sq. ft., 4-car garage (3-story all together), located at base of bluff approximately 27-ft., above grade. Grading will consist of 65 cu. yds. of export to a location outside coastal zone, at 3036 Breakers Drive, Corona Del Mar, Orange

d. **Permit No. 6-97-165-A3 (Lucker & Winkler**, Solana Beach) Request by Ron Lucker & David J. Winkler to amend permit for two seacave infills to allow maintenance of two infills, at 517 and 521 Pacific Avenue, Solana Beach, San Diego County. (DL-SD)

e. **Permit No. A-6-DMR-04-24-A3 (Del Mar parking meters)** Request by City of Del Mar to amend one-year permit to install of parking meters to remove Special Condition No. 2 and allow permanent retention of meters, on west side of Camino del Mar, just north of Camino del Mar/Carmel Valley Road intersection, Del Mar, San Diego County. (EL-SD)

## STATEWIDE

17. **APPROVAL OF MINUTES.**

18. **COMMISSIONERS' REPORTS.**

19. **CONSERVANCY REPORT.**

20. **SANTA MONICA MOUNTAINS CONSERVANCY REPORT.**

21. **SANTA MONICA BAY RESTORATION COMMISSION REPORT.**

22. **DEPUTY ATTORNEY GENERAL'S REPORT.**

23. **EXECUTIVE DIRECTOR'S REPORT** including report on legislation.

a. **Public Education Grants.** Public hearing and action on proposed competitive grant awards from sales of the Whale Tail License Plate. (CP & SBL-SF)





b. **UCSB Notice of Impending Development No. 1-06 (North and West Campus Housing)** Public hearing and action on Notice of Impending Development by the University of California at Santa Barbara for construction of the North Campus Faculty Housing, including 172 housing units, road improvements, parking, paths and trails, community recreation facility, recreation amenities, stormwater management, utilities, and approximately 68,000 cu. yds. of grading; the Sierra Madre Family Student Housing, including 151 housing units, 7,400 sq. ft. community building, road improvements, parking, paths and trails, stormwater management, and 15,300 cu. yds of grading; and implementation of a management plan and improvements to 314 acres of open space and natural reserve areas, including trail improvements, beach access improvements, parking, public amenities, resource management actions, habitat restoration and enhancement, access and use restrictions, stormwater management, and native landscaping on the reconfigured West and North Campuses proposed at U.C., Santa Barbara, Santa Barbara County. (MCH-V)

**POSTPONED**

# 9:00 a.m.

# FRIDAY, OCTOBER 13, 2006

1. **CALL TO ORDER.**

2. **ROLL CALL.**

## STATEWIDE

3. **FEDERAL CONSISTENCY REPORT.** Report by the Division Supervisor on Negative Determinations issued by the federal consistency staff, and status report on other major non-energy federal consistency matters. (MPD-SF)

4. **FEDERAL CONSISTENCY.** See AGENDA CATEGORIES description on page 21.

   a. **CD-69-06 (U.S. Fish and Wildlife Service and U.S. Bureau of Land Management,** Humboldt Co.) Consistency determination by Fish and Wildlife Service and Bureau of Land Management for Ma-le'l Dunes Cooperative Management Area Public Access Plan on north spit of Humboldt Bay in Humboldt Co. (LJS-SF)

5. **FINDINGS.** See AGENDA CATEGORIES description on page 21.

   a. **CD-46-06 (Corps of Engineers,** City of Santa Barbara). Commission conditional concurrence with consistency determination by Corps of Engineers for second phase of previously-concurred with consistency determination CD-117-99 for Mission Creek Flood Control Project in City and County of Santa Barbara. This second phase consists of 4 plans (tidewater goby, flood control channel maintenance, pilot channel design, and landscaping) required to be submitted to Commission under conditions of original concurrence. (MPD-SF).

## NORTH COAST DISTRICT

6. **DEPUTY DIRECTOR'S REPORT.** Report by Deputy Director on permit waivers, emergency permits, immaterial amendments & extensions, LCP matters not requiring public hearings, and on comments from the public. For specific information contact the Commission's Eureka office at (707) 445-7833.

7. **CONSENT CALENDAR (removed from Regular Calendar).** See AGENDA CATEGORIES description on page 21.



   c. **Application No. 6-05-131 (Inn-At-Sunset Cliffs,** San Diego) Application of the Inn-at-Sunset Cliffs to repair damaged seawall and fill sea cave void with concrete near northwest corner of property, at 1370 Sunset Cliffs Blvd, Peninsula, San Diego, San Diego County. (LRO-SD)

   d. **Application No. 6-05-134 (Leucadia Nat'l Corp.,** Solana Beach) Application of Leucadia National Corporation to construct 145 ft-long, 22 ft-high seawall on public beach below 633 and 645 Circle Drive, Solana Beach, San Diego County. (GDC-SD)

   e. **Application No. 6-06-43 (San Diego Co. regional trail)** Application of the County of San Diego, City of San Diego & City of Chula Vista to formalize public trails within Otay Valley Regional Park, between Saturn Avenue to 800 ft. east of Hollister Street, San Diego, San Diego County. (DL-SD)

   f. **Application No. 6-06-48 (Carlsbad opportunistic sand)** Application of City of Carlsbad for 5-year program allowing placement of maximum of 150,000 cu. yds. of sand per year, at Encinas Beach located west of Carlsbad Blvd, south of Palomar Airport Road, Carlsbad, San Diego County (DL-SD)

16. **PERMIT AMENDMENTS.** See AGENDA CATEGORIES description on page 21. An Amendment below may be moved to the Consent Calendar for this area by the Executive Director when, prior to taking up the Consent Calendar, staff and the applicant are in agreement on the staff recommendation. If an item is moved to the Consent Calendar it will be processed like other Consent Calendar items (See above) except that if that item is subsequently removed from the Consent Calendar by a vote of 3 or more commissioners, the item will be acted upon at the meeting in the order in which it originally appears on this Meeting Notice and in the manner material amendments are processed.

   a. **Permit No. 6-03-33-A4 (Surfsong,** Solana Beach,) Request by Surfsong Homeowners Association to amend permit for seawall to construct 115 ft-long, 35 ft-high seawall, 94 ft-long, 10 to 13 ft-high shotcrete retaining wall 8 to 10 ft. above seawall, geogrid re[illegible] bluff area, and 84 ft-long, 14 to 16 ft-high shotcrete retaining wall at top of bluff, on bluff and beach below 205 to 239 South Helix Avenue, Solana Beach, San Diego County. (GDC-SD)

   WITHDRAWN

   b. **Permit No. 6-05-35-A (Roberts,** San Diego) Request by Donald Roberts to amend permit for home to change building footprint and increase size from 2,970 sq. ft. to 3,046 sq. ft. and minor change in roofline to include flat area to accommodate a new 380 sq. ft. roof deck, at 3637 Ocean Front Walk, Mission Beach, San Diego, San Diego County. (LRO-SD)

   c. **Permit No. 6-87-581-A (Steinberg,** Solana Beach) Request by Joseph Steinberg to amend permit for seawall to allow repairs to seawall involving application of 15 ft-long, 12 in-thick erodible [illegible] ends of seawall and coloring and texturing of existing 176 ft-long seawall, at 645 Circle Dr., Solana Beach, San Diego County. (GDC-SD)

   POSTPONED

c. **Appeal No. A-6-ENC-06-100 (Zagara**, Encinitas) Appeal by Commissioners Kruer & Padilla from decision of City of Encinitas granting permit with conditions to John & Valerie Zagara to demolish home and construct 4,424 sq. ft., 2-story home with 1,095 sq. ft., basement and 505 sq. ft. garage on 5,638 sq. ft., blufftop lot, at 282 Neptune Avenue, Encinitas, San Diego County. (GDC-SD)

d. **Appeal No. A-6-ENC-06-101 (Albani**, Encinitas) Appeal by Commissioners Kruer & Padilla from decision of City of Encinitas granting permit with conditions to Salvatore Albani to demolish home and construct 3,962 sq. ft., 2-story home on 25,832 sq. ft., blufftop lot, at 629 Fourth Street, Encinitas, San Diego County. (GDC-SD)

e. **Appeal No. A-6-IMB-06-108 (Carver, et al.**, Imperial Beach) Appeal by Commissioners Caldwell & Kruer from decision of City of Imperial Beach granting permit with conditions to Lee Carver, Dr. Robert Mikolajczak, Dr. John Haskett & Ms. Kristina Perry to repair unpermitted riprap revetment in front of four condominiums by repositioning stray stones back on to revetment, at 1550, 1560, 1570, 1580 Seacoast Drive, Imperial Beach, San Diego County. (DL-SD)

f. **Appeal No. A-6-ENC-06-110 (Schreiber**, Encinitas) Appeal by Randy & Carrie Wastal from decision of City of Encinitas granting permit with conditions to Dale L. Schreiber to subdivide two (2) lots totaling 0.45 acres into four (4) lots, at 1531 San Elijo Avenue, Encinitas, San Diego County. (GDC-SD)

15. **COASTAL PERMIT APPLICATIONS.** See AGENDA CATEGORIES description on page 21. **Attention:** Items appearing in this section of the agenda may be moved to the Consent Calendar for this area by the Executive Director when, prior to taking up the Consent Calendar, staff and the applicant are in agreement on the staff recommendation. If an item is moved to the Consent Calendar it will be processed in the same manner as other Consent Calendar items (See AGENDA CATEGORIES) except that if that item is subsequently removed from the Consent Calendar by a vote of three or more commissioners, the item will be acted upon at the meeting in the order in which it originally appears on this Meeting Notice and in the manner Coastal Permit Applications are processed. The purpose of this procedural change is to expedite the Commission's coastal development permit process.

a. **Application No. 6-03-98 (Pardee**, San Diego) Application of Pardee Homes to subdivide 185.2 acres on 3 of 9 lots into 143 parcels, with associated street, drainage and landscaping improvements, and dedication of open space, including retirement of development rights on 6 parcels, north and south of Calle Cristobal, east and west of Camino Santa Fe, North City, San Diego, San Diego County. (EL-SD)

b. **Application No. A-6-NOC-05-50 (Pardee Homes,** San Diego) Application of Pardee Homes for Planned Residential Development to construct 128 single-family homes and 144 multi-family units (272 units total) in 15 buildings, with street, drainage and landscaping improvements, north and south of Calle Cristobal, east and west of Camino Santa Fe, North City, San Diego, San Diego County. (EL-SD)



8. **NEW APPEALS.** See AGENDA CATEGORIES description on page 21.

a. **Appeal No. A-1-DNC-06-37 (JHP, LLC**, Del Norte Co.) Appeal by Friends of Del Norte from decision of County of Del Norte granting permit with conditions to JHP, LLC for planned community subdivision of 54-acre portion of 134-acre parcel into 70 lots ranging in size from 0.47-acre to 3.12 acres, at 2400 Lake Earl Drive, approximately 2 miles northeast of the City of Crescent City, Del Norte County. (RSM-E)

b. **Appeal No. A-1-MEN-06-39 (Mendocino County Solid Waste Division**, Mendocino Co.) Appeal by Road 409 Residents Association from decision of County of Mendocino granting permit with conditions to Mendocino County Solid Waste Division & City of Fort Bragg to modify Coastal Development Use Permit for Caspar Solid Waste Transfer Station to allow addition of new facilities, consisting of new 50 ft. x 35 ft. tall waste transfer building with 50 ft. x 60 ft. x 12 ft. high vehicle ramp, and new 8 ft. x 16 ft. x 10 ft. tall gate house. Enlarge existing metals yard and construct loading ramp. Add landscaping and expand hours of operation to public, at 14000 Prairie Way, Caspar, Mendocino County. (TST-E)

9. **COASTAL PERMIT APPLICATIONS.** See AGENDA CATEGORIES description on page 21. **Attention:** Items appearing in this section of the agenda may be moved to the Consent Calendar for this area by the Executive Director when, prior to taking up the Consent Calendar, staff and the applicant are in agreement on the staff recommendation. If an item is moved to the Consent Calendar it will be processed in the same manner as other Consent Calendar items (See AGENDA CATEGORIES) except that if that item is subsequently removed from the Consent Calendar by a vote of three or more commissioners, the item will be acted upon at the meeting in the order in which it originally appears on this Meeting Notice and in the manner Coastal Permit Applications are processed. The purpose of this procedural change is to expedite the Commission's coastal development permit process.

a. **Application No. 1-06-8 (Reservation Ranch & Affiliates,** Del Norte Co.) Application of Reservation Ranch & Affiliates to excavate river sediments in three tidally influenced side channels and install large rootwads and logs to provide rearing and cover habitat for salmonids. An additional area will be skimmed to encourage colonization of emergent wetland vegetation, along lower Smith River estuary, at 341 Sarina Road, approximately 2 miles west-northwest of the town of Smith River, Del Norte County. (JB-E)

b. **Application No. 1-06-25 (Affinito**, Fort Bragg) Application of Robert Affinito to repair and improve existing mobile home park by (1) replacing existing water sewer and electric lines, (2) installing propane tank and associated gas line, and (3) repaving driveways and mobile home parking areas, at 32200 North Harbor Drive, Fort Bragg, Mendocino County. (JB-E)

c. **Appeal No. A-1-EUR-06-28 (Eureka-Pacific,** LLC, Eureka) Appeal by Commissioners Caldwell & Wan from decision of City of Eureka granting permit with conditions to Eureka-Pacific, LLC, for Coastal Development Permit to construct approximately 44,370-sq. ft. of retail commercial sales & service structural and outdoor storage area improvements on two boundary-adjusted parcels comprising a combined area of approximately 3.0 acres located between Highway 101 and Maurer Marsh, at 2616 Broadway, Eureka, Humboldt County. (JB-E)

d. **Application No. 1-06-33 (Tilch,** Humboldt Co.) Application of Bill & Sherry Tilch to replace existing septic system with new mount septic system, at 2838 Spears Road, Eureka, Humboldt County. (TST-E)

**Future Meetings:** The next meetings of the Coastal Commission will be November 14-17 in Huntington Beach and December 13-15 in San Francisco.



b. **Appeal No. A-3-MRB-06-46 (Salwasser,** Morro Bay) Appeal by Joe & Charlotte Wallick from decision of City of Morro Bay granting permit with conditions to George Salwasser for construction of 19-unit Recreational Vehicle Park with associated Manager's unit, and 2 amenity buildings containing showers and restrooms, manager's office and laundry facilities, at 210 Atascadero Rd., Morro Bay, San Luis ObispoCounty. (MW-SC)

11. **COASTAL PERMIT APPLICATIONS.** See AGENDA CATEGORIES description on page 21. **Attention:** Items appearing in this section of the agenda may be moved to the Consent Calendar for this area by the Executive Director when, prior to taking up the Consent Calendar, staff and the applicant are in agreement on the staff recommendation. If an item is moved to the Consent Calendar it will be processed in the same manner as other Consent Calendar items (See AGENDA CATEGORIES) except that if that item is subsequently removed from the Consent Calendar by a vote of three or more commissioners, the item will be acted upon at the meeting in the order in which it originally appears on this Meeting Notice and in the manner Coastal Permit Applications are processed. The purpose of this procedural change is to expedite the Commission's coastal development permit process.

a. **Application No. 3-06-34 (Santa Cruz City Water Department,** Santa Cruz) Application of Santa Cruz City Water Department to install and operate temporary pilot desalination treatment plant, at 100 Schaffer Road (UCSC Marine Science Campus), Santa Cruz, Santa Cruz County. (SC-SC)

## SAN DIEGO COAST DISTRICT

12. **DEPUTY DIRECTOR'S REPORT.** Report by Deputy Director on permit waivers, emergency permits, immaterial amendments & extensions, LCP matters not requiring public hearings, and on comments from the public. For specific information contact the Commission's San Diego office at (619) 767-2370.

13. **CONSENT CALENDAR (removed from Regular Calendar).** See AGENDA CATEGORIES description on page 21.

14. **NEW APPEALS.** See AGENDA CATEGORIES description on page 21.

a. **Appeal No. A-6-OCN-06-78 (Jubela,** Oceanside) Appeal by Ruth Clifford & Stephen A. Sandberg from decision of City of Oceanside granting permit with conditions to Joe Jubela to demolish home and construct 3-story (with basement) duplex structure (2,180 sq. ft. and 4,495 sq. ft.) on 3,333 sq. ft. lot, at 318 South Pacific Street, Oceanside, San Diego County. (LJM-SD)

b. **Appeal No. A-6-LJS-06-79 (King,** San Diego) Appeal by Commissioners Wan & Kruer from decision of City of San Diego granting permit with conditions to Ms. Virginia King to construct [illegible] home on vacant 13,460 sq. ft., blufftop lot, at 1620 Torrey Pines Rd, La Jolla, San Diego, San Diego County. (LJM-SD)

POSTPONED

Wednesday, October 11, 2006

## NORTH CENTRAL COAST DISTRICT

5. **DEPUTY DIRECTOR'S REPORT.** Report by Deputy Director on permit waivers, emergency permits, immaterial amendments & extensions, LCP matters not requiring public hearings, and on comments from the public. For specific information contact the Commission's San Francisco office at (415) 904-5260.

6. **CONSENT CALENDAR (removed from Regular Calendar).** See AGENDA CATEGORIES description on page 21.

## CENTRAL COAST DISTRICT

7. **DEPUTY DIRECTOR'S REPORT.** Report by Deputy Director on permit waivers, emergency permits, immaterial amendments & extensions, LCP matters not requiring public hearings, and on comments from the public. For specific information contact the Commission's Santa Cruz office at (831) 427-4863.

8. **CONSENT CALENDAR (removed from Regular Calendar).** See AGENDA CATEGORIES description on page 21.

9. **LOCAL COASTAL PROGRAMS (LCPs).** See AGENDA CATEGORIES description on page 21.

   a. **City Of Pismo Beach LCP Amendment No. PSB-MIN-2-6 (Minor).** Concurrence with Executive Director's determination that proposed amendment of the City Of Pismo Beach LCP Implementation Plan to provide standards for construction of secondary dwelling units is minor. (MW-SC)

   b. **San Luis Obispo County LCP Amendment No. SLO-MAJ-1-05 PART 1 (Port San Luis Harbor District Master Plan).** *Public hearing and action on request by San Luis* Obispo County to amend the San Luis Bay Area Plan to (1) incorporate provisions *of recently updated Port Master Plan*, (2) change Land Use Category of Cal Poly Pier from Industrial to Public Facilities, and (3) change Land Use Category of 3 *parcels totaling 12.03 acres within Harbor Terrace planning sub-area from* Agriculture to Public Facilities to include them within the URL/USL. (JB-SC)

10. **NEW APPEALS.** See AGENDA CATEGORIES description on page 21.

    a. **Appeal No. A-3-MCO-04-64 (California Department of Parks & Recreation**, Big Sur). Appeal by Friends of The Big Sur Coast & Joseph P. Schoendorf from decision of County of Monterey granting permit with conditions to California Department of Parks & Recreation for Waterfall Vista Landscape Maintenance Project replacing 4,516 exotic trees and shrubs with native plants near environmentally sensitive habitat on slopes, at Julia Pfeiffer-Burns State Park (Highway One), Big Sur, Monterey County. (KM-SC)

POSTPONED

POSTPONED



## AGENDA CATEGORIES

**ADMINISTRATIVE PERMIT APPLICATIONS.** If a person objects to issuance of an administrative permit or permit conditions, that person is allowed 3 minutes to request removal of the application from the administrative calendar. If four or more Commissioners vote to remove an item from this calendar, the approval is revoked, and the application will be scheduled for action at a later meeting.

**COASTAL PERMIT APPLICATIONS.** The Commission may vote at the conclusion of the public hearing, or it may continue the matter to a subsequent meeting. Time limits are determined by the Chair but generally are 15 minutes combined total time per side. The applicant may reserve some time for rebuttal after the opponents speak.

**CONSENT CALENDAR.** Three minutes will be allowed each side to address the Commission *on whether to remove an application from this calendar. It takes 3 or more Commissioners* to remove an item from the consent calendar, in which case it will be scheduled for further *hearing & action at a later meeting.*

**FEDERAL CONSISTENCY.** *See time limits under* COASTAL PERMIT APPLICATIONS above.

**FINDINGS.** Public hearing and vote to approve findings for a previous Commission action. The only issue is whether the findings adequately support the previous Commission action. The hearing is <u>not</u> to reargue the merits of the prior action.

**LOCAL COASTAL PROGRAMS (LCPs).** LCPs consisting of a land use plan and implementation plan are prepared by local governments and provide the standards for issuing coastal permits after approval by the Commission. Copies of LCP reports are available on request from the Commission office. Oral testimony may be limited to 5 minutes or less for each speaker, depending on the number wishing to be heard. Copies of all correspondence will be provided to the Commission.

**NEW APPEALS. (Note:** This agenda item requires an initial determination of whether the appeal raises a "substantial issue" and may **not** include a *de novo* public hearing on the merits of the project.)

When staff recommends "substantial issue," a public hearing on the question will <u>only</u> be held if 3 or more Commissioners ask for it. If three Commissioners do not request a hearing on "substantial issue" the matter automatically proceeds to *de novo* public hearing either at this or a later Commission meeting. If staff recommends "no substantial issue," public testimony will be taken only on the question whether the appeal raises a "substantial issue." Generally and at the discretion of the Chair, testimony is limited to 3 minutes total per side.

If the Commission finds "substantial issue" and there is no staff recommendation on the merits of the project, the de novo hearing will be scheduled for a subsequent meeting.

**PERMIT AMENDMENTS or EXTENSIONS.** *Public hearing and action on requests to amend or* extend permits previously issued by the Commission.

**RECONSIDERATIONS.** Public hearing and action to reconsider previous actions.

**VOTING on APPLICATIONS.** Hearing and action on coastal development permits continued from a previous meeting. The time limits are 5 minutes combined total time per side, and the applicant may reserve time for rebuttal.

# 9:00 a.m.

# WEDNESDAY, OCTOBER 11, 2006

1. **CALL TO ORDER.**

2. **ROLL CALL.**

## SAN DIEGO COAST DISTRICT

3. **ADMINISTRATIVE PERMIT APPLICATIONS.** See AGENDA CATEGORIES description on page 21.

   a. **Application No. 6-06-91 (Queen**, San Diego Co.) Application of Jack and Patty Queen to construct 1,477 sq. ft., 1-story guest house on 6.86 acre site containing 7,164 sq. ft., 2-story home and 2,650 sq. ft., barn, at 17760 La Bajada , Rancho Santa Fe, San Diego County. (GDC-SD)

4. **CONSENT CALENDAR.** See AGENDA CATEGORIES description on page 21.

   a. **Application No. 6-05-93 (Sprint-Nextel**, San Diego Co.) Application of Sprint-Nextel Communications to construct 10 ft.-high, 160 sq. ft. telecommunication equipment building next to existing 52 ft.-high monopole and similarly sized equipment building, at 2144 B Street, Camp Pendleton, San Diego County. (LRO-SD)

   b. **Application No. 6-06-64 (Caltrans**, San Diego Co.) Application of California Department of Transportation to construct 1,990 sq. ft. restroom/maintenance building, at southbound Aliso Creek Roadside Rest Area at Interstate 5, San Diego County. (DL-SD)

   c. **Application No. 6-06-80 (Cryogenic Resources**, Chula Vista) Application of Cryogenic Resources to demolish 2 industrial buildings and construct 1-story, 3,704 sq. ft. retail/storage commercial building, at 1590 Frontage Road, Chula Vista, San Diego County. (DL-SD)

   d. **Application No. 6-06-99 (Coronado Transbay Sewer)** Application of City of Coronado to replace portion of 24-inch diameter sewer force main under San Diego Bay located within Coastal Commission jurisdiction with new 23-inch force main via horizontal directional drilling and retain existing force main for back-up, San Diego Bay from the Coronado Ferry Landing to Embarcadero Marina Park, Coronado and San Diego, San Diego County. (DL-SD)

**SPEAKER SIGN-UP & TIME LIMITS.** If you wish to speak, please fill out a "Request to Speak" form and give it to a staff person. Forms are available near the door to the meeting room. Time limits are indicated on the speaker sign-up forms, and later in this summary. Generally, the Chairman will determine time limits for each speaker. Time limits for permit items are **combined total time** for all speakers in favor of or in opposition to the project.

**SUGGESTIONS FOR SUBMISSION OF WRITTEN MATERIALS.** Written materials should be submitted to Commission staff no later than three working days before the hearing. In the upper right hand corner of the first page of your submittal please identify the agenda item number & your name. Please summarize your position in two or three pages. You may attach any exhibits you feel are necessary. **Please Note:** You are discouraged from submitting written materials to the Commission on the day of the hearing, unless they are visual aids. It is difficult for Commissioners to carefully consider late submittals.

**LOCATION of MEETINGS.** The Commission meets once a month in different locations of the State. Due to legal deadlines for action, the hearing on an item may take place in a different area than the proposed project.

**NO FAXs** will be accepted at the meeting site. You may be able to make prior arrangements with staff or a Commissioner to send a fax, but you will be responsible for paying the hotel or meeting site for its receipt.

**CAMPAIGN CONTRIBUTIONS.** Government Code Section 84308 requires Commissioners to disqualify themselves from voting on any matter if they have received a campaign contribution of more than $250 from an interested party. If you intend to speak on any hearing item, please indicate on your speaker slip and/or in your testimony, if you have made campaign contributions of more than $250 to any Commissioner within the last year, and if so, to which Commissioners you contributed.

**CONTACTS with COMMISSIONERS.** Written materials sent to Commissioners must also be sent to staff. All non-procedural communications must become part of the record. For a summary of these requirements, please call the receptionist at (415) 904-5200.

**PUBLIC STATEMENTS ABOUT ITEMS NOT ON THIS AGENDA.** Before lunch each day there will be time for public statements about Commission work other than items that are pending before the Commission. Persons wishing to speak should fill out a sign-up slip, and limit presentations to 3 minutes. You may always submit written comments to the Commission office, and copies will be distributed to Commissioners.

**WHEN WILL MY AGENDA ITEM BE HEARD?** It is not possible to predict how quickly the Commission will complete agenda items or how many will be postponed to a later date. The Commission begins each session at the time listed on the Meeting Notice and considers each item in the sequence listed, except in extraordinary circumstances. The Commission may consider an item even though interested persons are not present.

**STAFF RECOMMENDATIONS.** A written staff report is available for most items on this agenda. At the end of the agenda description the author's initials and a code indicating his/her headquarters office are identified (E=Eureka SF=San Francisco SC=Santa Cruz V=Ventura LB=Long Beach SD=San Diego). Staff reports are usually distributed 10 days before the meeting. If you are interested in any item on this Meeting Notice contact the nearest Commission office to get a copy of the staff report. It may also be on the Commission's web site.

**VISUAL MATERIALS.** A slide projector & carousel will be available, and staff can assist you in its use. All materials exhibited to the Commission during the hearing (slides, maps, etc) are part of the public record and must be kept by the Commission for 60 days after final Commission action on the matter. Your materials will be returned upon written request.

**PUBLIC & ADMINISTRATIVE RECORDS.** Some public records for agenda items are available for inspection at the meeting, and are available in the Commission office. Please call to make an appointment to see any file you are interested in. If you need a verbatim transcript of the proceedings, a court reporter is present at the hearing. If you decide to challenge a final decision of the Commission in Court, please request preparation of the administrative record by letter to the Administrative Records Section at the Commission office in San Francisco, and indicate in your letter a description of the agenda item and date(s) of Commission action. Such a record will include a transcript of the proceedings at the hearing.

**CLOSED SESSION.** At any time during the meeting the Commission may meet to consider possible and pending litigation in a session closed to the public pursuant to the attorney-client privilege and statutory exemption to the Open Meeting Act (Government Code Section 11126e).

**ACCESS TO HEARINGS.** The hearings are wheelchair accessible. If accommodation for other disabilities is required, please call (415) 904-5200.

**MORE INFORMATION.** For more information about this agenda, contact one of the following staff members:

(Del Norte, Humboldt & Mendocino Counties) Bob Merrill (707) 445-7833,
(Sonoma, Marin, San Francisco & San Mateo Counties) Chris Kern (415) 904-5260,
(Santa Cruz, Monterey & San Luis Obispo Counties) Steve Monowitz (831) 427-4863,
(Santa Barbara & Ventura Counties, Malibu & Santa Monica Mountains) Gary Timm (805) 585-1800,
(Los Angeles & Orange Counties) Teresa Henry (562) 590-5071,
(San Diego County) Sherilyn Sarb (619) 767-2370,
(Energy) Alison Dettmer (415) 904-5240,
(Federal Consistency) Mark Delaplaine (415) 904-5280,
(Statewide) Chris Goehler (415) 904-5200.

A Telecommunication Device for the Deaf (TDD) is available at (415) 904-5200.

The Coastal Commission is not equipped to receive comments on any official business by electronic mail. Any information relating to official business should be sent to the appropriate Commission office using U.S. Mail or courier service.

**A copy of this agenda is available on the Internet.** (www.coastal.ca.gov)

## ADDRESS CORRECTION?

Please attach your mailing label from the front cover when writing about service, a change of name, or address.

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**SAN FRANCISCO, CA 94105-2219**

**(415) 904-5451**
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**CA COASTAL COMMISSION**
***45 FREMONT ST., SUITE 1920***
**SAN FRANCISCO, CA 94105-2219**

**(415) 904-5215**
**(fax) (415) 904-5216**

CALIFORNIA COASTAL COMMISSION
45 Fremont Street, Suite 2000
San Francisco, CA 94105-2219

# California Coastal Commission

45 Fremont Street, Suite 2000, San Francisco, CA 94105-2219 (415) 904-5200
*Internet location* http://www.coastal.ca.gov

**Meg Caldwell**, *Chair*
Judy Lloyd, Alternate
**Patrick Kruer**, *Vice Chair*
Adi Liberman, Alternate
**William A. Burke**
**Larry Clark**
Trent Orr, Alternate
**Steven Kram**
Dan B. Secord, M.D., Alternate
**Bonnie Neely**
Sharon Wright, Alternate
**Steve Padilla**
David Allgood, Alternate
**Dave Potter**
**Mike Reilly**
Annette Rose, Alternate
**Khatchik Achadjian**
Brooks Firestone, Alternate
**Mary Shallenberger**
**Sara Wan**
April Vargas, Alternate

**Michael Chrisman/Karen Scarborough/Brian Baird**, Resources Agency
**Sunne Wright McPeak/Barry Sedlik**, Business, Transportation & Housing Agency
**Paul Thayer/Dwight Sanders**, State Lands Commission

**Peter M. Douglas**, *Executive Director*

# OCTOBER 2006 MEETING NOTICE

**Wednesday, October 11, 2006, 9:00 a.m**
**Thursday, October 12, 2006, 8:00 a.m**
**Friday, October 13, 2006, 9:00 a.m**

Hyatt Regency Long Beach
200 S. Pine Avenue
Long Beach, CA 90802
(562) 491-1234

# Supplemental Addendum

## Thursday, October 12, 2006

21b. **Appeal No. A-4-MAL-06-125 (Lashgari)** Appeal by Will O'Leary from decision of City of Malibu granting permit to Kamyar Lashgari for the construction of a new, one-story, 4,981 sq. ft. single-family residence, pool and spa, drainage improvements, driveway, Fire Department turnaround, and on-site wastewater treatment system at 27927 Pacific Coast Highway, Malibu, Los Angeles County. (DC-V)

# CALIFORNIA COASTAL COMMISSION

South Coast Area Office
200 Oceangate, Suite 1000
Long Beach, CA 90802-4302
(562) 590-5071

Date 5/17/06

RECEIVED BY
PLANNING DEPARTMENT
CITY OF NEWPORT BEACH
MAY 23 2006
AM 7|8|9|10|11|12|1|2|3|4|5|6 PM

Re: Application/Appeal No NPB-MAJ-1-06

## STATUS LETTER

The status of this matter is noted below.

✓ Your application was filed on 4/14/06. The public hearing is tentatively scheduled on June 14-16, 2006 in Santa Rosa. This tentative scheduling information is being provided for your convenience and is subject to change. Written notification of final scheduling of the hearing, along with a copy of the staff report, will be mailed approximately 10 days prior to the hearing.
IMPORTANT: The enclosed Notice of Pending Permit must be posted on the site, in a conspicuous place, within 3 days of its receipt.

___ This application is incomplete and cannot be filed or processed until the items listed on the attached sheet have been completed and submitted to the District Office. If these items have not been received by the date indicated, the entire package will be returned to you.

Please be advised that the items needed to complete your application must be submitted to this office by _____.

___ This file is being returned as the application submitted is deemed incomplete. The required substantive documents are missing. Please see the attached sheet.

___ This appeal was received _____ and has been determined to be a valid appeal. You will be notified of the place and date of the public hearing.

___ This appeal was received _____ but has been determined invalid for the following reason:

_____

_____

If you have any questions, please contact this office at (562) 590-5071.

Staff Analyst Laurinda J. Blemker

**CALIFORNIA COASTAL COMMISSION**
South Coast Area Office
200 Oceangate, Suite 1000
Long Beach, CA 90802-4302
(562) 590-5071

# AGREEMENT FOR EXTENSION OF TIME FOR DECISION ON COASTAL DEVELOPMENT PERMIT

Pursuant to Government Code Section 65957, the applicant and Coastal Commission staff hereby irrevocably agree that: 1) the time limits for a decision on permit applications # **5-06-168** established by Government Code Section 65952 shall be extended by 90 days (extension request ordinarily to be 90 days, and in no event more than 90 days for a total period for Commission action not to exceed 270 days); and 2) the effective date of this extension is October 25, 2006.

Accordingly, the deadline for Commission decision on these permit applications is extended from October 25, 2006 to January 23, 2007.

August 7, 2006
Date

SUSAN K. HORI
_Applicant or X Authorized Representative (Print)
(check one)

Susan K Hori
Applicant or Authorized Representative (Signature)

Date

CCC Staff Name (Print)

CCC Staff Name (Signature)

# CITY OF NEWPORT BEACH

## PLANNING DEPARTMENT

Patricia L. Temple, Director

August 7, 2006

Ms. Anne Blemker
Coastal Program Analyst
California Coastal Commission
South Coast District
200 Oceangate, Suite 1000
Long Beach, CA 90802-4303

RE: CITY OF NEWPORT BEACH LAND USE PLAN AMENDMENT NPB-MAJ-1-06 PART A (SANTA BARBARA CONDOMINIUMS); REQUEST FOR POSTPONEMENT TO OCTOBER, 2006 COASTAL COMMISSION HEARING AGENDA

Dear Ms. Blemker:

In March 2006, the City of Newport Beach submitted an amendment request to the City's certified Land Use Plan (LUP). The proposed LUP amendment consists of two separate amendments. Part A is for the property referred to as the Santa Barbara Condominiums located at 900 Newport Center Drive. Part B is for property referred to as "CalTrans West". The Coastal Commission approved the City's Land Use Plan Amendment Part B at the July 2006 hearing and has scheduled Part A for its consideration at the August 2006 hearing.

On behalf of the project proponent, the City of Newport Beach is hereby requesting that the Coastal Commission postpone consideration of this item to the October 2006 hearing. The continuance is necessary for the project proponent to resolve potential land use compatibility issues with the Newport Beach County Club since one of the issues raised in the Staff Report is whether the proposed amendment would create a land use conflict between an existing recreational facility and the proposed residential development. This request is consistent with the Commission's actions to extend time for consideration of this Land Use Plan Amendment until July 2007, pursuant to Coastal Act Section 30517.

Should you have any questions, I can be contacted at 949-644-3228 or Rosalinh Ung of my staff at 949-644-3208.

Sincerely,

Patricia L. Temple
Planning Director

cc: Deborah Lee
Donna Kelly
Carol McDermott

3300 Newport Boulevard · Post Office Box 1768 · Newport Beach, California 92658-8915
Telephone: (949) 644-3200 · Fax: (949) 644-3229 · www.city.newport-beach.ca.us

**CALIFORNIA COASTAL COMMISSION**
South Coast Area Office
200 Oceangate, Suite 1000
Long Beach, CA 90802-4302
(562) 590-5071

July 27, 2006

# IMPORTANT PUBLIC HEARING NOTICE
# CITY OF NEWPORT BEACH LUP AMENDMENT
# NPB-MAJ-01-06 (PART A)

**HEARING DATE AND LOCATION:**

DATE: Tuesday, August 8, 2006
TIME: 10:00 AM
PLACE: Los Angeles Harbor Hotel
(formerly Sheraton LA Harbor)
601 S. Palos Verdes St.
San Pedro, CA 90731

ITEM NO: **T8b**

PLANNING DEPARTMENT
CITY OF NEWPORT BEACH
AUG 01 2006
AM PM

**AMENDMENT DESCRIPTION AND STAFF RECOMMENDATION:**

Part A of the Land Use Plan (LUP) amendment consists of a request by the City of Newport Beach to change the land use designation of a 4.25 acre area (presently occupied by tennis courts) at the Marriott Hotel from Visitor-Serving Commercial to Medium Density Residential, at 900 Newport Center Drive, Newport Beach. (Part B of the amendment was heard separately at the July 2006 hearing.) The proposed land use change would allow the construction of condominiums (or other medium density residential) on the subject property.

Commission staff recommends that the Commission **DENY** Part A of the proposed amendment because the land use redesignation would result in a loss of one of the few sites designated Visitor-Serving Commercial in the certified LUP. A more complete description of the staff recommendation is contained in the staff report which may be viewed on the Commission's web site at http://www.coastal.ca.gov/mtgcurr.html or you may view or request a copy of the report from the Commission's Long Beach office.

**HEARING PROCEDURES:**

This item has been scheduled for a public hearing and vote. People wishing to testify on this matter may appear at the hearing and/or may present their concerns in writing to the Commission before the hearing date.

**SUGGESTIONS FOR SUBMISSION OF WRITTEN MATERIALS:**

If you wish to submit written materials for review by the Commission, please observe the following suggestions:

- We request that you submit your materials to the Commission staff no later than three working days before the hearing (staff will then distribute your materials to the Commission).
- Mark the agenda number of your item, the application number, your name and your position in favor or opposition to the project on the upper right hand corner of the first page of your submission. If you do not know the agenda number, contact the Commission staff person listed on the bottom of this page.

- If you wish, you may obtain a current list of Commissioners' names and addresses from any of the Commission's offices and mail the material directly to the Commissioners. If you wish to submit materials directly to Commissioners, we request that you mail the materials so that the Commissioners receive the materials no later than Thursday of the week before the Commission meeting. **Please** mail the same materials to all Commissioners, alternates for Commissioners, and the four non-voting members on the Commission with a copy to the Commission staff person listed at the bottom of this page.

- You are requested to summarize the reasons for your position in no more than two or three pages, if possible. You may attach as many exhibits as you feel are necessary.

**PLEASE NOTE:**

While you are not prohibited from doing so, you are discouraged from submitting written materials to the Commission on the day of the hearing, unless they are visual aids, as it is more difficult for the Commission to carefully consider late materials. The Commission requests that if you submit written copies of comments to the Commission on the day of the hearing, that you provide 20 copies.

**ALLOTTED TIME FOR TESTIMONY:**

Oral testimony may be limited to 5 minutes or less for each speaker depending on the number of persons wishing to be heard.

**FINAL NOTES:**

No one can predict how quickly the Commission will complete agenda items or how many will be postponed to a later date. The Commission begins each session at the time listed and considers each item in order, except in extraordinary circumstances. Questions regarding the report or the hearing should be directed to, **Anne Blemker** the Coastal Program Analyst assigned to the project, at the South Coast Area office at **562-590-5071**.

*G:\Hearing Notices\NPB-MAJ-1-06(Part A) August 2006 Hearing Notice.doc*

# CITY OF NEWPORT BEACH

## PLANNING DEPARTMENT

Patricia L. Temple, Director

August 4, 2006

FILE COPY

Ms. Anne Blemker
Coastal Program Analyst
California Coastal Commission
South Coast District
200 Oceangate, Suite 1000
Long Beach, CA 90802-4303

RE: CITY OF NEWPORT BEACH LAND USE PLAN AMENDMENT NPB-MAJ-1-06 PART A (SANTA BARBARA CONDOMINIUMS); REQUEST FOR POSTPONEMENT TO OCTOBER, 2006 COASTAL COMMISSION HEARING AGENDA

Dear Ms. Blemker:

In March 2006, the City of Newport Beach submitted an amendment request to the City's certified Land Use Plan (LUP). The proposed LUP amendment consists of two separate amendments. Part A is for the property referred to as the Santa Barbara Condominiums located at 900 Newport Center Drive. Part B is for property referred to as "CalTrans West". The Coastal Commission approved the City's Land Use Plan Amendment Part B at the July 2006 hearing and has scheduled Part A for its consideration at the August 2006 hearing.

On behalf of the project proponent, the City of Newport Beach is hereby requesting that the Coastal Commission postpone consideration of this item to the October 2006 hearing. The continuance is necessary for the project proponent to resolve potential land use compatibility issues with the Newport Beach County Club since one of the issues raised in the Staff Report is whether the proposed amendment would create a land use conflict between an existing recreational facility and the proposed residential development. This request is consistent with the Commission's actions to extend time for consideration of this Land Use Plan Amendment until July 2007, pursuant to Coastal Act Section 30517.

Should you have any questions, I can be contacted at 949-644-3208.

Sincerely,

Rosalinh M. Ung
Associate Planner

cc: Deborah Lee
Donna Kelly
Carol McDermott

3300 Newport Boulevard · Post Office Box 1768 · Newport Beach, California 92658-8915
Telephone: (949) 644-3200 · Fax: (949) 644-3229 · www.city.newport-beach.ca.us

## XIII. PUBLIC SERVICES

*Please identify whether adequate capacity currently exists for the following public services and utilities. If expansion is needed, explain how it will be accomplished. Please attach any written confirmation of capacity you have received from service providers.*

- *Fire protection*
- *Police protection*
- *Schools*
- *Maintenance of Public facilities, including roadways*
- *Other Government Services*

Given the location of the proposed project, Newport Center, adequate services currently exist. New construction of this type places very little demand on public safety services such a fire. The property is located near the Newport Beach Police Station and an existing fire station. The type of residential units being offered will have a very low student generation rate. No impact is anticipated.

## XIV. RECREATION

*Describe the impact of the project on the demand for neighborhood regional parks or other recreational facilities and any affect on existing recreational opportunities.*

The project will provide residents with approximately 79,140 square-feet of softscape and approximately 21,300 square-feet of hardscape which includes recreational areas for their use. In addition, the proximity of the site to beaches, parks, golf and other recreation activities offers potential residents a number of alternatives. Local Park Code feels will be paid consistent with city requirements.

## XV. TRANSPORTATION/TRAFFIC

*Please describe how the project will comply with parking regulations, and identify any changes or improvements to the circulation system that are proposed as part of the project.*

The project will provide parking consistent with the Zoning Code requirements.

The project includes two driveways to be added along Santa Barbara Dr. to allow access in and out of the site.

## XVI. UTILITIES & SERVICE SYSTEMS

*Please identify whether adequate capacity currently exists for the following public services and utilities. If expansion is needed, explain how it will be accomplished. Please attach any written confirmation of capacity you have received from service providers.*

- *Natural gas*
  Natural gas will be provided from the existing S.C.E. gas main in Santa Barbara Drive.

- *Communications Systems*
  Communication service will be provided from the existing facilities in Santa Barbara Drive.

- *Local or regional water treatment or distribution facilities*
  Water treatment and service will be provided by the City of Newport Beach Utility Department. Service lines and meters will be connected to the existing 12" water main in Santa Barbara Drive.

- *Sewer systems or septic tanks*
  Sewer from the site will be discharged into the existing City of Newport Beach's 8" sewer main in Santa Barbara Drive.

- *Storm water drainage systems*
  Storm water from the drives will be collected in catch basins and trench drains. Drainage from the landscaped areas will be collected in area drains. Drainage from the buildings will be collected in gutters and down spouts and drained into the area drains. The site drainage will be conveyed in a storm drain system to the existing storm drain in Santa Barbara Drive (existing filters as noted above) and the golf course.

- *Solid waste and disposal Police protection*
  Trash will be collected from the site and disposed of by the City of Newport Beach's trash disposal vendor.

## XIV. RECREATION

Describe the impact of the project on the demand for neighborhood regional parks or other recreational facilities and any affect on existing recreational opportunities.

## XV. TRANSPORTATION/TRAFFIC

Please describe how the project will comply with parking regulations, and identify any changes or improvements to the circulation system that are proposed as part of the project.

## XVI. UTILITIES & SERVICE SYSTEMS

Please identify whether adequate capacity currently exists for the following public services and utilities. If expansion is needed, explain how it will be accomplished. Please attach any written confirmation of capacity you have received from service providers.

- Natural gas
- Communications Systems
- Local or regional water treatment or distribution facilities
- Sewer systems or septic tanks
- Storm water drainage systems
- Solid waste and disposal Police protection
- Local or regional water supplies

**Certification**

I certify that the statements furnished above and in the attached exhibits are correct and complete to the best of my knowledge and belief. I am the legal owner of the property that is the subject of this application or have been authorized by the owner to act on his behalf regarding this application. I further acknowledge that any false statements or information presented herein may result in the revocation of any approval or permit granted on the basis of this information.

Bob Shorb, Senior Vice President — Print name of owner or representative and Title

Signature — Date 7-21-04

For Office Use

Date filed: _____ Fee: _____ Receipt No: _____ By: _____

**CALIFORNIA COASTAL COMMISSION**
South Coast Area Office
200 Oceangate, Suite 1000
Long Beach, CA 90802-4302
(562) 590-5071

# T8b

July 20, 2006

**TO:** Commissioners and Interested Persons

**FROM:** Deborah Lee, Senior Deputy Director, South Coast District
Teresa Henry, District Manager, South Coast District
Karl Schwing, Supervisor, Regulation & Planning, Orange County Area
Anne Blemker, Coastal Program Analyst

**SUBJECT:** **City of Newport Beach Land Use Plan Amendment NPB-MAJ-1-06 Part A (Marriott Hotel VSC to MDR/Santa Barbara Condominiums)**

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## SUMMARY OF STAFF REPORT

### DESCRIPTION OF THE SUBMITTAL

The amendment that is the subject of this report was submitted as part of a package with other Land Use Plan (LUP) amendments. This report deals only with "Part A" of the amendment. Part A of the amendment consists of a request by the City of Newport Beach to change the land use designation of a 4.25 acre area (presently occupied by tennis courts) at the Marriott Hotel from Visitor-Serving Commercial to Medium Density Residential, at 900 Newport Center Drive, Newport Beach, Orange County. (Part B of the amendment was acted on separately at the Commission's July 2006 hearing, and Part C was retracted, in part because the City Council had not authorized its original submittal.) The proposed land use change would allow the construction of condominiums (or other medium density residential) on the subject property. A corresponding coastal development permit application (5-06-168, Lennar) has been submitted and will be considered at a subsequent hearing.

The major issues raised by this amendment request are adequate provision of visitor-serving commercial development and public access.

### SUMMARY OF STAFF RECOMMENDATION

Commission staff recommends that the Commission **DENY** Part A of the proposed amendment because the land use redesignation would result in a loss of one of the few sites designated Visitor-Serving Commercial in the certified LUP. The motion to accomplish this is found on Page 3.

### ANTICIPATED AREAS OF CONTROVERSY

The City and the landowner object to the staff recommendation.

## ADDITIONAL INFORMATION

For further information, please contact **Anne Blemker** at the South Coast District Office of the Coastal Commission at **(562) 590-5071**. The proposed amendment to the Land Use Plan (LUP) of the City of Newport Beach Local Coastal Program (LCP) is available for review at the Long Beach Office of the Coastal Commission or at the City of Newport Beach Planning Department. The City of Newport Beach Planning Department is located at 3300 Newport Boulevard in Newport Beach. **Rosalinh Ung** is the contact person for the City's Planning Division, and he may be reached by calling **(949) 644-3208**.

## EXHIBITS

1. City Council Resolution No. 2006-02 approved January 10, 2006
2. City Council Resolution No. 2006-26 approved March 28, 2006
3. Vicinity Map
4. Land Use Map

# I. COMMISSION RESOLUTION ON CITY OF NEWPORT BEACH LOCAL COASTAL PROGRAM AMENDMENT 1-06 (PART A)

Following a public hearing, staff recommends the Commission adopt the following resolution and findings.

**Motion for Part A**

*"I move that the Commission **CERTIFY** the City of Newport Beach Land Use Plan Amendment NPB MAJ 1-06 Part A as submitted."*

**Staff Recommendation**

Staff recommends a **NO** vote. Failure of this motion will result in denial of the land use plan amendment as submitted and adoption of the following resolutions and findings. The motion to certify as submitted passes only upon affirmative vote of a majority of the appointed Commissioners.

**Resolution**

The Commission hereby **DENIES** the City of Newport Beach Land Use Plan Amendment 1-06 Part A as submitted and adopts the findings stated below on the grounds that the amendment will not meet the requirements of and is not in conformity with the policies of Chapter 3 of the California Coastal Act. Certification of the Land Use Plan amendment would not comply with the California Environmental Quality Act as there are feasible mitigation measures and alternatives that would substantially lessen the significant adverse impacts on the environment that will result from certification of the land use plan amendment as submitted.

## II. PROCEDURAL PROCESS (LEGAL STANDARD FOR REVIEW)

### *A. Standard of Review*

The standard of review for land use plan amendments is found in Section 30512 of the Coastal Act. This section requires the Commission to certify an LUP amendment if it finds that it meets the requirements of, and is in conformity with, the policies of Chapter 3 of the Coastal Act. Specifically, Section 30512(c) states: *"The Commission shall certify a land use plan, or any amendments thereto, if it finds that a land use plan meets the requirements of, and is in conformity with, the policies of Chapter 3 (commencing with Section 30200). Except as provided in paragraph (1) of subdivision (a), a decision to certify shall require a majority vote of the appointed membership of the Commission."*

### *B. Procedural Requirements*

Pursuant to Section 13551(b) of Title 14 of the California Code of Regulations, a local government's resolution for submittal of a proposed LUP amendment must indicate whether the local coastal program amendment will require formal local government adoption after Commission approval, or is an amendment that will take effect automatically upon the Commission's approval pursuant to Public Resources Code Sections 30512, 30513 and 30519. The City of Newport Beach's submittal indicates that this LCP amendment will take effect upon Commission certification.

## III. BACKGROUND

The Land Use Plan (LUP) for the City of Newport Beach was effectively certified on May 19, 1982 and comprehensively updated October 13, 2005.

The subject amendment was initially submitted by the City of Newport Beach on March 6, 2006. On March 15, 2006, Coastal Commission staff notified the City of Newport Beach that the submittal was incomplete and that additional information would be required to complete the submittal. City staff submitted the information on April 14, 2006. On May 18, 2006, Coastal Commission staff notified the City that the amendment request was complete. The Commission approved a request for a one-year (1) time extension of the amendment on June 13, 2006. Part B of the amendment request, which involved a change in the land use designation of another parcel from Medium Density Residential to Open Space, was approved by the Commission on July 12, 2006. Part A of the amendment request is now being submitted for Commission action. Part A involves a change in land use designation at 900 Newport Center Drive from Visitor-Serving Commercial to Medium Density Residential.

## IV. SUMMARY OF PUBLIC PARTICIPATION

The City of Newport Beach approved this segment of the Land Use Plan amendment request (Part A) through a City Council public hearing on January 10, 2006. The item was originally scheduled for the Council hearing of November 22, 2005, but the item was continued to the December 13, 2005 hearing and finally approved on January 10, 2006. It was approved through City Council Resolution No. 2006-02, which approved General Plan Amendment No. 2004-005 and Local Coastal Plan Amendment 2005-001 (Exhibit 1). Prior to either the City Council approving the LUP amendment request, or the Planning Commission voting to recommend that the City Council do so, the Planning Commission held a public hearing on November 3, 2005. Notice was provided for both entities' hearings. Notice of the City Council's public hearing was mailed and posted on November 14, 2005 and published in the local newspaper on November 12, 2005. The City Council approved a subsequent resolution (Resolution No. 2006-26) on March 28, 2006 to correct procedural deficiencies in the original resolution related to the Coastal Act requirements (Exhibit 2).

One letter of opposition was received at the local level. The letter expresses concerns about increased density at the subject site. No oral comments were received during the public hearings held at the local level.

## V. FINDINGS FOR DENIAL OF PART A OF NPB-MAJ-1-06

The Commission hereby finds and declares as follows:

Site Description and Land Use Designation

The proposed land use redesignation will affect only one site—900 Newport Center Drive in the City of Newport Beach, Orange County. The 4.25-acre site is located in the Newport Center/Fashion Island area of the City, inland of Pacific Coast Highway (Exhibit 3). The site is currently operated as a private tennis club used by members and guests of the Newport Beach Marriott Hotel. There are eight outdoor tennis courts, a clubhouse and ancillary uses on the property. The property owner proposes to subdivide the subject site from the larger hotel parcel and develop a 79-unit condominium project.[1]

The site is currently designated Visitor-Serving Commercial (CV-B) in the City's Certified Land Use Plan, as depicted in Exhibit 4. The site is surrounded by a golf course to the west and north, hotel development to the south, and commercial offices to the east.

[1] Coastal Development Permit Application 5-06-168 (Lennar), which seeks authorization to develop the condominium project, will be considered by the Commission at a subsequent hearing.

Coastal Act Policies

As stated previously, the Coastal Act is the standard of review in the current analysis. The Coastal Act encourages the provision of lower cost visitor and recreational facilities and prioritizes visitor-serving commercial development over residential development. The proposed LUP amendment is not in conformity with the public access and recreation policies of the Coastal Act relating to the provision of visitor serving development. Applicable provisions of the Coastal Act include the following:

Section 30213 states, in pertinent part:

> *Lower cost visitor and recreational facilities shall be protected, encouraged, and, where feasible, provided. Developments providing public recreational opportunities are preferred.*

Section 30222 states:

> *The use of private lands suitable for visitor-serving commercial recreational facilities designed to enhance public opportunities for coastal recreation shall have priority over private residential, general industrial, or general commercial development, but not over agriculture or coastal-dependent industry.*

Land Use Plan Policies

2.3.1-3 *On land designated for visitor-serving and/or recreational uses, give priority to visitor-serving commercial recreational facilities designed to enhance public opportunities for coastal recreation over other commercial uses, except for agriculture and coastal-dependant industry.*

2.3.3-3 *Encourage visitor-serving and recreational developments that provide public recreational opportunities.*

Proposed Change in Land Use Designation

The proposed amendment (NPB MAJ 1-06, Part A) involves a request to change the land use designation of a 4.25-acre area of the Newport Beach Marriott Hotel from Visitor Serving Commercial to Medium Density Residential at 900 Newport Center Drive. No other properties are subject to the proposed land use change.

The proposed change will have an adverse affect on priority visitor-serving opportunities in the area. Residential development is the lowest priority use within the Coastal Zone. The City indicates that the loss of CV-B designated land at this location will not have an adverse affect on visitor-serving commercial or recreational activities. According to the amendment request, "*[t]he property is not located in close proximity to coastal resources, coastal recreational use or the water and the change in land use does not impact the adjacent visitor serving uses other than to eliminate the accessory tennis courts, which is not a coastal dependent recreational activity.*" Although the tennis courts are not considered a "coastal dependent" activity, tennis is a recreational activity, and the site is part of a larger commercial facility (Marriott Hotel) that serves visitors to

the coast. Thus, although currently operated as a private tennis club serving only members and guests of the Newport Beach Marriott Hotel, that is nevertheless a visitor-serving recreational offering. In addition, the hotel is located in close proximity to popular visitor destinations, such as the Newport Dunes, Balboa Island and the beach. The site is located in a highly visible, well-traveled location and could potentially support some form of commercial and/or recreational development in the future. If the site were to be redesignated for residential development now, the opportunity for a future visitor-serving use that would be even more generally accessible or lower cost would be lost.

The City states that the loss of this visitor-serving commercial site as a result of the requested amendment would not significantly reduce the amount of visitor-serving land in the City. The City concludes that the project represents a reduction in visitor serving uses of 2% based on a table showing the portion of land currently designated as visitor serving commercial and what will remain after the 4.25-acre site is re-designated. The table is replicated below.

| **Visitor Serving Commercial Designation** | **Amount of Land** |
|---|---|
| CV-A (0.5—0.75) | 7.65 acres |
| CV-B (0.5—1.25) | 42.90 acres |
| Newport Coast Planned Community | 153.00 acres |
| **CITYWIDE TOTAL:** | 203.55 acres |
| Less project | -4.25 acres |
| **REMAINING CITYWIDE TOTAL:** | 199.30 acres |
| | (2% loss of CV-B) |

The City included the Newport Coast Planned Community in the above-referenced tabulation. However, Newport Coast is covered by a segment of the County of Orange certified LUP and is not within the boundary of the City of Newport Beach certified LUP. As such, the 153.00 acres of visitor serving commercially designated area referred to in the table is not covered by the LUP that is the subject of the current amendment request. In actually, the 4.25-acre loss represents an 8.4% [4.25/(7.65+42.90)]--not 2%-- reduction in visitor-serving land in the portion of the City covered by this LUP.

In addition, the subject site is one of only five sites designated Visitor-Serving Commercial (CV) in the City's certified LUP. Many land uses that are in fact visitor-serving are located within the General Commercial (CG) or Neighborhood Commercial (CN) designation and could thus cease to provide a visitor-serving function. According to the LUP, *[t]he CV designation is intended to provide for accommodations, goods, and services intended to primarily serve the needs of visitors of Newport Beach."* Hotels, and their ancillary development, clearly fit this designation and should be protected consistent with Section 30222 of the Coastal Act. The LUP includes policies that encourage visitor-serving and recreational developments that provide public recreational opportunities. Although the tennis courts are part of a private club, they are available for use by hotel guests. Hotel guests are typically members of the public that are visitors to the area.

The agent for the corresponding CDP application states that the tennis courts are underutilized and replacing the courts *"does not remove a publicly accessible, widely-used recreation facility from the coastal zone."* The Commission acknowledges that the property owner is in no way obligated to retain the tennis court use of the site. However, under the current land use designation, the site can only be developed with uses allowed under the CV designation. Commercial development of the site could serve potential visitors to the coast. The location is conducive to commercial recreational development and consistent with the adjacent hotel use and the nearby commercial development. Residential development at the subject site would serve no purpose to members of the visiting public and would potentially establish a precedent for residential conversions in the subject area.

Concerns have also been raised that the proposed residential land use is inconsistent with the neighboring Newport Beach Country Club golf course because of potential safety issues. Due to the configuration of the golf course holes adjacent to the subject site, golf balls are periodically hit into the tennis court area. A substantial fence has been erected to prevent injuries. This, in conjunction with the limited use of the tennis courts, has minimized potential hazard. However, with a proposed residential development, such as the one proposed through CDP application 5-06-168, there would be a greater probability that an errant ball could result in injury. As such, the proposed amendment may create a serious land use conflict between an existing recreational facility and residential development.

The proposed land use conversion proposed as Part A of the City's amendment request is inconsistent with Section 30213 of the Coastal Act, which requires lower cost visitor and recreational facilities be *"protected, encouraged, and, where feasible, provided."* The proposed amendment will also have an adverse effect on the priority *"visitor-serving commercial recreational facilities"* to be provided under Section 30222 of the Coastal Act. Therefore, Part A of the amendment must be denied.

## VI. CONSISTENCY WITH THE CALIFORNIA ENVIRONMENTAL QUALITY ACT

Section 21080.9 of the California Environmental Quality Act (CEQA) exempts local governments from the requirement of preparing an environmental impact report (EIR) in connection with a local coastal program (LCP). Instead, the CEQA responsibilities are assigned to the Coastal Commission. Additionally, the Commission's Local Coastal Program review and approval procedures have been found by the Resources Agency to be functionally equivalent to the environmental review process. Thus, under Section 21080.5 of CEQA, the Commission is relieved of the responsibility to prepare an environmental impact report for each local coastal program submitted for Commission review and approval. Nevertheless, the Commission is required when approving a local coastal program to find that the local coastal program does conform to the provisions of CEQA and to base the certification on a specific factual finding supporting the conclusion that the proposal *"meets the requirements of [CEQA] Section*

*21080.5(d)(2)(i) . . .*," which requires that an activity will not be approved or adopted as proposed if there are feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse impact which the activity may have on the environment. 14 C.C.R. §§ 13555(b) and 13540(f).

The amendment involves a request to change the land use designation of a 4.25 acre area (presently occupied by tennis courts) at the Marriott Hotel from Visitor-Serving Commercial to Medium Density Residential. As proposed, the change in land use proposed in Part A is inconsistent with the public access and recreation policies of the Coastal Act and must be denied.

The Commission finds that approval of Part A of the Land Use Plan amendment will result in significant adverse environmental impacts under the meaning of the California Environmental Quality Act. In addition, the Commission finds that there are feasible alternatives under the meaning of CEQA, including the no project alternative, which would reduce the potential for significant adverse environmental impacts which have not been explored. The proposal must therefore be denied.

*H:\Staff Reports\Aug06\NPB-MAJ-1-06(part a).doc*

Attachment 1

**RESOLUTION NO. 2006-2**

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF NEWPORT BEACH ADOPTING MITIGATED NEGATIVE DECLARATION (SCH NO. 2005-071067) AND APPROVING GENERAL PLAN AMENDMENT NO. 2004-005, LOCAL COASTAL PROGRAM LAND USE PLAN AMENDMENT NO. 2005-001, TENTATIVE PARCEL MAP NO. 2005-014, TENTATIVE TRACT MAP NO. 2004-004 (16774), TRAFFIC STUDY NO. 2005-002 AND COASTAL RESIDENTIAL DEVELOPMENT PERMIT NO. 2005-004 FOR PROPERTY LOCATED AT 900 NEWPORT CENTER DRIVE (PA 2004-169)**

**WHEREAS**, an application was filed by Lennar Homes with respect to property located at 900 Newport Center Drive, and legally described as Parcel 1, as per map filed in Book 75 pages 33 and 34 of parcel maps, in the office of the County Recorder to construct 79 residential condominiums on a 4.25-acre site presently developed with tennis courts operated by the adjacent Newport Beach Marriott Hotel. The applicant requests approval of: a General Plan Amendment and an Amendment of the 1990 Local Coastal Plan Land Use Plan (LCPLUP) to change the land use designations of the 4.25-acre site from Administrative, Professional & Financial Commercial to Multiple-Family Residential; an Amendment of the 2004 LCPLUP to change the land use designation from Visitor-Serving Commercial (CV-B) to Medium Density Residential C (RM-C); a Zone Change to rezone the subject property from APF to the PC District; adopt a Planned Community Development Plan to establish permitted use and development regulations; consider a waiver of the 10-acre minimum land area requirement for Planned Community District adoption; a Parcel Map to subdivide the subject property from the hotel development for financing and development purposes; a Tract Map for the condominium ownership (79 residential units); a Traffic Study pursuant to the Traffic Phasing Ordinance (TPO) and a Coastal Residential Development Permit regarding the provision of affordable housing in accordance with the Municipal Code and the General Plan Housing Element.

**WHEREAS**, on November 3, 2005, the Planning Commission held a noticed public hearing in the City Hall Council Chambers, 3300 Newport Boulevard, Newport Beach, California at which time the project applications, the Mitigated Negative Declaration and comments received thereon were considered. Notice of time, place and purpose of the public hearing was given in accordance with law and testimony was presented to, and considered by, the Planning Commission at the hearing. With a vote of 6 ayes (one recused), the Planning Commission recommended approval of the above-mentioned applications to the City Council.

**WHEREAS**, the property is located in the Block 900 – Hotel Plaza of the Newport Center (Statistical Area L1) of the Land Use Element and has a land use designation of Administrative, Professional & Financial Commercial (APF) and zoned APF (Administrative, Professional, Financial).

**WHEREAS**, pursuant to Section 20.94 of the Newport Beach Municipal Code, the City Council held a noticed public hearing on November 22, 2005, which was continued to December 13, 2005 without testimony, to consider the proposed applications and the recommendations of the Planning Commission.

COASTAL COMMISSION
NPB 1-06 Part A
EXHIBIT # 1
PAGE 1 OF 7

**WHEREAS**, a General Plan Amendment and an Amendment of the 1990 Local Coastal Plan Land Use Plan (LCPLUP) to change the land use designations of the site from Administrative, Professional & Financial Commercial to Multiple-Family Residential is necessary as the proposed residential use is not permitted in the APF designation. A change in land use would result in a 4.25-acre reduction in land available to be potentially used for office uses consistent with the APF designation. However, within the Newport Center, there is approximately 200 acres designated APF and the two percent (2%) reduction proposed by the project is not a significant reduction.

**WHEREAS**, the residential condominium project is consistent with the proposed Multi-Family Residential land use designation. The proposed residential condominium project would be compatible with the residential developments to the south and northeast of the site. The proposed project is viewed as incompatible with the office uses across Santa Barbara Street and is also compatible with the adjacent hotel and golf course

**WHEREAS**, the 2004 LCP Land Use Plan designates the site for Visitor Serving Commercial uses. This designation was applied due to the existing use of the Marriott Hotel complex. A change in land use designation from CV-B (Visistor-Serving Commercial) to RM-C (Medium Density Residential C) is necessary for the proposed residential development. The change in land use designation will reduce the land available for visistor-serving commercial uses by 4.25 acres. Although this reduction in area would occur, the opportunity to construct the remaining hotel room entitlement of 79 rooms would not be lost and they could be constructed nearby within a portion of Newport Center within the Coastal Zone.

**WHEREAS**, Section 30250(a) of the California Coastal Act (CCA) provides criteria for the location of new development. The Coastal Act provides for the protection of coastal resources by requiring that new development be located in close proximity to existing development with available public services to minimize the impacts associated with the extension of infrastructure and services. The project is located within Newport Center, which is a development area with all public services (utilities, roads, police, fire etc.) presently provided.

**WHEREAS**, Section 30252(4) requires new development within the Coastal Zone to provide adequate parking facilities or provide substitute means of serving the development with public transportation. The proposed development provides an adequate number of on-site parking spaces. The project also will be conditioned so that the parking structures will have adequate dimensions, clearances, and access to insure their proper use.

**WHEREAS**, Section 30212, requires public access must be provided from the nearest public roadway to the shoreline and along the coast in new development. The subject property is not adjacent to the ocean or bay; therefore, coastal access easements are not required.

**WHEREAS**, Section 30222 requires the use of private land suitable for visitor-serving commercial recreational facilities for coastal recreation must have priority over private residential, general industry, or general commercial development. Although, the change in land use designation will reduce the land available for visistor serving commercial uses by 4.25 acres; the opportunity to construct the remaining hotel room entitlement of 79 rooms would not

Ex. 1
2/7

be lost and they could be constructed nearby within the portion of Newport Center that is located within the Coastal Zone.

**WHEREAS**, the City's General Plan indicates that the City shall maintain suitable and adequate standards for landscaping, sign control, site and building design, parking and undergrounding of utilities and other development standards to ensure that the beauty and charm of existing residential neighborhoods are maintained, that commercial and office projects are aesthetically pleasing and compatible with surrounding land uses. The proposed PC Text contains one classification of land use and provides the development standards for the entire subject property. The draft PC Text contains development regulations for the subject site which includes definitions and information concerning requirements for development site coverage, building height, setbacks, off-street parking, vehicular access, signing, lighting, storage, and screening and landscaping to ensure that the project would be compatible with the surrounding land uses consistent with the objectives of the Land Use Element.

**WHEREAS**, to be consistent with the Housing Programs 2.2.1 and 2.2.3 of the City's Housing Element, the project is required to provide a minimum of 20% of the total units (16 units) for affordable income households for a minimum of 30 years. The applicant is requesting that the affordable housing provision be off-site, at an approved location within the City, as affordable housing is not feasible at the subject site. According to the applicant, the project's Home Owner's Association fees are expected to be a minimum of $1,500 per month, which is a substantial multiple of the statutory mortgage payment limits for affordable housing when combined with acquisition costs and taxes. With this provision, the applicant will be required to enter into an agreement with the City to provide said units off-site within the City's limits. The agreement will be reviewed and approved by the City Attorney and will be executed prior to the recordation of tract map or the issuance of a building or grading permit for the proposed project.

**WHEREAS**, an approval of the project is implementing Housing Program 3.2.4 that allows the City to consider and approve rezoning of property from non-residential to residential uses when appropriate to extend housing opportunities to as many renter and owner occupied households as possible in response to the demand for housing in the City.

**WHEREAS**, Charter Section 423 requires all proposed General Plan Amendments to be reviewed to determine if the square footage, peak hour vehicle trip or dwelling units thresholds have been exceeded and a vote by the public is required. This project has been reviewed in accordance with Council Policy A-18 and a voter approval is not required as the project represents an increase of 39 – A.M. and 35 – P.M. peak hour trips for a new 79 dwelling unit development. These increases, when added with 80% of the increases attributable to two previously approved amendments, result in a total of 47 – A.M. peak hour trips and 43.8 – P.M. peak hour trips; 3,640 square feet of non-residential floor area and 79 dwelling units do not cumulatively exceed Charter Section 423 thresholds for a vote.

**WHEREAS**, the project is located within Newport Center where public services and infrastructure are available to serve the proposed development. Additionally, all applicable improvements required by Section 19.28 (Subdivision Improvements) of the Subdivision Code are to be satisfied by the applicant.

Ex. 1
3/7

**WHEREAS,** the parking requirement for a multiple-family residential zoned project is two spaces per unit, including one covered, plus 0.5 spaces for guest parking for developments of four or more units. A total of 158 spaces are required for the residences and a minimum of 40 spaces are required for guest parking. A total of 201 spaces are proposed to serve the project, and therefore, the project meets the parking requirements of the Municipal Code. In addition to the provision of adequate on-site parking, the project is conditioned that the parking designs meet all City requirements regarding parking stall width, depth, grade, and aisle-turning radii.

**WHEREAS,** pursuant to Section 19.12.070 of the City Subdivision Code, the following standard findings must be made to approve the Tentative Parcel Map and Tract Map.

1. The proposed Tentative Maps are consistent with the Newport Beach Subdivision Code (Title 19) and applicable requirements of the Subdivision Map Act. Conditions of approval have been included to ensure compliance with Title 19 and the Subdivision Map Act.

2. Lot 1 of the Parcel Map is being proposed for the residential development and is of sufficient size for the intensity of development and the site is physically suitable for the project. The project provides an adequate number of parking spaces as required by the Zoning Code. Access to the site can be provided through the proposed driveways along Santa Barbara Drive. Additionally, no earthquake faults were found on-site. There is no known incidence of landslide, lateral spreading, subsidence, liquefaction, or collapse on-site or near the site; however, existing soils will be required to be excavated and re-compacted to create stable soil conditions to support the proposed development. The implementation of mitigation measures identified in the draft Mitigated Negative Declaration would reduce any potential impacts. The site is, therefore, physically suitable for development.

3. Lot 2 of Parcel Map is proposed to retain a General Plan land use designation of Administrative, Professional & Financial Commercial. Lot 2 is not proposed for new development and this parcel will continue to be used as a hotel and it is of sufficient size to support its existing use.

4. Under the proposed Parcel Map, Lot 2 does not include any improvements and the development of Lot 1 as a residential use is not expected to cause serious public health problems given the use of typical construction materials and practices. No evidence is known to exist that would indicate that the proposed subdivisions will generate any serious public health problems. All mitigation measures will be implemented as outlined in the Mitigated Negative Declaration to ensure the protection of the public health.

5. No public easements for access through, or use of, the property have been retained for the use by the public at large. Public utility easements for utility connections that serve the project site are present and will be modified, if necessary, to serve the proposed project.

Ex. 1
4/7

6. Title 24 of the Uniform Building Code requires new construction to meet minimum heating and cooling efficiency standards depending on location and climate. The Newport Beach Building Department enforces Title 24 compliance through the plan check and field inspection processes.

7. The proposed subdivision facilitates the creation of 79 new residential units. The provision of 16 affordable units will assist the City in meeting its housing needs as identified in the Regional Housing Needs Assessment. Public services are available to serve the proposed development of the site and the Mitigated Negative Declaration prepared for the project indicates that the project's potential environmental impacts are expected to be less than significant.

8. Waste discharge into the existing sewer system will be consistent with residential use of the property which does not violate Regional Water Quality Control Board (RWQCB) requirements.

9. The proposed subdivision is entirely within the coastal zone and the site subject to the tentative maps is not presently developed with coastal-related uses, coastal-dependent uses or water-oriented recreational uses. The project is consistent with the City's 1990 Local Coastal Program Land Use Plan and the recently modified and approved LCPLUP that will replace the 1990 certified LUP. The subject site to be subdivided does not abut the ocean or bay, and does not provide public access to coastal resources; therefore, no impacts to coastal access are anticipated. Recreation policies of the Coastal Act require that site resources for water-oriented recreational activities that cannot be supplied inland must be protected. These policies prioritize water-oriented recreational activities over other land uses and encourage aquaculture and water-oriented recreational support facilities. The project site proposed to be subdivided is not suitable for water-oriented recreational activities due to its size and location, approximately 1.5 miles from the shoreline.

**WHEREAS**, the entire project is located within the Coastal Zone and requests the construction of 79 units. Pursuant to Chapter 20.86 of the Zoning Code, when a project proposes to create 10 or more units within the coastal zone, affordable housing must be included within the project unless it can be determined infeasible. The Housing Element of the General Plan determines the number and type of affordable housing that is required. In accordance with the Housing Element, 16 affordable housing units would be required to be provided.

**WHEREAS**, a Traffic Study has been prepared by Kunzman Associates under the supervision of the City Traffic Engineer pursuant to the TPO and its implementing guidelines (Appendix D of the Mitigated Negative Declaration), CEQA analysis for cumulative projects and intersection capacity utilization (ICU), and General Plan analysis. The project will result in a net increase of 330 new average daily trips, 42 vehicle trips during morning (AM) peak hour and 39 vehicle trips during the afternoon (PM) peak hour. The study concluded that the proposed project will not cause a significant impact at the study area intersections; therefore, no improvements are required at these intersections.

Ex. 1
5/7

**WHEREAS**, an Initial Study and Mitigated Negative Declaration (MND) have been prepared in compliance with the Environmental Quality Act (CEQA), the State CEQA Guidelines, and City Council Policy K-3. The Draft MND was circulated for public comment between July 15 and August 15, 2005. Comments were received from the California Coastal Commission, Airport Land Use Commission and Mr. Terek Saleh of Costa Mesa. The contents of the environmental document, including comments on the document, have been considered in the various decisions on this project. Since then, it was determined that the most appropriate zoning designation for the property would be PC (Planned Community). This new zoning designation does not affect the size, scope or design of the project that would potentially create additional physical environmental impacts. As result, it has been determined that the MND adequately describes the potential impacts of the project and does not require additional recirculation and review of the MND. An addendum has been prepared to address the change in the zoning designation and made it a part of the MND.

**WHEREAS**, on the basis of the entire environmental review record, the proposed project will have a less than significant impact upon the environment and there are no known substantial adverse affects on human beings that would be caused. Additionally, there are no long-term environmental goals that would be compromised by the project, nor cumulative impacts anticipated in connection with the project. The mitigation measures identified are feasible and reduce potential environmental impacts to a less than significant level. The mitigation measures are applied to the project and are incorporated as conditions of approval.

**WHEREAS**, General Plan Amendment No. 2004-005, Planned Community Development Plan No. 2005-003, Tentative Parcel Map No. 2005-014, Tentative Tract Map No. 2004-004 (16774), Traffic Study No. 2005-002 and Coastal Residential Development Permit No. 2005-004 shall only become effective upon the approval of LCP Land Use Plan Amendment No. 2005-001 by the California Coastal Commission.

**NOW, THEREFORE, BE IT RESOLVED**, that the City Council of the City of Newport Beach does hereby adopt Mitigated Negative Declaration (SCH No. 2005-071067); approve General Plan Amendment No. 2004-005 by amending the Land Use Element, Statistical Area L1, Block 900-Hotel Plaza and the Estimated Growth for Statistical Area L1 Table of the General Plan as depicted in Exhibit "A" and Land Use map in Exhibit "B", LCP Land Use Plan Amendment No. 2005-001 by revising Land Use map as depicted in Exhibit "C", Tentative Parcel Map No. 2005-014, Tentative Tract Map No. 2004-004 (16774), Traffic Study No. 2005-002 and Coastal Residential Development Permit No. 2005-004, subject to the conditions of approval listed in Exhibit "D"

Ex. 1
6/7

This resolution shall take effect immediately upon adoption. Passed and adopted by the City Council of Newport Beach at a regular meeting held on the 10th day of January 2006 by the following vote to wit:

AYES, COUNCIL MEMBERS Heffernan, Selich, Rosansky, Rideway, Daigle, Nichols, Mayor Webb

NOES, COUNCIL MEMBERS None

ABSENT, COUNCIL MEMBERS None

MAYOR

ATTEST:

CITY CLERK

Ex. 1
7/7

**RESOLUTION NO. 2006-26**

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF NEWPORT BEACH DECLARING THAT LOCAL COAST PROGRAM LAND USE PLAN AMENDMENT NOS. 2005-001 AND 2006-001 ARE INTENDED TO BE CARIED OUT IN FULL CONFORMANCE WITH THE CALIFORNIA COASTAL ACT**

**WHEREAS,** on January 10, 2006, the City Council approved Coastal Land Use Plan Amendment No. 2005-001 changing the coastal land use designation of a 4.25-acre site locates at 900 Newport Center Drive from CV-B (Visitor-Serving Commercial) to RM-C (Medium Density Residential) allowing the development of 79 residential condominiums.

**WHEREAS,** on February 14, 2006, the Council approved Coastal Land Use Amendment No. 2006-001 changing the coastal land use designation of a 14.25 acre site located at 4850 West Coast Highway from RM-B (Medium Density Residential) to OS (Open Space) to facilitate the development of a public park.

**WHEREAS,** the approval of these two amendments should have included a finding that the amendments are intended to be carried out in full conformance with the California Coastal Act and they should have specified when the amendments become effective.

**NOW, THEREFORE, BE IT RESOLVED**

Section 1. Coastal Land Use Plan Amendment Nos. 2005-001 and 2006-001 are intended to be carried out in full conformance with the California Coastal Act.

Section 2. Coastal Land Use Plan Amendment Nos. 2005-001 and 2006-001 shall take effect automatically upon Coastal Commission action unless the Coastal Commission proposes suggested modifications. In the event that the Coastal Commission proposes revisions, the LCP Land Use Plan Amendments shall not take effect until the City Council adopts the Commission suggested modifications.

Section 3. This resolution shall take effect immediately upon adoption.

Passed and adopted by the City Council of Newport Beach at a regular meeting held on the 28th day of March 2006 by the following vote to wit:

AYES, COUNCIL MEMBERS Curry, Selich, Rosansky, Ridgeway, Daigle, Nichols, Mayor Webb

NOES, COUNCIL MEMBERS ---

ABSENT, COUNCIL MEMBERS ---

MAYOR

ATTEST:

CITY CLERK

COASTAL COMMISSION
NPB 1-06 Part A
EXHIBIT # 2
PAGE 1 OF 2

STATE OF CALIFORNIA }
COUNTY OF ORANGE } ss.
CITY OF NEWPORT BEACH }

I, LaVonne M. Harkless, City Clerk of the City of Newport Beach, California, do hereby certify that the whole number of members of the City Council is seven; that the foregoing resolution, being Resolution No. 2006-26 was duly and regularly introduced before and adopted by the City Council of said City at a regular meeting of said Council, duly and regularly held on the 28th day of March 2006, and that the same was so passed and adopted by the following vote, to wit:

Ayes: Curry, Selich, Rosansky, Ridgeway, Daigle, Nichols, Mayor Webb

Noes: None

Absent: None

Abstain: None

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed the official seal of said City this 29th day of March 2006.

LaVonne M. Harkless
City Clerk
Newport Beach, California

(Seal)

EX. 2
2/2

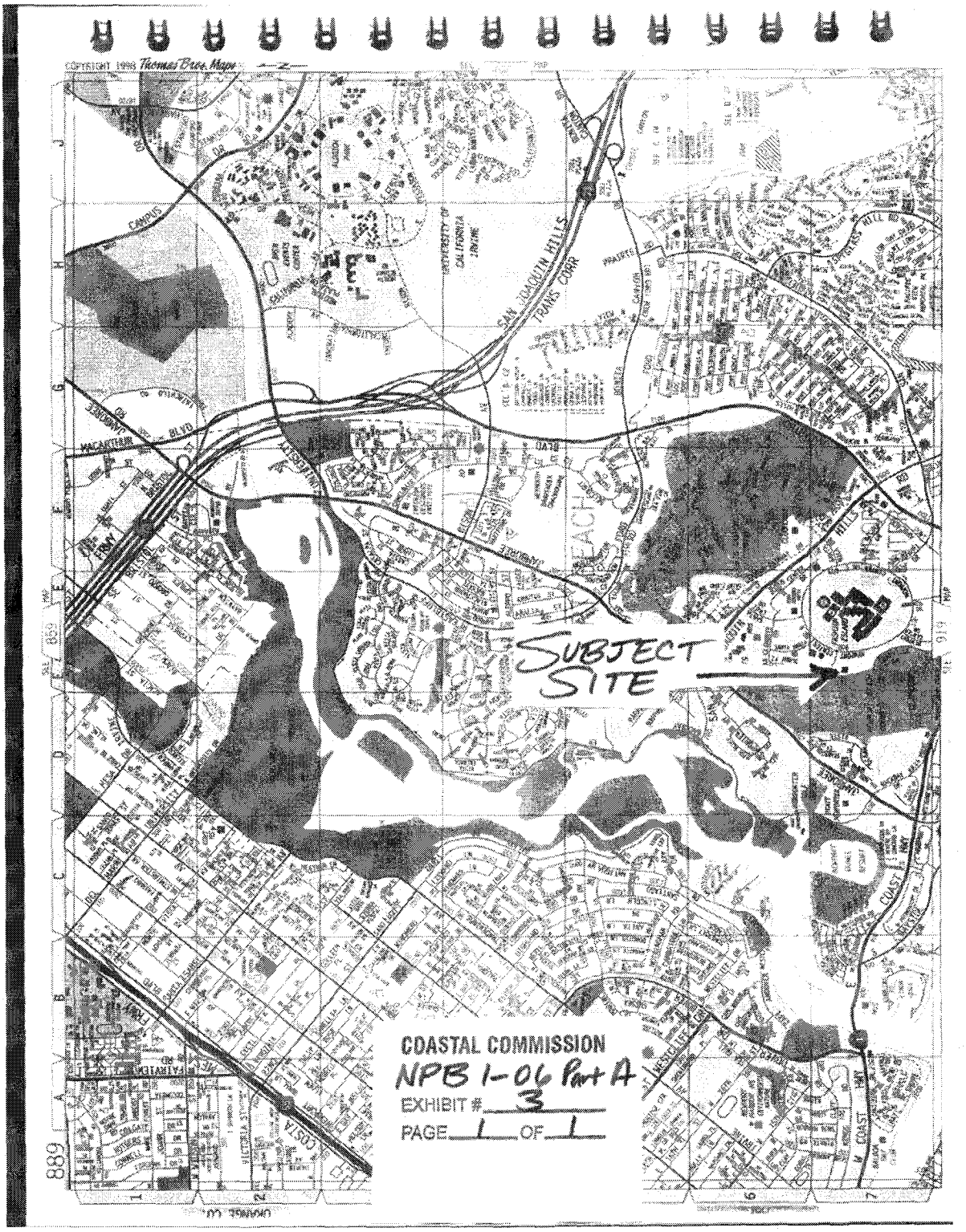
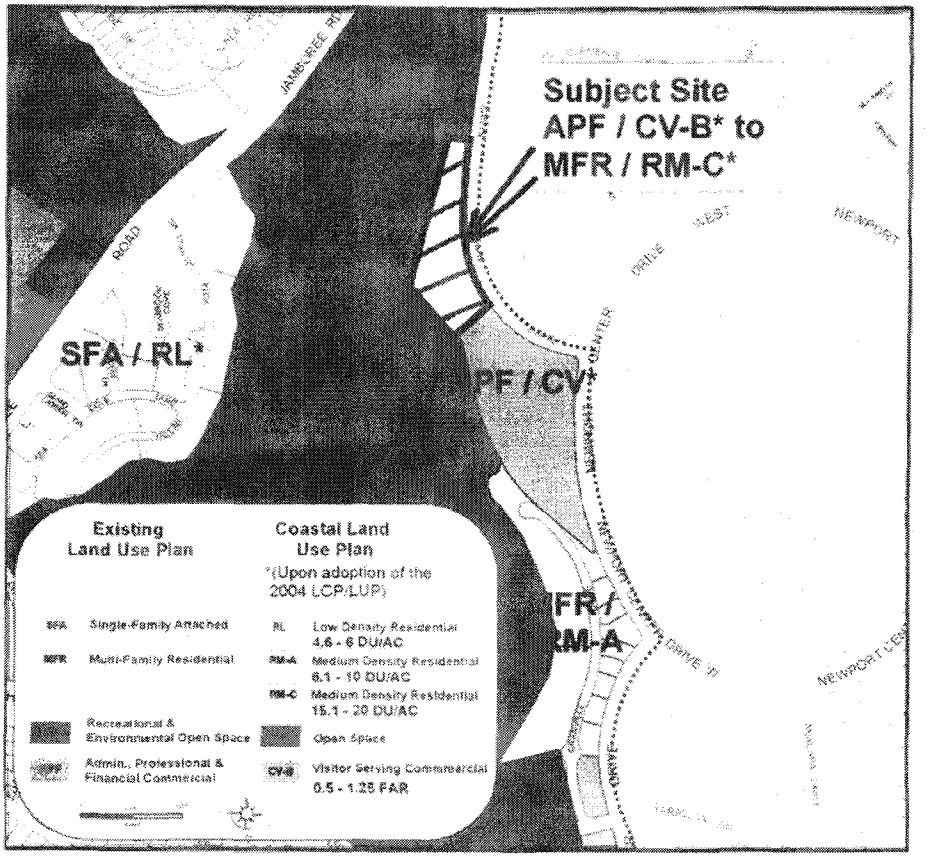

SUBJECT SITE
COASTAL COMMISSION
NPB 1-06 Part A
EXHIBIT # 3
PAGE 1 OF 1

Exhibit "C"

PROPOSED CHANGE TO THE 1990/2004 LOCAL COASTAL LAND USE MAP FROM APF/CV-B TO MFR/RM-C




COASTAL COMMISSION
NPB 1-06 Part A
EXHIBIT # 4
PAGE 1 OF 1

# CITY OF NEWPORT BEACH
## PLANNING DEPARTMENT

**FACSIMILE TRANSMITTAL SHEET**

| | |
|---|---|
| TO: Ann Blemker | FROM: Rosalinh Ung<br>Associate Planner |
| COMPANY: California Coastal Commission-South Coast Area Office | DATE: July 11, 2006 |
| FAX NUMBER: 562-590-5084 | TOTAL NO. OF PAGES INCLUDING COVER: 2 |
| PHONE NUMBER: | PHONE NUMBER 949-644-3208 |
| RE: Santa Barbara Condominium Project – NPB-MAJ-1-06(A) – Affidavit of Posting | FAX NUMBER: 949-644-3229 |

☐ URGENT ☑ FOR REVIEW ☐ PLEASE COMMENT ☐ PLEASE REPLY ☐ PLEASE RECYCLE

Note/Comment:

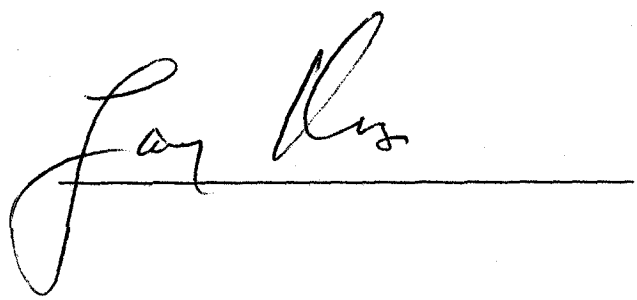
As requested. Notices were mailed at least 12 days in advance to meet the 10-day notice requirement. We used the same mailing list that was sent out for the Planning Commission meeting.

# AFFIDAVIT OF POSTING

On 11/14/05, 2005, I posted the Notice of Public Hearing regarding:

**Santa Barbara Condominiums (PA2004-169)**

Date of Hearing: November 22, 2005



# CITY OF NEWPORT BEACH

PLANNING DEPARTMENT

FACSIMILE TRANSMITTAL SHEET

| TO: | FROM: |
|---|---|
| Ann Blemker | Rosalinh Ung<br>Associate Planner |
| COMPANY: | DATE: |
| California Coastal Commission-<br>South Coast Area Office | July 11, 2006 |
| FAX NUMBER: | TOTAL NO. OF PAGES INCLUDING COVER: |
| 562-590-5084 | 2 |
| PHONE NUMBER: | PHONE NUMBER<br>949-644-3208 |
| RE: | FAX NUMBER: |
| Santa Barbara Condominium Project – NPB-MAJ-1-06(A) – Proof of Publication for City Council Approval | 949-644-3229 |

☐ URGENT ☑ FOR REVIEW ☐ PLEASE COMMENT ☐ PLEASE REPLY ☐ PLEASE RECYCLE

Note/Comment:

Ann,
The project was originally advertised for the November 22, 2005 meeting. Council continued the hearing to December 13, 2005 and finally approved on January 10, 2006. There was no re-advertisement because Council continued the item to specific dates. Please let me know if you need anything else. Thanks.

Rosalinh

Authorized to Publish Advertisements of all kinds including public notices by Decree of the Superior Court of Orange County, California. Number A-6214, September 29, 1961, and A-24831 June 11, 1963.

RECEIVED

'05 NOV 21 A9:30

OFFICE OF THE CITY CLERK
CITY OF NEWPORT BEACH

# PROOF OF PUBLICATION

STATE OF CALIFORNIA)
) ss.
COUNTY OF ORANGE )

I am a Citizen of the United States and a resident of the County aforesaid; I am over the age of eighteen years, and not a party to or interested in the below entitled matter. I am a principal clerk of the NEWPORT BEACH - COSTA MESA DAILY PILOT, a newspaper of general circulation, printed and published in the City of Costa Mesa, County of Orange, State of California, and that attached Notice is a true and complete copy as was printed and published on the following dates:

NOVEMBER 12,2005

I declare, under penalty of perjury, that the foregoing is true and correct.

Executed on NOVEMBER 12,2005
at Costa Mesa, California.

Rita Newell
Signature

**NOTICE OF PUBLIC HEARING**
**Santa Barbara Condominiums**
**(PA2004-169)**

NOTICE IS HEREBY GIVEN that the City Council of the City of Newport Beach will hold a public hearing on the application of Lennar Homes for General Plan Amendment No. 2004-005; Local Coastal Plan Land Use Plan Amendment No. 2005-003; Planned Community Development Plan No. 2005-003; Tentative Parcel Map No. 2005-014; Tentative Tract Map No. 2004-004 (16774); Traffic Study No. 2005-002, and Coastal Residential Development No. 2005-004 on property located at 900 Newport Center Drive. The property is located in the Administrative, Professional & Financial Commercial zone.

Lennar Homes proposes to construct 79 residential condominiums on a 4.25 acre site presently developed with tennis courts operated by the adjacent Newport Beach Marriott Hotel. The applicant proposes to construct three buildings that are approximately 65 feet in height. The requested applications would change the General Plan and Local Coastal Land Use Plan land use designations from commercial to Multiple Family Residential. The existing APF zoning is also proposed to be changed to PC (Planned Community) and a Planned Community Development Plan text that would establish use and development regulations is proposed. Implementation of the project also requires a Traffic Study pursuant to the Traffic Phasing Ordinance, Tentative Parcel and Tract Maps for subdivision purposes, and a Coastal Residential Development Permit regarding the provision of affordable housing in accordance with the Zoning Code and Housing Element of the General Plan.

**NOTICE IS HEREBY FURTHER GIVEN** that a Negative Declaration has been prepared by the City of Newport Beach in connection with the application noted above. The Negative Declaration states that, the subject development will not result in a significant effect on the environment. It is the present intention of the City to accept the Negative Declaration and supporting documents. This is not to be construed as either approval or denial by the City of the subject application. Copies of the Negative Declaration and supporting documents were available for public review and inspectio during a 30-day revie period from July 1 through August 15, 200 at the Planning Depart ment, City of Newpo Beach, 3300 Newpo Boulevard, Newpor Beach, California, 9265 8915, (949) 644-3225.

**NOTICE IS HEREB FURTHER GIVEN** tha said public hearing wi be held on **Novembe 22, 2005,** at the hou of **7:00** p.m. in th Council Chambers of th Newport Beach City Hall 3300 Newport Boule vard, Newport Beach California, at which tim and place any and al persons interested ma appear and be hear thereon. If you challeng this project in court, yo may be limited to raisin only those issues you o someone else raised a the public hearin described in this notic or in written corre spondence delivered t the City at, or prior to, the public hearing. Fo information call (949) 644-3200.

LaVonne M. Harkless,
City Clerk
City of Newport Beach
Published Newport Beach/Costa Mesa Daily Pilot November 12, 2005
Sa937

STATE OF CALIFORNIA - THE RESOURCES AGENCY Arnold Schwarzenegger, Governor

# CALIFORNIA COASTAL COMMISSION

South Coast Area Office
200 Oceangate, Suite 1000
Long Beach, CA 90802-4302
(562) 590-5071

562-590-5084

RECEIVED BY
PLANNING DEPARTMENT
CITY OF NEWPORT BEACH
JUL 10 2006
AM PM
7 8 9 10 11 12 1 2 3 4 5 6

Date July 6, 2006

Re: Application/Appeal No NPB-MAJ-1-06 (A)

## STATUS LETTER

The status of this matter is noted below.

✓ Your application was filed on 4/14/06. The public hearing is tentatively scheduled on Aug. 9-11, 2006 in San Pedro. This tentative scheduling information is being provided for your convenience and is subject to change. Written notification of final scheduling of the hearing, along with a copy of the staff report, will be mailed approximately 10 days prior to the hearing.
IMPORTANT: The enclosed Notice of Pending Permit must be posted on the site, in a conspicuous place, within 3 days of its receipt.

___ This application is incomplete and cannot be filed or processed until the items listed on the attached sheet have been completed and submitted to the District Office. If these items have not been received by the date indicated, the entire package will be returned to you.

Please be advised that the items needed to complete your application must be submitted to this office by _____.

___ This file is being returned as the application submitted is deemed incomplete. The required substantive documents are missing. Please see the attached sheet.

___ This appeal was received _____ and has been determined to be a valid appeal. You will be notified of the place and date of the public hearing.

___ This appeal was received _____ but has been determined invalid for the following reason:

_____

_____

If you have any questions, please contact this office at (562) 590-5071.

Staff Analyst [signature]

# CITY OF NEWPORT BEACH

**PLANNING DEPARTMENT**
Patricia L. Temple, Director

June 9, 2006

Ms. Anne Blemker
Coastal Program Analyst
South Coast Area Office
California Coastal Commission
2000 Oceangate, 10th Floor, #1000
Long Beach, CA 90802-4303

SUBJECT: REQUESTED EXTENSIONS
LOCAL COASTAL PROGRAM, LAND USE AMENDMENTS

Dear Ms. Blemker:

Thank you for informing the City of your request to the California Coastal Commission for a one-year extension to act on the City of Newport Beach Land Use Plan Amendment NP-MAJ-1-06. The City of Newport Beach understands Coastal staff's rationale for requesting the one-year extension and does not object to the request. However, the City would like to express the desire that these amendments be heard in a timely manner, preferably within the next 2 to 3 months. Thank you for your consideration.

Sincerely,

Patricia Temple

Patricia L. Temple
Planning Director

3300 Newport Boulevard · Post Office Box 1768 · Newport Beach, California 92658-8915
Telephone: (949) 644-3200 · Fax: (949) 644-3229 · www.city.newport-beach.ca.us

**CALIFORNIA COASTAL COMMISSION**
South Coast Area Office
200 Oceangate, Suite 1000
Long Beach, CA 90802-4302
(562) 590-5071

RECEIVED BY
PLANNING DEPARTMENT
CITY OF NEWPORT BEACH
MAY 30 2006
AM 7 8 9 10 11 12 1 2 3 4 5 6 PM

T13c

# MEMORANDUM

TO: Commissioners & Interested Persons

DATE: May 25, 2006

FROM: Deborah Lee, Senior Deputy Director, South Coast District
Teresa Henry, District Manager, South Coast District
Karl Schwing, Supervisor, Regulation & Planning, Orange County Area
Anne Blemker, Coastal Program Analyst

SUBJECT: **Request to extend the 90-day time limit for action City of Newport Beach Land Use Plan Amendment NPB-MAJ-1-06 (CalTrans West and Santa Barbara Condominiums),** for Commission Meeting of June 13-16, 2006

On April 14, 2006, Land Use Plan Amendment (LUPA) NPB-MAJ-1-06 was deemed to be complete and in proper order for filing pursuant to Section 30510(b) of the Coastal Act. The amendment was initially submitted by the City of Newport Beach on March 6, 2006. On March 15, 2006, Coastal Commission staff notified the City of Newport Beach that the submittal was incomplete and that additional information would be required to complete the submittal. The proposed amendment originally consisted of: A) change in land use designation at 900 Newport Center Drive from Visitor-Serving Commercial to Medium Density Residential (Santa Barbara Condominiums); B) change in land use designation of the CalTrans West property at 4850 West Coast Highway from Medium Density Residential to Open Space; and C) acceptance of 17 Offers to Dedicate ("OTDs") Easements for Coastal Access. The portion of the amendment pertaining to Part C has since been rescinded (this does not affect the status of the OTDs).

Pursuant to Sections 30512 and 30514 of the Coastal Act, an amendment to a certified land use plan, must be acted on by the Commission within 90 days after the submittal request has been deemed to be in proper order for filing. The 90th day for this LCP amendment is July 13, 2006. In order to be heard within this allotted time period, the amendment request would have to be scheduled for hearing by the second day of the July 12-14, 2006 Commission meeting in San Diego. Section 30517 of the Coastal Act allows the Commission to extend, for good cause, the 90-day time limit for up to one year. Commission staff is requesting this extension to allow additional time to evaluate the submittal and consult with the City of Newport Beach and outside parties that have expressed opposition to the proposed land use changes. The full one-year extension is requested because extensions are only considered once and it is prudent to allow for the maximum amount of time in case of unexpected delays. City staff has been notified of this time extension request and does not object to the request so long as the amendment is heard in a timely manner. Commission staff intends to agendize the item in July or August 2006.

Therefore:

Summary of Staff Recommendation. Staff recommends the Commission extend the 90-day time limit for a period of one year, i.e. to July 13, 2007.

MOTION:

*"I move that the Commission extend the 90-day time limit to act on the City of Newport Beach Land Use Plan Amendment NPB-MAJ-1-06 for a period of one year."*

STAFF RECOMMENDATION:

Staff recommends a YES vote. An affirmative vote of the majority of the Commissioners present is needed to pass the motion.

# CALIFORNIA COASTAL COMMISSION

South Coast Area Office
200 Oceangate, Suite 1000
Long Beach, CA 90802-4302
(562) 590-5071

March 15, 2006

Patricia L. Temple, Director
City of Newport Beach Planning Department
3300 Newport Boulevard
Newport Beach, CA 92658

MAR 17 2006

**RE: Newport Beach Local Coastal Program Amendment No. 1-06**

Dear Ms. Temple:

On March 6, 2006, this office received your submittal for an amendment to the City's certified Land Use Plan (LUP). The proposed LUP amendment consists of the following requests: A) change in land use designation at 900 Newport Center Drive from Visitor-Serving Commercial to Medium Density Residential; B) change in land use designation of the CalTrans West property at 4850 West Coast Highway from Medium Density Residential to Open Space; and C) acceptance of 17 Offers to Dedicate ("OTDs") Easements for Coastal Access. This amendment has been designated Newport Beach LCP Amendment No. 1-06 (referred to as NPB-MAJ-1-06 Parts A, B & C). This is a major amendment, as it does not qualify as a minor amendment pursuant to 13554 of the California Code of Regulations, which specifies that changes in the *"kind, location, intensity, or density of use"* are not considered minor.

Pursuant to Section 13553 of the California Code of Regulations, we have reviewed the transmittal and determined that it is incomplete. It cannot be deemed complete until the materials and information identified below are submitted to our office.

- **Submittal**

  Section 13551 of the California Code of Regulations requires that an LCP amendment be accepted for filing by the Commission only if it is submitted pursuant to a resolution adopted by the local government in accordance with Section 30510 (a) of the Coastal Act. The local government must specify in its resolution that the proposed amendment is intended to be carried out in a manner fully in conformity with the Coastal Act. The local government must also specify in its resolution whether the proposed changes are to take effect automatically upon Commission approval or whether the changes will require formal local adoption after Commission approval. None of the City's Resolutions specified when the proposed changes were to take effect or whether they were to be carried out in conformance with the Coastal Act. Consequently, the resolutions submitted cannot be accepted for filing. The City Council should adopt revised resolutions (or a combined resolution) that include all items listed in Section 13551 of the California Code of Regulations.

  In addition, the City's submittal did not include a discussion of the amendments' relationship to and effect on other sections of the LUP, as required by Section 13552 (c) of the Regulations. Please provide such a discussion for each part of the proposed amendment.

- **Loss of Visitor Serving Commercial Opportunities**

  The submittal fails to fully address the loss of visitor serving opportunities at the Newport Center site. Please describe how the proposed residential rezoning will affect the City's ability to provide visitor serving commercial uses within the Coastal Zone. The analysis should include a comparative evaluation of the proposed use with various types of visitor serving development that could be accommodated there. For example, approximately how many acres/square feet of visitor serving commercial property currently exist within the

Coastal Zone? How many acres/square feet of visitor serving commercial will be lost by the proposed LUP amendment? Please include an analysis of the adequacy of visitor serving commercial opportunities within the Coastal Zone. The analysis should address all types of visitor serving commercial opportunities, not just water-oriented facilities as discussed on page 5 of Resolution 2006-2.

- **Coastal Access Map**

  Suggested Modification 51 of the previous LUP amendment (NPB MAJ-1-04) required that a new symbol be added to the Coastal Access Map to reflect potential public access points. Part C of the current amendment request includes the acceptance of 17 OTDs. However, no change to the Coastal Access Map was referenced in Resolution 2005-63. It was our understanding that this amendment would involve the aforementioned mapping change. Please submit a revised Coastal Access Map to correspond to the newly accepted OTDs (along with updated resolution).

- **Graphics**

  Due to poor reproduction quality, the graphics in Attachment A (Newport Center Drive) are illegible. Please submit a clear copy of Exhibit C provided on page 10 of Resolution 2006-2 and any other graphics that would assist in our review of the proposed land use change.

  No maps or illustrative graphics (other than the Districting Map) were attached to Resolution 2006-11 to show the land use change proposed in Attachment B (CalTrans West). Please submit a clear graphic identifying the boundaries of the proposed land use change.

- **Mailing List**

  Though not required, to facilitate the mailing process we would appreciate that the mailing list be provided as a Microsoft Access 97 database so that the mailing list can be managed and printed on self adhesive labels (such as Avery 5162 labels). This would assist the ability of the Commission to properly inform known interested persons that the Commission will be conducting a public hearing on this LCP amendment.

Once these items are received in the Commission office, they will be reviewed for adequacy and a determination will be made as to whether the submittal is complete. As an amendment to the City's certified Land Use Plan, the time period for Commission action is ninety (90) days. However, if more time is needed for our staffs to work together, the Commission may extend the time period for up to one year.

Should you have any questions, please contact Anne Blemker at (562) 590-5071. We look forward to working together with you and your staff on this amendment.

Sincerely,

Teresa Henry
District Manager

*H:\Letters\NB LCP\NB Maj-1-06 incomplete letter.doc*

# CITY OF NEWPORT BEACH

**PLANNING DEPARTMENT**
Patricia L. Temple, Director

April 13, 2006

Ms. Ann Blemker
Coastal Program Analyst
South Coast Area Office
California Coastal Commission
2000 Oceangate, 10th Floor, #1000
Long Beach, CA 90802-4303

SUBJECT: LOCAL COASTAL PROGRAM, LAND USE AMENDMENT FOR SANTA BARBARA CONDOMINIUM PROJECT - 900 NEWPORT CENTER DRIVE, NEWPORT BEACH

Dear Ms. Blemker:

In response to your letter dated March 15, 2006, the City of Newport Beach hereby submits additional information for the Santa Barbara Condominium Project as requested by your office for the Coastal Commission review and approval. They are as follows:

- Submittal

Attached is a copy of the City Council Resolution that was considered and approved on March 28, 2006, declaring that Local Coastal Program Land Use Plan Amendment Nos. 2005-001 (Santa Barbara Condominium) and 2006-001 (CalTrans West) are intended to be carried out in full compliance with the California Coastal Act. Specifically, it contains a statement that the amendments shall take effect automatically upon Coastal Commission action unless the Coastal Commission proposes suggested modifications. And lastly, in the event that the Coastal Commission proposes revisions, the LCP Land Use Plan Amendments shall not take effect until the City Council adopts the Commission suggested modifications.

The amendment does include a discussion of its relationship to and effect on other sections of the LUP, as required by Section 13552(c) of the Regulations. The discussion could be found on Page 2 of the Council Resolution No. 2006-2 and on Page 9 and 10 of the attached Planning Commission Staff Report dated November 3, 2005 for the project.

3300 Newport Boulevard · Post Office Box 1768 · Newport Beach, California 92658-8915
Telephone: (949) 644-3200 · Fax: (949) 644-3229 · www.city.newport-beach.ca.us

Loss of Visitor Serving Commercial Opportunities
The subject property, located at 900 Newport Center Drive, seeks an amendment of the land use designation from Visitor-Serving Commercial to Medium Density Residential. The requested amendment would not impede either, the viability and growth of visitor serving uses in this immediate area, or the City's ability to accomplish the visitor serving objectives in the LCP.

It is important to note that the loss of visitor serving commercial as a result of the requested amendment would not significantly reduce the amount of visitor serving land in the city. The project, 4.25 acres, represents a reduction in visitor serving uses of two percent (2%). The table below shows the portion of land currently designated as visitor serving commercial and what will remain.

| **Visitor Serving Commercial Designation** | **Amount of Land** |
|---|---|
| CV-A (0.5 – 0.75) | 7.65 acres |
| CV-B (0.5 – 1.25) | 42.90 acres |
| Newport Coast Planned Community | 153.00 acres |
| CITYWIDE TOTAL: | 203.55 acres |
| Less project | -4.25 acres |
| **REMAINING CITY WIDE TOTAL:** | **199.30 acres (2% loss of CV-B)** |

The city's newly adopted Local Coastal Program Land Use Plan designates the site for Visitor-Serving Commercial (CV-B) uses. This designation was applied due to the use of the site for tennis courts that are part of the existing Marriott Hotel complex. Because the hotel has decided to discontinue its tennis facility and has determined that the project site is no longer necessary to support hotel uses, the city is proposing a Land Use Plan amendment to allow for the development of residential uses. The land use designation would be changed from CV-B to RM-C (Medium Density Residential C) for the proposed residential development.

The CV designation is intended to provide commercial land for accommodations, goods, and services intended primarily to serve the needs of visitors of Newport Beach. Because the site is not located in close proximity to coastal resources, coastal recreational use or the water, the proposed Land Use Plan amendment would not impact the adjacent visitor serving uses other than to eliminate the accessory tennis courts, which is not a coastal dependent recreational activity. As currently developed, the 4.25-acre project site represents a very minor portion of the city's coastal zone. Given the location of the site, Newport Center, and the fact that it is bound by commercial office space across the street, a private country club directly adjacent to the site and the Marriott Hotel, there is no public access to the coast or coastal uses that will be lost as a result of the project.

The tennis courts are NOT open to the public and are underutilized. Replacing the tennis courts does not remove a publicly accessible, widely-used facility from the coastal zone. The Marriott Hotel has determined that it is able to more than adequately continue to provide visitor serving uses on its property, and that the tennis courts are no longer necessary for the continued growth and viability of its visitor-serving operations. Given the site's location, shape and proximity to the existing Marriott Hotel, replacing the tennis courts with other types of visitor serving uses would be difficult. Currently the hotel offers ample public opportunities for dining, meetings, banquets, and spa services – all of which are accessible to the public and do not need the site for additional hotel rooms. It is for these reasons that it has been determined that the conversion of this property from visitor serving to residential would not impede either the viability and growth of visitor serving uses in this immediate area, or the City's ability to accomplish the visitor serving objectives in the LCP.

The Coastal Act provides for the protection of coastal resources by requiring that new development be located in close proximity to existing development with available public services to minimize the impacts associated with the extension of infrastructure and services. The project is located within Newport Center, which is a development area with all public services (utilities, roads, police, fire etc.) presently provided. The project is an infill redevelopment which will also help reduce vehicle trips within the coastal zone thereby improving coastal access by allowing residents to access commercial uses, such as banks and professional services; retail; and entertainment (theaters and restaurants) without the use of cars as all uses are within close walking distance of the proposed residences.

The Coastal Act also requires new development within the Coastal zone to provide adequate parking facilities or providing substitute means of serving the development with public transportation. The proposed development provides an adequate number of on-site parking spaces. The project also has been conditioned to have adequate dimensions, clearances, and access to insure proper use of their parking structures.

The parking requirement for multiple-family residential zoned project is two spaces per unit, including one covered, plus 0.5 spaces for guest parking for developments of four or more units. A total of 158 spaces are required for the residences and a minimum of 40 spaces are required for guest parking. A total of 201 spaces is proposed to serve the project, and therefore, the project meets the parking requirements of the City Municipal Code. The tennis courts provide NO public parking or public access. The project will provide both resident and guest parking.

In summary, it is not anticipated the requested change to the LCPLUP would create significant impacts to the implementation of the land use plan as

environmentally sensitive habitat areas, shore-line public access, water or marine resources, and coastal visitor-serving facilities would not be impacted given the nature and location of the site and design of the project. Considering the location of the project and the fact that as a private tennis facility, it provides no public access to the coast, parking or public recreation opportunities. The proposed residential development, therefore, would not be in conflict with the Coastal Act.

- Graphics

Attached is a clear copy of Exhibit C showing the site's location and boundaries of the Santa Barbara Condominiums project.

- Mailing List

The mailing list for this project is not available on the Microsoft Access 97 database.

As we spoke and agreed earlier, the requested information for the CalTrans West application will be sent to you separately. The Coastal Access Map change request has been addressed by our senior planner, Patrick Alford. The City of Newport Beach, on behalf of the applicant, appreciates your prompt review of this request. Should you have any questions, I could be contacted at 949-644-3208.

Sincerely,

Rosalinh M. Ung
Associate Planner

Attachments:

1. City Council Resolution No. 2006-26 for LCPA Nos. 2005-001 & 2006-001
2. Planning Commission Staff Report dated November 3, 2005 for LCPA No. 2005-001
2. Exhibit "C" for LCPA No. 2005-001

DAVID EVANS AND ASSOCIATES INC

# Initial Study and Mitigated Negative Declaration for the Santa Barbara Condominiums Project

*Prepared for:*

*City of Newport Beach*
Attn: Rosalinh Ung, Associate Planner
3300 Newport Boulevard
Newport Beach, CA 92658
Phone: (949) 644-3208

*Prepared by:*

*David Evans and Associates, Inc.*
23382 Mill Creek Drive, Suite 225
Laguna Hills, California 92653
Dustin Fuller, Project Manager
Phone: (949) 588-5050; Fax: (949) 588-5058
E-mail: djf@deainc.com

**October 1, 2004**

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**APPENDIX:** **Resumes of Key Staff**

# Introduction

*David Evans and Associates (DEA)* is pleased to offer this proposal to provide professional environmental services for the proposed *Santa Barbara Condominiums* project. *DEA* is particularly qualified to provide the necessary services for the preparation and processing of the Initial Study and Mitigated Negative Declaration for the proposed project. Since 1976, we have been fulfilling the need for high-quality environmental planning, engineering, landscape architecture, planning and surveying services that are timely, accurate, and cost-efficient. Founded upon these disciplines, *DEA* has grown from a site development firm to the multi-disciplinary firm it is today. *DEA* maintains strong relationships with our clients. We are organized around a system where one professional staff member is the central contact for each client. This system ensures that there is always at least one person responsible for maintaining the relationship and working with the client.

## *DEA*'s Environmental Services

Successfully balancing social, economic, and environmental interests in our world today is a challenge for people, companies, and agencies. *DEA* helps our clients meet these regulatory challenges by staying up-to-date on the latest scientific information and environmental regulations; maintaining a staff of trained, certified, and experienced environmental professionals; and considering the whole project when solving environmental issues.

*DEA* provides environmental planning services to both public agencies and private sector clients. We specialize in preparing environmental documents in compliance with the California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA). Specifically, *DEA* provides the following services:

- CEQA/NEPA documents (Notice of Exemption, Initial Studies (IS), Negative Declarations (ND), Mitigated Negative Declarations (MND), Environmental Assessments (EA), Finding of No Significant Impacts, Environmental Impact Reports (EIR), Environmental Impact Statements (EIS))
- Technical studies in support of environmental documents
- Mitigation monitoring and reporting plans (MMRP)
- Permit processing with local, state and federal agencies (Section 404 permits, Section 401 Certifications, 1601/1603 Streambed Alteration Agreements, and NPDES).

Our staff has prepared NDs, MNDs, Initial Studies, EIRs, EISs, EAs, and related environmental clearance documents for a range of public and private projects throughout California, including those for residential, commercial, industrial, and mixed-use developments; school, colleges and other institutional uses; public facilities; and redevelopment projects, general plans, annexations, and transportation plans. Our staff is also skilled in preparing Zoning Ordinances, Specific Plans, Design Guidelines and Development Standards, Local Coastal Program Amendments, Rezones, Community and General Plans and amendments, and permit applications.

By accurately establishing existing conditions, conducting detailed impact evaluation, developing implementable mitigation measures, and understanding the mechanisms available for applying effective mitigation monitoring and reporting programs, *DEA* adds efficiency to the environmental

review process and allows for modification and interaction as the review process evolves. In the long run, this can eliminate unnecessary delays as the process comes to a close.

Our approach to environmental analysis is structured not only to be comprehensive, but also to provide maximum flexibility and control. This approach ensures selection of the appropriate environmental document and that all needed analysis can be undertaken efficiently and expeditiously, without affecting the project schedule. Our staff has successfully completed the environmental review and permitting for a variety of public and institutional projects and is thoroughly familiar with the issues that can surround a project of public interest.

*DEA*'s expertise and proficiency in local, state and federal permitting requirements are qualities that *DEA* is proud to bring to the City of Newport Beach. Our knowledge of environmental regulations allows us to readily understand the overlap of requirements and scheduling of critical events in a manner which avoids duplication and unnecessary project delays. By knowing what is required for each project, we are able to visualize the end result and carefully strategize the steps necessary to get there. When an unexpected obstacle is confronted, we have the knowledge and tools to maneuver and quickly remedy the situation.

*DEA*'s environmental services are proven by our positive results. Environmental reports and documentation prepared by *DEA* meet or exceed the requirements of federal and state environmental laws and related regulations, and *DEA* has demonstrated success in working with regulatory and resource agencies. *DEA*'s environmental analysts are supported by professionals in a variety of other disciplines that include planning, Geographic Information Systems (GIS); civil, structural, environmental and transportation engineering; and landscape architecture.

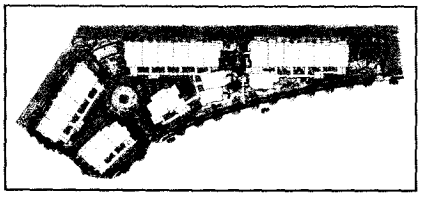
*DEA*'s graphics are prepared by professionals experienced in graphic arts, layout, computer design, and landscape architecture. Documents prepared by *DEA* are professionally produced using a variety of publishing techniques to ensure high quality products. These are easy to read and reproduce for public review and decision-maker consideration. Our report production expertise is supported by access to large data banks, which assist in our research. *DEA's* strengths include GIS applications and implementation, involving services such as user needs assessments, database design, data conversion, base and utility mapping, programming, equipment acquisition, training, and support. We use various computer programs including ARC/INFO, Auto CAD, Intergraph, WILDsoft, and Softdesk and Sun and Intergraph workstations. We have also customized these programs for use as tools in our engineering, land use planning, environmental, and transportation planning efforts.

*DEA* has experience in working directly with staff members of a variety of public jurisdictions and private clients to achieve successful processing of projects. Working directly with local community groups, other agencies and jurisdictions, and local interested citizens, we can understand and analyze the simplest to the most complex of issues. Our environmental documents have withstood this severe scrutiny and evaluation. Our experiences have gained us recognition for preparing high-quality, legally defensible environmental documents, which are well-received by reviewing bodies.

*DEA* is accustomed to working with applicants and clients with aggressive schedules. We are experienced in developing work programs which meet the project's scheduling challenges through efficient management techniques including, but not limited to, conducting tasks in a concurrent manner; close and regular coordination with the Project Team, agency staff and subconsultants;

beginning tasks as early as possible; and avoiding down-time by active participation in all aspects of the project's review and approval processes.

## Understanding the Project



The *Santa Barbara Condominiums* project proposes the development of 79 residential condominium units on a 4.25-acre site, located at 900 Newport Center Drive in the City of Newport Beach. Development is anticipated to include five residential structures, with a total livable floor area of approximately 205,000 square feet and approximately 100,000 square feet within subterranean parking garages. The structures would vary between three and four stories and be approximately fifty to sixty feet tall. In order to allow the proposed project, a General Plan Amendment, Zone Change, Tentative Parcel Map, and a Tentative Tract Map from the City of Newport Beach, and a Coastal Development Permit from the California Coastal Commission would be required.

The site is currently developed with eight tennis courts, a clubhouse, and associated parking for the Newport Beach Marriott Hotel. Uses surrounding the site include the Newport Beach Country Club Golf Course to the west, the Newport Beach Police Station, a fire station and the Newport Beach Chamber of Commerce to the north---, the Newport Beach Marriott Hotel to the south, and multi-family residential and commercial office spaces to the east.

In accordance with the California Environmental Quality Act (CEQA) and the CEQA Guidelines, the proposed development is considered a "project" and subject to environmental review. The City of Newport Beach is serving as the Lead Agency and is soliciting a proposal for environmental consultant services that would be needed for the project. Based on the City's preliminary analysis, it is anticipated that an Initial Study in support of of a Mitigated Negative Declaration (MND) would be needed for the project. A traffic study will be prepared by a separate consultant and provided to the environmental consultant for use in the Initial Study analysis.

The City would like to retain the services of an environmental consultant to prepare the requisite documentation and assist the City in the environmental clearance for the project. These services would include:

**Phase 1**

- Review of the Traffic Study; and
- Preparation of the Initial Study.

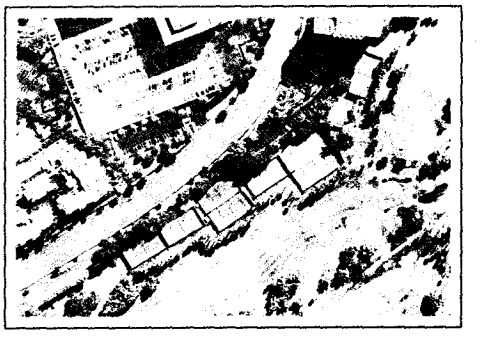
**Phase 2**

- Preparation of the Mitigated Negative Declaration;
- Circulation of the draft documents for public review;
- Response to comments on the Mitigated Negative Declaration;
- Preparation of notices and other necessary related documents; and
- Attendance at meetings and hearings on the environmental review process.

It is anticipated that an Air Quality Study and a Noise Study would be needed to support the analysis in the Initial Study. The Request for Proposals does not specify the need for these studies, as such, *DEA* will provide these studies as optional tasks.

Based on our understanding of the project and a site survey, issues that are expected to be of concern for the project include:

- Increases in traffic volumes on Santa Barbara Drive;
- Increases in air emissions of criteria pollutants from increased traffic;
- Noise impacts from project-related traffic on existing and proposed sensitive receptors;
- The consistency of the amendments to the General Plan and Zoning Ordinance with the City's goals and policies; and
- Changes in views of the site from adjacent parcels.



*DEA* is offering our environmental consultant services to the City of Newport Beach to prepare the appropriate environmental documentation for the proposed *Santa Barbara Condominiums* project. Under the direction of the City's assigned Project Manager, *DEA* will be responsible for preparing and processing the Initial Study and Mitigated Negative Declaration. *DEA* will incorporate the findings of the technical studies prepared for the project into the Initial Study. *DEA* will then be responsible for the processing these environmental documents, including preparation and filing of the necessary notices, public distribution of the documents during the review period, preparation of response to letters of comments, final documents, and attendance at public hearings for the project. Although not requested by the Request for Proposal, a Coastal Development Permit would be required by the project. *DEA* has extensive experience processing a wide variety of permits through various public agencies, including the California Coastal Commission. If requested, *DEA* can provide an additional scope and cost to process a coastal development permit.

## Proposed Work Program

Presented below is *DEA's* anticipated work program for completing and processing the Initial Study/MND for the proposed *Santa Barbara Condominiums* project. Additional issues or refinements to the scope of work may be warranted as a result of additional review by the City. Minor project changes can be easily incorporated into the environmental document without significantly affecting the overall project scope, schedule, and costs. In some cases, however, major changes occur to a project, requiring wholesale modifications to the project description, which must be reflected throughout the document text and graphics. Should this occur as part of the proposed *Santa Barbara Condominiums* project, we will discuss the project changes with the City and determine if an amendment to our Scope of Work and Budget is warranted. *DEA* will make every effort to work within our proposed Scope of Work and Budget, and will make a commitment to stay on-schedule, depending on the extent of modifications, which may arise during our preparation, and processing of the Initial Study and MND.

All environmental documents prepared by *DEA* as presented in this proposal shall be prepared in accordance with the City of Newport Beach's environmental review procedures; with the criteria, standards and procedures of the California Environmental Quality Act (CEQA) of 1970, as amended, (Public Resources Code Sections 21000 *et seq.*) and the CEQA Guidelines (Public Resources Code Section 15000 *et seq.*); and with other applicable regulations, requirements and procedures of any other responsible public agency or any agency with jurisdiction by law.

Our scope of work includes the completion of the Initial Study during Phase 1 and the completion of the Mitigated Negative Declaration and the environmental review process under Phase 2.

### PHASE 1 – INITIAL STUDY PREPARATION

***1.1 Organizational Project Team Meeting***

At project initiation, *DEA* will meet the City's Project Manager to identify project goals and objectives; to obtain project plans, studies and related information; and to establish and confirm the project schedule and deliverables. This will be beneficial in avoiding duplicated efforts and setting up a process directed at project efficiency and timeliness.

***1.2 Site Analysis/Data Collection***

*DEA* will conduct a physical site analysis based on the information provided by the City, other technical experts associated with the project and other data we have gathered for the project. This task will also include a review of the conceptual Site Plan, the City's General Plan, Zoning Ordinance and other relevant ordinances, and any studies completed for the site and the project. The review of the available documents will focus on developing a clear and concise project description of the proposed *Santa Barbara Condominiums* project, for use in the Initial Study.

***1.3 Technical Studies***

*DEA*'s scope of work includes the optional tasks of the preparation of an Air Quality Study and a Noise Study. We have provided scopes below for these optional tasks under this work program.

***Review of Traffic Study*** - *DEA* traffic engineers will provide an independent review of the Traffic Impact Analysis (TIA) to be prepared by others, for accuracy and completeness.

*DEA* will then provide the City with comments or suggested revisions, if any. We assume that the applicant's consultant will then be responsible for any revisions. *DEA* will summarize the findings of the traffic study for use in the analysis of traffic impacts.

***Optional Air Quality Study*** - An optional air quality study will be prepared by Giroux and Associates. Work scope items to implement this analysis include:

- Characterize the existing air environment, highlighting any development opportunities presented or constraints imposed by existing (and projected future) air quality.
- Evaluate air quality implications of proposed project using the URBEMIS2002 model.
- Prepare air pollution burden calculations resulting from project-related traffic, and energy use.
- Analyze development plan consistency with SCAQMD regional air quality strategy and State Implementation Plan (SIP).
- Identify relevant mitigation measures for general development, particularly the jobs/housing balance goals and appropriate transportation control measures of the last adopted (1994) SIP.

***Optional Noise Study*** – An optional Noise Study can be prepared by Giroux and Associates. The tasks for completing this study are outlined below:

- Perform limited on-site ambient noise monitoring to develop a baseline noise characterization.
- Develop a baseline noise exposure profile (CNEL or Leq as appropriate).
- Analysis of demolition and construction activity impacts on nearby sensitive land uses
- Analysis of site related noise constraints from ambient and future traffic volumes, as well as current loading dock operations at the Marriott Hotel.
- Relate project noise impacts to the noise/land use compatibility guidelines in the City of Newport Beach's Noise Element and Noise Ordinance.
- Develop a noise mitigation plan for any predicted noise impacts that represent a constraint to the project area development opportunities.

### *1.4 Initial Study*

The Environmental Analysis discussion in the Initial Study will form the basis for the Mitigated Negative Declaration and will provide the necessary background for determining the potential for significant environmental effects associated with project implementation. *DEA* will need to complete an Initial Study in accordance with CEQA Guidelines Section 15063 and Initial Study Checklist (Appendix G) in the CEQA Guidelines.

In order to achieve the objective of a Negative Declaration determination, the Initial Study (IS) must be thorough. Each of the topics identified on the environmental assessment form contained in the State CEQA Guidelines will be analyzed to document the nature and extent of any potential environmental consequences and the need for mitigation. Many of the issue areas addressed in the Initial Study will not have the potential for significant effects (i.e., "No Impact") due to the location and nature of the proposed project. The specific purpose of the analysis in the Initial Study will be to identify all potential significant adverse environmental impacts and incorporate mitigation measures to reduce or eliminate the adverse consequences.

*DEA* will prepare a draft Initial Study document, in accordance with CEQA and the CEQA Guidelines, and will include the following sections:

- ***Introduction.*** This section will introduce the Initial Study, describe the purpose of the Initial Study and determination for the preparation of the Mitigated Negative Declaration and will provide a brief summary of the findings of the Initial Study.

- ***Environmental Setting.*** The Environmental Setting will describe existing physical setting and characteristics of the project site, as well as the setting and character of the surrounding area. Additionally, this section will summarize the various land use policies in the City and present their relevancy to the proposed project.

- ***Project Description.*** The Project Description will provide a detailed, yet concise, description of the proposed *Santa Barbara Condominiums* project. The purpose and need of the project will be clearly stated, along with the benefits of the proposed project. Discretionary actions (GPA, ZC, TTM and CDP) needed to implement the project would also be identified.

- ***Environmental Analysis.*** This section will provide an expanded discussion of the environmental issues as presented in the Environmental Initial Study checklist. Each checklist question will be presented along with a response. A statement will be provided to clearly support the checklist response to each question. References used as the basis for the analysis would also be listed after each response.

Based on our understanding of the project and the proposed site for the *Santa Barbara Condominiums* project, we expect that more detailed discussion of the following issues will be needed in the Initial Study.

- **Land Use and Community Character** – The consistency of the *Santa Barbara Condominiums* project with the City's General Plan and Zoning Ordinance and conformity of the project with other land use plans and policies for the site and the surrounding area will be analyzed. The analysis will also focus on land use compatibility with adjacent commercial land uses and residential development.

- **Traffic** – Impacts associated with the increase in vehicle traffic volumes on Santa Barbara Drive and the surrounding roadways would be identified, along with the needed roadway improvements to maintain acceptable operating levels of service. The analysis will be based on the traffic study to be prepared by others.

- **Short-term Noise and Air Quality Impacts** – Construction of the *Santa Barbara Condominiums* project will result in short-term noise and air quality impacts. Scheduling construction/demolition activities and adherence to local regulations regarding hours for construction would avoid significant impacts associated with construction noise. Relative to air quality impacts, dust is normally the primary concern during the construction of new buildings and infrastructure. The air quality impacts of the proposed project would be analyzed in accordance with the requirements of the SCAQMD, as provided in the District's CEQA Air Quality Handbook. Air quality and noise impacts

associated with increases in vehicle traffic on area roadways would also be analyzed.

- **Aesthetics** – The site and the surrounding area have views of the adjacent golf course. Construction of the condominiums on the site would change views of the site and through the site. This would be analyzed in the Initial Study.

Since the project site is developed with the existing tennis courts, clubhouse and associated surface parking lot, no biological resources or cultural resources are expected to be present on the site. Also, since the site is in use, it is anticipated that public services and utility and infrastructure systems are present to serve the site and the proposed project. While significant adverse impacts are not expected on these environmental issues, as well as on population and housing, mineral resources, and recreation, a detailed analysis of the impacts and the findings will be provided in the Initial Study. This will provide the needed supporting documentation for the Mitigated Negative Declaration.

- ***Mandatory Findings of Significance.*** This section of the document will provide a discussion of the project's impacts, as they relate to the mandatory findings of significance under CEQA. . Similar to the discussion in the Environmental Analysis section, a response will be presented for each of the Mandatory Findings of Significance questions, as found in the Initial Study Checklist. Any mitigation measures developed to reduce adverse impacts will also be identified, to support the determination of a Mitigated Negative Declaration.

- ***Appendix.*** The Environmental Initial Study checklist will be included as an appendix to the document, along with the technical studies prepared for the project.

### *1.5 City Review*

Once the draft Initial Study is completed, they will be presented to the City of Newport Beach's Project Manager for review and comment. This task will ensure that the information provided in the Initial Study relative to the project actions and description is accurate and that the Initial Study reflects any modifications to the project which may have occurred during the time the Initial Study was being prepared.

### *1.6 Mitigation Monitoring and Reporting Program*

In compliance with AB 3180 (PRC 21081.6), which requires the monitoring of mitigation measures and reporting their implementation to ensure compliance as part of specific project approvals, *DEA* will prepare the Mitigation Monitoring and Reporting Program for the project. Monitoring would be linked to specific stages of project development, such as building permit, and/or certificate of occupancy, to ensure that all mitigation measures are implemented.

## PHASE 2 – MND AND ENVIRONMENTAL REVIEW

### *2.1 Mitigated Negative Declaration (MND)*

Based on the findings in the Initial Study,DEA will prepare the MND, which will include a brief summary of the project and the environmental analysis, identify the needed mitigation measures; and provide the City's findings for adoption of the MND.

### *2.2 Public Distribution*

Following review of the Initial Study and MND by the City of Newport Beach, *DEA* will make the necessary revisions to the draft Initial Study and MND and prepare the documents for public review. We assume one revision of the preliminary document, prior to the document being circulated for public review. *DEA* will also prepare the Notice of Availability/Notice of Intent. *DEA* will distribute the Notice and draft Initial Study and MND to City staff, responsible agencies and other interested parties to initiate the public review period, but we assume that the City will be responsible for providing the mailing list and posting and/or noticing in the local newspaper.

### *2.3 Response to Letters of Comment*

Upon completion of the 30-day public review period, *DEA* will prepare written responses to all letters of comment received. All comments received in response to the Initial Study and Mitigated Negative Declaration will be discussed with the City of Newport Beach's Project Manager, and an approach to the responses will be agreed upon prior to preparation of the responses. Draft responses to comments will be submitted to the City for review. Once finalized, *DEA* will provide copies of the responses to agencies and parties that provided written comments on the Initial Study and MND. *DEA* will then revise the Initial Study and Mitigated Negative Declaration in accordance with staff's directions, will prepare the final documents. The Final Initial Study and MND will include necessary agreed upon revisions requested by staff or as a result of the Public Review process, Letters of Comment and Responses, and the Mitigation Monitoring and Reporting Program.

### *2.4 Meetings and Public Hearings*

During preparation of the environmental document, *DEA* may be requested to attend project team meetings where environmental issues are the focus. Additionally, *DEA* may be requested to attend meetings with the City where impact assessments and/or mitigation strategies are discussed.

Our proposal assumes that *DEA* will attend one (1) organizational Project Team meeting, three (3) meetings with City staff, and two (2) public hearings. Additional meetings will be performed on a time and materials basis, as requested by the City. Teleconference calls to discuss the project status, various project features or issues and other matters related to the project would be part of project coordination and would not be counted as meetings.

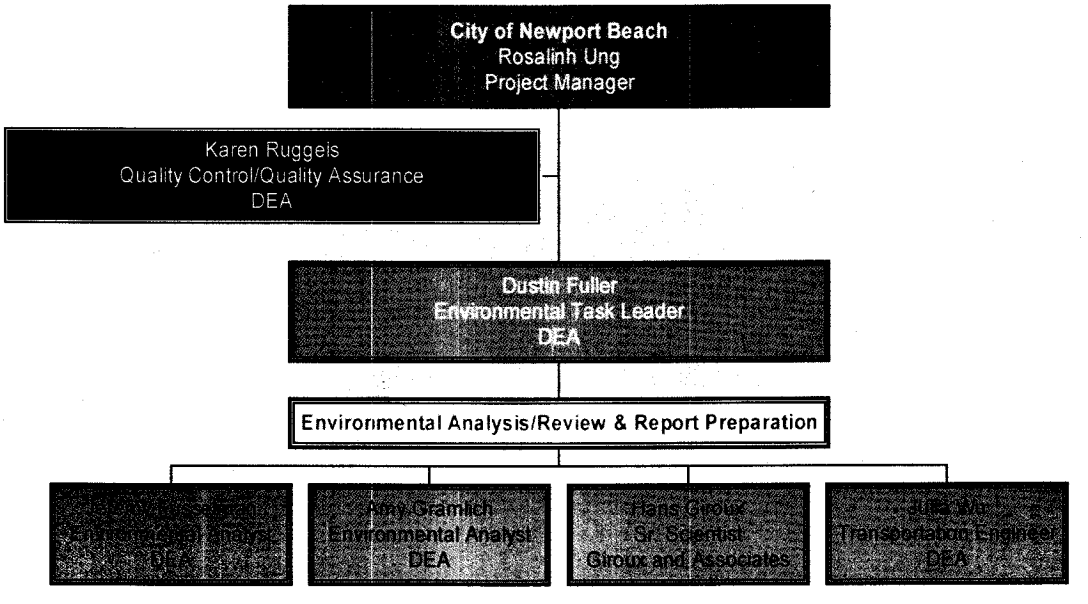
*DEA* will also prepare and file the Notice of Determination for the project, after the City's adoption of the Mitigated Negative Declaration. In addition, we will prepare the Certificate of Fee Exemption/De Minimis Impact Finding, in accordance with Section 711.2 of the Fish and Game Code. After obtaining signatures on these documents by the City, *DEA* will file the Notice and Certificate with the County Clerk.

## DEA Team

The successful preparation of an environmental document and implementation of an effective mitigation program is due in large part to the quality of the project team, whose expertise is essential in providing technical analyses and supporting documentation in an efficient manner. Similar to every project, each project team is unique. With the size of our firm and the diverse expertise of each individual at *DEA*, we have the ability to choose a proven project manager with the necessary expertise to suit the needs of the project. Similarly, we can designate an experienced team to provide the various technical elements that are required for the project.

*DEA* has organized an experienced group of individuals for the preparation of the Initial Study/MND for the proposed *Santa Barbara Condominiums* project that will provide the City of Newport Beach with a responsive, technically competent, and efficient team. *DEA* is proud to present a strong team with the knowledge, experience, and enthusiasm to achieve the City's goals.

To serve the City of Newport Beach, we have selected ***Karen Ruggels*** to serve as the ***Principal-in-Charge*** and ***Quality Control/Quality Assurance Manager***. Ms. Ruggels is a senior member of the *DEA* staff, with 25 years of experience on environmental projects for California. ***Dustin Fuller*** will directly support Ms. Ruggels and will be the ***Environmental Task Leader*** for the project. *DEA*'s qualified staff of environmental planners and technical experts will support Ms. Ruggels and Mr. Fuller to ensure accurate analysis of environmental issues and efficient use of staffing and resources for the project. Organization of our project team is illustrated below. A brief introduction to *DEA*'s primary project team members follows our organizational chart. Complete resumes are provided in the Appendix.



### ◆ Karen Ruggels – *Principal-in-Charge*

Ms. Ruggels brings to your project nearly 25 years of environmental experience in both the private and public sectors. Her expertise includes implementing environmental review under CEQA and NEPA, as well project management, resource agency coordination, site and policy planning and public presentations. She has managed a wide variety of projects ranging from large-scale land development to public facilities and is skilled in working directly with public interest groups to discern and evaluate potential public concerns.

Particularly relevant to the work effort necessary for the *Santa Barbara Condominiums* project is Ms. Ruggels' ability to work side-by-side with public agency staff. Ms. Ruggels has been working directly with City and County staff members in a variety of jurisdictions throughout her professional planning experience. She has developed an outstanding relationship based on her professionalism, responsiveness, conscientiousness and honesty. Additionally, Ms. Ruggels regularly works with staff of other jurisdictions, U.S. Army Corps of Engineers (ACOE), U.S. Fish and Wildlife Service (USFWS), California Department of Fish and Game (CDFG), California Coastal Commission and Caltrans. Ms. Ruggels is able to coordinate the interrelationship of a variety of public agencies with local approvals. Added to Ms. Ruggels' wealth of experience is her ability to work directly with public interest groups to discern and evaluate potential public concern relative to a particular project. For the *Santa Barbara Condominiums*, Ms. Ruggels will serve as our team's QA/QC officer.

### ◆ Dustin Fuller – *Environmental Task Leader*

Mr. Fuller is a project manager with *DEA* and has over eight years of experience in the environmental planning field. His experience includes preparation of CEQA and NEPA documents for general plans, redevelopment projects, and mixed-use projects for a variety of commercial and residential uses. Mr. Fuller has wide-ranging experience in the preparation of Environmental Impact Reports (EIRs), Negative Declarations, Environmental Impact Statements (EISs), and Air Quality and Noise Quality Technical Reports. Additionally, Mr. Fuller has training and knowledge with a wide variety of land use and planning issues such as: zoning, general plans, variances, setbacks, housing, historical buildings, community planning, transportation, and growth inducement. Of particular relevance is Mr. Fuller's project experience including a General Plan Amendment and rezone for the Espanada Specific Plan in Chula Vista; preparation of environmental documents in support of, and acquisition of Coastal Development Permits from the California Coastal Commission and City of Del Mar for the North County Transit District. Lastly, Mr. Fuller brings the ability to work well in project teams to prepare documents that are thorough and legally defensible.

For the *Santa Barbara Condominiums* project, Mr. Fuller will be the Environmental Task Leader and will be responsible for coordinating with the City and the efforts of our staff, in preparing the Initial Study/MND and associated documentation, and ensuring that all deliverables are prepared on-schedule.

### ◆ Jeremy Fusselman – *Environmental Analyst*

Mr. Fusselman is an environmental planner and analyst with *DEA*. His experience in environmental planning includes research and writing EIRs, and other environmental resource studies for the private sector. Additionally, Mr. Fusselman is knowledgeable with preparing and processing project applications. He is familiar with Geographic Information Systems (GIS), water resources/toxicology, natural resource management, and urban planning. Mr. Fusselman is also

efficient in data collection, research and analysis. A few projects that he has provided environmental research and report preparation for include the Annexation 156/Pre-zoning/Foothill Boulevard Street Improvement Project IS/MND in Fontana, Espanada Specific Plan EIR, and the Costco National City EIR. He will assist in the preparation of the environmental documents for the *Santa Barbara Condominiums.*

### ◆ Amy Gramlich – Planning Analyst

Ms. Gramlich is an environmental planner and analyst with *DEA*. Her experience in environmental planning includes assisting in the research and preparation of Initial Studies and Mitigated Negative Declarations (IS/MNDs), and EIRs. Ms. Gramlich is familiar with issues pertaining to natural resource management/conservation and city planning issues. She has provided environmental research and report preparation for the Francis Parker Upper and Middle School IS/MND, Empire North Fontana Project EIR, Esplanade Specific Plan IS/MND, Espanada Specific Plan EIR, and the San Jose Community Day School IS/MND. She will assist in the Initial Study research and analysis for this project.

### ◆ Julia Wu – Transportation Engineer

Ms. Wu is a transportation engineer with professional experience in transportation/ traffic operation analysis, traffic impact study, mitigation design, and preliminary engineering for Major Investment Study. She also has professional PS&E experience in traffic signals, signing, striping, detour/traffic control, highway and street improvement design. Ms. Wu will provide independent review of the traffic study prior to our use in the IS.

### *Giroux & Associates*

*Giroux & Associates*, under the direction of Hans Giroux, has been providing air quality and noise consulting services for wastewater projects for over twenty years. Mr. Giroux has extensive experience in the Inland Empire and southern California region. He has written community noise ordinances and General Plan Noise Elements. Hans' noise expertise is in the conduct of impact assessments for roadway sources, construction equipment and gravel plants, industrial equipment, gas recovery plants, recreational activities and oil refineries. He also has extensive experience in monitoring ambient noise levels and the calibration of highway traffic noise using the FHWA-RD-77-108 model. In addition, he has prepared noise mitigation studies, including barrier design, location, equipment noise control and residential retrofits.

Mr. Giroux's air quality experience includes air quality impact assessments for transportation systems; industrial emission sources; commercial, residential, institutional and recreational uses. He has also developed numerical airflow analyses and conducted numerous meteorological and air quality data acquisition programs. He has a strong emphasis in arid environment, geothermal development, odors and nuisance, and regional pollution impacts in Southern California. The optional air quality and noise studies will be provided by Giroux and Associates, if the City decides on these studies.

## Project Schedule

*DEA* has been commended many times for meeting and beating project schedules set by our clients. We realize the importance that has been placed upon our firm to provide a quality product in a timely manner. *"On time"* and *"On budget"* are some of the terms frequently used by clients, but very few consultants are able to live up to these standards. *DEA* has an excellent reputation for meeting both of these criteria. When *DEA* takes on a project, we are committed to seeing that project through to a positive completion. The best indicator of our ability is in our repeat business with various clients and agencies. We understand the need for accelerated schedules and have a great deal of confidence in our ability to meet project schedules.

The demonstrated proficiency with which *DEA* manages concurrent complex, multi-disciplinary task projects is a major factor in the demonstrated success of our firm and the exceptional quality of our documents. We have consistently maintained excellent performance while managing several simultaneous assignments of diverse scopes. Specific aspects of *DEA*'s internal operation, which allow an efficient management of personnel assigned to the project, will prove valuable to the completion of work assignments in a timely manner. Specifically, the following personnel resources management plan will be applied to the project:

- Consistent with *DEA* policy, we have assigned a Project Manager with specific relevant experienced to see the project through to completion;
- The Project Manager will maintain a 3-month staff workload of all environmental projects within *DEA,* updated weekly to ensure that staff is available to complete tasks and meet project milestones and target dates.
- At project initiation, a project work plan will be defined, detailing scope, schedule, budget, and assignments.
- Total Quality Management requirements will be identified at project on-set to match the specific project discipline.
- A project kick-off meeting will be conducted involving all key project personnel.
- A project team roster will be prepared and kept updated, including project-specific e-mail distribution lists to rapidly exchange information.
- Internal to *DEA* is our centralized accounting system, which will track labor weekly and bill monthly.

*DEA* will work closely with the City staff to ensure the completion of work products within established schedules. To assist *DEA*'s project managers in meeting tight schedules, *DEA* utilizes computer software, such as Microsoft Project and Primavera, to create a critical path schedule and to identify start and end times for each task, slack times for non-critical tasks, and dependencies between tasks. Once adopted, the schedule is reviewed on a weekly or bi-weekly basis to ensure that tasks are progressing as planned. When deviations to the schedule result from factors beyond our control, the schedule is updated to reflect current estimates for completion dates and staffing requirements. If a scheduling conflict is identified during the team's weekly meeting, the project manager is responsible for resolving the conflict.

Provided below is a preliminary Project Timeline for *DEA*'s work efforts that has been developed for the project and will be refined as part of the initial phase of our work efforts. The schedule defines milestones and assigns tasks based on the required scope for the project. The schedule

reflects the required CEQA review for the Initial Study and MND (30 days). Once a start date has been developed, *DEA* will meet with the City to refine the project schedule, as necessary. A detailed schedule will then be submitted to the City.

*DEA* will monitor and adjust the schedule regularly as the project progresses. This management procedure will alert *DEA* and City staff to any delays, rescheduling needs, or assignment of additional staff. As shown, *DEA* will be able to provide the City with the draft Initial Study ten weeks after the Notice to Proceed and the time we receive the plans and studies for the project. It is also anticipated that the environmental review process would be completed within approximately 20 weeks.

**Santa Barbara Condominiums**
**Project Schedule**

| Task & Description | Weeks | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| **Phase 1 - Initial Study Preparation** | | | | | | | | | | | | | | | | | | | | |
| 1.1 Organizational Project Team Meeting | ■ | | | | | | | | | | | | | | | | | | | |
| 1.2 Site Analysis/Data Collection | ■ | ■ | ■ | | | | | | | | | | | | | | | | | |
| 1.3 Technical Studies | | | | | | | | | | | | | | | | | | | | |
| Review of Traffic Study | ■ | ■ | | | | | | | | | | | | | | | | | | |
| Optional Air Quality Analysis | | | ■ | ■ | ■ | ■ | | | | | | | | | | | | | | |
| Optional Noise Study | | | ■ | ■ | ■ | ■ | | | | | | | | | | | | | | |
| 1.4 Initial Study | | | ■ | ■ | ■ | ■ | ■ | ■ | ■ | | | | | | | | | | | |
| 1.5 City Review | | | | | | | | | | ■ | ■ | ■ | | | | | | | | |
| 1.6 MMRP | | | | | | | | | | ■ | | | | | | | | | | |
| **Phase 2 - MND and Environmental Review** | | | | | | | | | | | | | | | | | | | | |
| 2.1 Prepare MND | | | | | | | | | | | | ■ | ■ | | | | | | | |
| 2.2 Public Distribution | | | | | | | | | | | | | | ■ | ■ | ■ | ■ | | | |
| 2.3 Response to Letters of Comment | | | | | | | | | | | | | | | | | ■ | ■ | ■ | |
| 2.4 Meetings and Hearings | ● | | | | | | | | | | | | ● | | | | | ● | | ● |

# Fee Schedule

Our proposed fee schedule is presented on the following page. As shown, professional services will cost **$34,728.00.** Direct costs for other items incurred on the City's behalf are estimated at **$3,500.00,** and will cover reproduction and mailing costs of the Initial Study during the public review period and delivery or messenger services. The total fee for our environmental services, as presented in this proposal, would be **$38,228.00**. The optional air quality and noise studies are expected to add **$4,180.00** to the fees, if selected. Fees and costs proposed in our budget are in effect for one year from the point we receive the Notice to Proceed.

Budget control will be the responsibility of *DEA*'s Program Manager. We will monitor the time our staff spend on assigned tasks to ensure that we maintain our agreed upon budget. Additionally, *DEA*'s project manager will regularly communicate, via phone calls and e-mail, with all members of our project team, as well as City staff, to provide regular updates of our work efforts. This will ensure that our efforts progress efficiently and will be valuable in alerting City staff in an expeditious manner of any critical issues that may develop during our work. Invoices for work completed will be submitted to the City staff on a monthly basis.

**City of Newport Beach**
**SANTA BARBARA CONDOMINIUMS**
**Proposed Budget**

| | Principal-in-charge | Environmental Task Leader | Environmental Planner | Traffic Engineer | Graphics | Total |
|---|---|---|---|---|---|---|
| **PHASE 1: INITIAL STUDY PREPARATION** | | | | | | |
| 1.1 Organizational Team Meeting | 4 | 4 | | | | 1,040 |
| 1.2 Site Tour and Literature Review | | 4 | 8 | | | 920 |
| 1.3 Technical Studies | | | | | | |
| Review of Traffic Study | | | | 14 | | 1,540 |
| Optional Air Quality Study | | | | | | 1,980 |
| Optional Noise Study | | | | | | 2,200 |
| 1.4 Initial Study | 4 | 36 | 75 | | 20 | 10,330 |
| 1.5 City Review | 2 | 8 | 20 | | 3 | 2,634 |
| 1.6 MMRP | | 4 | 8 | | | 920 |
| Subtotal | 10 | 56 | 111 | 14 | 23 | $21,564 |
| **PHASE 2: MND and Environmental Review** | | | | | | |
| 2.1 Prepare Mitigated Negative Declaration | 1 | 4 | 6 | | 2 | 1,066 |
| 2.2 Public Distribution | | 4 | 7 | | 4 | 1,082 |
| 2.3 Response to Letters of Comment | 2 | 10 | 18 | | 2 | 2,616 |
| Preparation of Final MND | 1 | 5 | 8 | | 5 | 1,470 |
| Notice of Determination | 1 | 2 | 4 | | | 630 |
| 2.4 Meetings and Public Hearings (assumes 2 mtgs and 1 Hearing | 12 | 12 | | | | 3,120 |
| Project Management | 6 | 24 | | | | 3,180 |
| Subtotal | 23 | 61 | 43 | 0 | 13 | $13,164 |
| TOTAL | 33 | 117 | 154 | 14 | 36 | $34,728 |

| | |
|---|---|
| Estimated Reimburseable Costs [Includes out-of-pocket expenses (including, but not limited to, blueprinting, printing, duplicating/copying, reproduction, photography and deliver services) and services performed for unexpected work. Direct expenses will b | $3,500 |
| **GRAND TOTAL** | **$38,228** |
| Without the optional air quality and noise studies, the proposed budget total would be: | **$34,048** |

## Relevant Experience and References

*DEA* is particularly qualified to provide the necessary environmental consultant services for the *Santa Barbara Condominiums* project. Our ability to conduct environmental analyses and prepare high quality written reports is expanded by our abilities to prepare and process a variety of agency permits. *DEA*'s expertise and proficiency in local, state and federal permitting requirements are qualities that *DEA* is proud to bring to the City of Newport Beach. Our knowledge of environmental regulations allows us to readily understand the overlap of requirements, necessary timing of surveys, and scheduling of critical events in a manner which avoids duplication and unnecessary project delays. By knowing what is required for each project, we are able to visualize the end result and carefully strategize the steps necessary to get there. When an unexpected obstacle is confronted, we have the knowledge and tools to maneuver and quickly remedy the situation.

### Relevant Project Experience

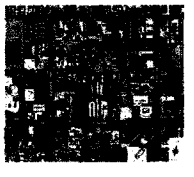
*DEA* has prepared environmental documentation for a wide variety of projects in the Southern California region. *DEA's* work on similar projects provides the City with the experience and knowledge necessary to complete the environmental documentation for this project. This list represents only a sample of our resume and is not intended to be comprehensive.

***Murray Canyon Apartments, San Diego, California***

*DEA* is providing environmental planning services for the Murray Canyon Apartments project. The project is located in the Mission Valley area of the City of San Diego. *DEA* is coordinating the environmental documentation for the project. The project involves the development of 276 one and two bedroom apartments with parking and recreational areas. The site is also adjacent to an existing sand and gravel quarry.

***Espanada Specific Plan Project, Chula Vista, California***

The proposed *Espanada Specific Plan* project proposes redevelopment of a 4.2-acre site with two fifteen-story residential towers, sixteen residential townhomes, approximately 13,000 square feet (s.f.) retail commercial, and a high-end restaurant component comprising approximately 8,900 s.f. Surface parking would serve the townhouse, retail and restaurant uses; while a two-level below-grade parking facility would serve the two residential towers. The proposed *Espanada Specific Plan* would establish a new mixed-use zone for approximately 3.5 acres of the project site. This new zone would be designated as the Urban Residential/Commercial Zone and is intended to be compatible with the proposed Mixed-use Transit Focus Area land use classification identified in the City of Chula Vista's General Plan Update. The project proposes high-density, transit-oriented, residential development with complementary retail commercial uses to serve workers and residents of the surrounding Urban Core and the City of Chula Vista.



***Empire Center South, Fontana, California***

*DEA* prepared an Initial Study/MND for the Empire Center South project in the City of Fontana. The document analyzes the potential environmental impacts of a proposed General Plan Amendment, Zone Change, Specific Plan Amendment, Tentative Tract Map, and Tentative Parcel Map for a 108-acre site in the southern section of the City of Fontana. The project proposed the development of 414 single family homes, a neighborhood commercial area, and a park on the site. The project site was located on potential habitat for Delhi Sands Flower-loving Flies, a federally endangered species, although no individuals of the species was recorded on the project site. The IS/MND also addressed the project's potential to result in impacts to traffic.

***University Gardens, San Diego, California***

*DEA* was responsible for the environmental review and permitting for a senior housing project in University City. *DEA* was instrumental in developing mitigation for potential impacts to wetlands caused by an offsite sewer extension, which is required to serve the project. The sewer line improvement is located within the Marion Bear Park, an important open space preserve in San Diego. Coordination for the project involves working with a variety of consultants, the City of San Diego Parks and Recreation and Development Review Departments.

***Glendora Condominium and Subdivision EIRs, Glendora, California***

*DEA* prepared two EIRs for residential projects in the City of Glendora. The nine-unit condominium EIR analyzed the potential for adverse impacts on an adjacent senior housing project and pre-school, while the 18-lot subdivision EIR analyzed impacts on the various residential land uses surrounding the site. Both projects involved a zone change to a lower density designation, development plan review, and approval of subdivision maps. Issues addressed in these EIRs include land use compatibility, view obstruction, noise, and air quality impacts, traffic and circulation, and public services and utilities.

***Student Apartment Complex, California State University San Bernardino (CSUSB), San Bernardino, California***

*DEA* prepared an Initial Study and Addendum to the Master Plan Revision EIR for the construction of a student housing facility on the CSUSB campus. The Student Apartment Complex included a 600-bed complex in nine separate structures, with four to six apartment suites in each structure. This apartment complex would be utilized by existing and future students at CSUSB, as anticipated by the University's recently adopted Campus Master Plan. The Initial Study evaluated the potential impacts of the apartment complex, in relation to the impacts discussed in the EIR for the Campus Master Plan Revision.

***Orange County Animal Shelter, Tustin, California***

*DEA* prepared an Initial Study/Mitigated Negative Declaration for the Orange County Animal Care Center, which is proposed within the reuse area of former Marine Corps Air Station, Tustin (MCAS Tustin) in the City of Tustin. A Program EIR and Environmental Impact Statement (EIR/EIS) applies to the land use plan governing the broader reuse area,

and the MND discusses the project's relationship to the EIR/EIS. The proposed facility would house the relocated Orange County Animal Care Center, including a main building, animal enclosures, and a parking area. Issue areas for the project include its proximity to ongoing hazardous materials remediation on the former military base and potential air quality impacts.

## References

The following is a list of private clients and public agency references that can attest to the quality of work by *DEA*.

**City of Fontana**
Don Williams
Planning Manager
(909) 350-6723

**County of Los Angeles**
Sam Sklar
Facilities Project Manager
(626) 300-3014

**City of San Diego**
Dick Rol
Water and Wastewater Facilities
(619) 533-5124

**City of San Bernardino**
Valerie Ross, Director
Community Development Department
(909) 384-5057

**City of Fontana**
Debbie Brazill
Community Development Director
(909) 350-7613

**County of Riverside**
Ron Goldman
Planning Department
(909) 955-1897

Tom Daly
County Clerk-Recorder
12 Civic Center Plaza, Rm.106
PO Box 238
Santa Ana, CA 92702

RECEIVED BY
PLANNING DEPARTMENT
CITY OF NEWPORT BEACH

FEB 21 2006
AM 7|8|9|10|11|12|1|2|3|4|5|6 PM

**CITY OF NEWPORT BEACH**
**PLANNING DEPT**

Memorandum

SUBJECT: Environment Impact Reports
Amendment of "Public Resources Code, Section 21092.3"

The attached notice was received, filed and a copy was posted on **01/13/2006** It remained posted for 30 (THIRTY) days.

Tom Daly
County Clerk-Recorder
In and for the County of Orange

By: _____ Deputy

Public Resource Code 21092.3

The notices required pursuant to Sections 21080.4 and 21092 for an environmental impact report shall be posted in the office of the County Clerk of each county in which the project will be located and + shall remain for a period of 30 days. The notice required pursuant to Section 21092 for a negative declaration shall be so posted for a period of 20 days, unless otherwise required by law to be posted for 30 days. The County Clerk shall post notices within 24 hours of receipt.

Public Resources Code 21152

All notices filed pursuant to this section shall be available for public inspection, and shall be posted within 24 hours of receipt in the office of the County clerk. Each notice shall remain posted for a period of 30 days. Thereafter, the clerk shall return the notice to the local agency with a notation of the period it was posted. The local agency shall retain the notice for not less than nine months.

# NOTICE OF DETERMINATION

POSTED
JAN 13 2006
TOM DALY, CLERK-RECORDER

FILED
JAN 13 2006
TOM DALY, CLERK-RECORDER

TO: _X_ Clerk of the Board of Supervisors
or
___ County Clerk
County of Orange

FROM: City of Newport Beach
Planning Department
3300 Newport Boulevard
Newport Beach, CA 92663

_X_ Office of Planning and Research (If the project requires state approval)
1400 Tenth Street
Sacramento, CA 95814

By _____ DEPUTY

By _____ DEPUTY

**SUBJECT:** Filing of Notice of Determination in Compliance with Section 21152 of the Public Resources Code.

**Project Title:** SANTA BARBARA CONDOMINIUMS PROJECT

**State Clearinghouse Number:** 2005071067 **Contact Person: Rosalinh Ung** **Telephone Number: (949) 644-3208**

**Project Location:** 900 Newport Center Drive, Newport Beach, CA 92660.

**Project Description:** A proposed development of 79 condominiums on a 4.25 acre site, currently in the Newport Beach Marriott Hotel's tennis complex. The project consists of three separate buildings with eight different floor plan options and has an approximately 79,140 square fee of open space and 21,300 square feet of recreational areas for use by residents and their guests. The four-story buildings are approximately 65 feet in height with subterranean parking levels. The project would require a General Plan Amendment to change the land use designation from Administrative, Professional, Financial to Multiple-Family Residential; Local Coastal Plan Land Use Plan Admendment to change the land use designation from Visitor-Serving Commercial to Medium Density Residential; a Zone Change to rezone the subject property from APF to PC District; a Parcel Map to subdivide the subject property from the hotel development for financing purposes; and a Tract Map for the condominium ownerships.

This is to certify that the **City of Newport Beach** approved the above described project on _January 10, 2006_ and made the following determinations:

1. The project __ will _X__ will not have a significant effect on the environment.
2. ____ An Environmental Impact Report was prepared and certified for this project pursuant to the provisions of CEQA and reflects the independent judgment of the Lead Agency.
   ____ A Negative Declaration was prepared for this project pursuant to the provisions of CEQA and reflects the independent judgment of the Lead Agency.
   _X__ A Mitigated Negative Declaration was prepared for this project pursuant to the provisions of CEQA and reflects the independent judgment of the Lead Agency.
3. Mitigation measures _X_ were ___ were not made a condition of the approval of the project.
4. A Statement of Overriding Considerations ___ was __X_ was not adopted for this project.
5. Findings _X__ were __ were not made pursuant to the provisions of CEQA.
6. The location and custodian of the documents which comprise the record of proceedings for the Final EIR (with comments and responses) or Mitigated Negative Declaration are specified as follows:

   **Custodian:** City of Newport Beach Planning Department

   **Location:** 3300 Newport Boulevard, Newport Beach, CA 92663

_January 10, 2006_
Date

Signature

Rosalinh Ung, Associate Planer
Title

Date Received for Filing

**Recorded in Official Records, Orange County**
**Tom Daly, Clerk-Recorder**

43.00

200685000038 09:47am 01/13/06

**90 67 Z01**
**0.00 43.00 0.00 0.00 0.00 0.00 0.00 0.00**

# CERTIFICATE OF FEE EXEMPTION

De Minimis Impact Finding

FILED

JAN 1 3 2006

TOM DALY, CLERK-RECORDER

BY _____ DEPUTY

Project Title/Location (include County):

SANTA BARBARA CONDOMINIUMS
City Newport Beach
County of Orange
California 92660

POSTED

JAN 13 2006

TOM DALY, CLERK-RECORDER

BY _____ DEPUTY

Name and Address of Project Applicant:

City of Newport Beach, Planning Department
3300 Newport Blvd
Newport Beach, CA 92663

Government Solution, Inc.
Lenna Homes
230 Newport Center Dr. Ste. 2
Newport Beach CA 92660

Project Description:

A proposed development of 79 condominiums on a 4.25 acre site, currently in the Newport Beach Marriott Hotel's tennis complex. The project consists of three separate buildings with eight different floor plan options and has an approximately 79,140 square fee of open space and 21,300 square feet of recreational areas for use by residents and their guests. The four-story buildings are approximately 65 feet in height with subterranean parking levels. The project would require a General Plan Amendment to change the land use designation from Administrative, Professional, Financial to Multiple-Family Residential; Local Coastal Plan Land Use Plan Admendment to change the land use designation from Visitor-Serving Commercial to Medium Density Residential; a Zone Change to rezone the subject property from APF to PC District; a Parcel Map to subdivide the subject property from the hotel development for financing purposes; and a Tract Map for the condominium ownerships.

Findings of Exemption:

- An Initial Study has been prepared by the Lead Agency to evaluate the project's effects on biological resources.
- The analysis in the Initial Study indicates that the project will not have any potential for significant adverse effects on the environment.
- The project site is highly disturbed and does not support riparian habitats, rivers, streams, watercourses, or wetlands.
- There is no native vegetation on the site.
- There are no sensitive, threatened and endangered plants and animals and their habitats on the site.
- Impacts to biological resources are considered less than significant.

CERTIFICATION:

I hereby certify that the City of Newport Beach, as the Lead Agency, has made the above finding(s) of fact and based upon the Initial Study. The project will not individually or cumulatively have an adverse effect on wildlife resources, as defined in Section 711.2 of the Fish and Game Code.

Lead Agency Representative Rosalinh Ung
Title: Project Manager
Lead Agency: City of Newport Beach

Date: January 10, 2006

268191

STATE OF CALIFORNIA - THE RESOURCES AGENCY
DEPARTMENT OF FISH AND GAME
**ENVIRONMENTAL FILING FEE CASH RECEIPT**
DFG 753.5a (8-03)

Lead Agency: City of Newport Bch  Date: 1-13-06

County / State Agency of Filing: Clerk Recorder  Document No.: 2006000038

Project Title: Santa Barbara Condo Project

Project Applicant Name: Government Solutions Inc  Phone Number: 6443205

Project Applicant Address: 330 Newport Center Dr. Ste 210 Newport Bch Ca 92660

Project Applicant *(check appropriate box)*: Local Public Agency ☐ School District ☐ Other Special District ☐ State Agency ☐ Private Entity ☐

**CHECK APPLICABLE FEES:**

| | | |
|---|---|---|
| ( ) Environmental Impact Report | $850.00 | $ |
| ( ) Negative Declaration | $1,250.00 | $ |
| ( ) Application Fee Water Diversion *(State Water Resources Control Board Only)* | $850.00 | $ |
| ( ) Projects Subject to Certified Regulatory Programs | $850.00 | $ |
| ( ) County Administrative Fee | $25.00 | $ 13 |
| ( ) Project that is exempt from fees | | |

**TOTAL RECEIVED** $ 13

Signature and title of person receiving payment: [signature]

WHITE-PROJECT APPLICANT  YELLOW-DFG/FASB  PINK-LEAD AGENCY  GOLDENROD-STATE AGENCY OF FILING

# CITY OF NEWPORT BEACH

**PLANNING DEPARTMENT**
Patricia L. Temple, Director

October 14, 2004

Marice H. White
230 Newport Center Drive, Suite 210
Newport Beach, CA 92660

SUBJECT: SANTA BARBARA CONDOMINIUMS PROJECT (PA2004-169)

Dear Ms. White:

On October 13 2004, the Newport Beach City Council authorized the City Manager to sign a professional services agreement on behalf of the City for your project. As you are aware, the applicant will be responsible for the full costs of preparing the environmental documents for the project. Before the City executes the agreement, the City requires that the applicant sign and return this letter acknowledging their acceptance on behalf of Lennar Homes, of the costs of conducting the environmental review of the project. Please remit payment of the amount indicated below to the undersigned.

| | | |
|---|---|---|
| ***Approved By:*** | City Council, City of Newport Beach | |
| **Consultant:** | David Evans & Associates, Inc. | |
| **Project Address:** | 900 Newport Center Drive | |
| **Planning Activity Number:** | PA2004-169 | |
| **Estimated Cost Summary:** | Consultant costs outlined in the proposal dated October 1, 2004: | $38,228 |
| | City staff cost: | $105/hour |

*Please note that modifications to the scope of work or additional technical studies may result in additional charges. Excess funds will be returned at the conclusion of the project.*

**Project Applicant:** Lennar Homes

**Applicant Approval:** MR — 10/27/04
Mark Rosene for Lennar Homes Date

**PLANNING DEPARTMENT**

**BY:** Roselinh Ung
Rosalinh Ung, Associate Planner

3300 Newport Boulevard · Post Office Box 1768 · Newport Beach, California 92658-8915
Telephone: (949) 644-3200 · Fax: (949) 644-3229 · www.city.newport-beach.ca.us

PA2004-169

**PROFESSIONAL SERVICES AGREEMENT WITH DAVID EVANS AND ASSOCIATES, INC. FOR SANTA BARBARA CONDOMINIUMS PROJECT**

**THIS AGREEMENT** is made and entered into as of this 12th day of October, 2004, by and between the **CITY OF NEWPORT BEACH**, a Municipal Corporation ("**City**"), and **David Evans and Associates, Inc.**, a corporation whose address is 2333 Mill Creek Drive, Suite 225, Laguna Hills, California, 92653 ("**Consultant**"), and is made with reference to the following:

**RECITALS**

A. City is a municipal corporation duly organized and validly existing under the laws of the State of California with the power to carry on its business as it is now being conducted under the statutes of the State of California and the Charter of City.

B. City is planning to prepare an Initial Study and Mitigated Negative Declaration and other environmental documents in accordance with the California Environmental Quality Act for the Santa Barbara Condominiums project (PA2004-169), located at 900 Newport Center Drive, Newport Beach, California.

C. City desires to engage Consultant to prepare an Initial Study and Mitigated Negative Declaration and other environmental documents in accordance with the California Environmental Quality Act for the Santa Barbara Condominiums project (PA2004-169), located at 900 Newport Center Drive, Newport Beach, California ("Project").

D. Consultant possesses the skill, experience, ability, background, certification and knowledge to provide the services described in this Agreement.

E. The principal member[s] of Consultant for purposes of Project shall be Karen L. Ruggels, Vice President and Dustin Fuller, Project Manager.

F. City has solicited and received a proposal from Consultant, has reviewed the previous experience and evaluated the expertise of Consultant, and desires to retain Consultant to render professional services under the terms and conditions set forth in this Agreement.

**NOW, THEREFORE**, it is mutually agreed by and between the undersigned parties as follows:

**1. TERM**

The term of this Agreement shall commence on the above written date, and shall terminate on the 1st day of November, 2005, unless terminated earlier as set forth herein.

## 2. SERVICES TO BE PERFORMED

Consultant shall diligently perform all the services described in the Scope of Services attached hereto as Exhibit A and incorporated herein by reference. All work and documents shall be prepared in accordance with and shall contain all items required by the California Environmental Quality Act (CEQA), CEQA Implementing Guidelines and City of Newport Beach ordinances and policies. Consultant shall furnish all environmental documents and forms to City in electronic format, Microsoft Word 2000, or other format acceptable to City.

## 3. TIME OF PERFORMANCE

Time is of the essence in the performance of services under this Agreement and Consultant shall perform the services in accordance with the schedule included in Exhibit A. The failure by Consultant to strictly adhere to the schedule may result in termination of this Agreement by City.

Notwithstanding the foregoing, Consultant shall not be responsible for delays due to causes beyond Consultant's reasonable control. However, in the case of any such delay in the services to be provided for the Project, each party hereby agrees to provide notice to the other party so that all delays can be addressed.

**3.1** Consultant shall submit all requests for extensions of time for performance in writing to the Project Administrator not later than ten (10) calendar days after the start of the condition that purportedly causes a delay. The Project Administrator shall review all such requests and may grant reasonable time extensions for unforeseeable delays that are beyond Consultant's control.

**3.2** For all time periods not specifically set forth herein, Consultant shall respond in the most expedient and appropriate manner under the circumstances, by telephone, fax, hand-delivery or mail.

## 4. COMPENSATION TO CONSULTANT

City shall pay Consultant for the services in accordance with the provisions of this Section set forth in Exhibit A. No rate changes shall be made during the term of this Agreement without prior written approval of the Project Administrator. Consultant's compensation for all work performed in accordance with this Agreement shall not exceed the total contract price of Thirty-eight thousand two hundred twenty-eight dollars ($38,228).

**4.1** Consultant shall submit monthly invoices to City describing the work performed the preceding month. Consultant's bills shall include the name of the person who performed the work, a brief description of the services performed and/or the specific task in the Scope of Services to which it relates, the date the services were performed, the number of hours spent on all work billed on an hourly basis, and a description of any

reimbursable expenditures. City shall pay Consultant no later than thirty (30) days after approval of the monthly invoice by City staff.

**4.2** City shall reimburse Consultant only for those costs or expenses specifically approved in this Agreement, or specifically approved in advance by City. Unless otherwise approved, such costs shall be limited and include nothing more than the following costs incurred by Consultant:

A. The actual costs of subconsultants for performance of any of the services that Consultant agrees to render pursuant to this Agreement, which have been approved in advance by City and awarded in accordance with this Agreement.

B. Approved reproduction charges.

C. Actual costs and/or other costs and/or payments specifically authorized in advance in writing and incurred by Consultant in the performance of this Agreement.

**4.3** Consultant shall not receive any compensation for Extra Work without the prior written authorization of City. As used herein, "Extra Work" means any work that is determined by City to be necessary for the proper completion of the Project, but which is not included within the Scope of Services and which the parties did not reasonably anticipate would be necessary at the execution of this Agreement. Compensation for any authorized Extra Work shall be paid in accordance with such approval.

**4.4** Notwithstanding any other provision of this Agreement, when payments made by City equal 90% of the maximum fee provided for in this Agreement, no further payments shall be made until City has accepted the final work under this Agreement.

## 5. PROJECT MANAGER

Consultant shall designate a Project Manager, who shall coordinate all phases of the Project. This Project Manager shall be available to City at all reasonable times during the Agreement term. Consultant has designated **Dustin Fuller** to be its Project Manager. Consultant shall not remove or reassign the Project Manager or any personnel listed in Exhibit A or assign any new or replacement personnel to the Project without the prior written consent of City. City's approval shall not be unreasonably withheld with respect to the removal or assignment of non-key personnel.

Consultant, at the sole discretion of City, shall remove from the Project any of its personnel assigned to the performance of services upon written request of City. Consultant warrants that it will continuously furnish the necessary personnel to complete the Project on a timely basis as contemplated by this Agreement.

## 6. ADMINISTRATION

This Agreement will be administered by the **Planning Department.** **Patricia L. Temple, Planning Director** shall be the Project Administrator and shall have the authority to act for City under this Agreement. The Project Administrator or his/her authorized representative shall represent City in all matters pertaining to the services to be rendered pursuant to this Agreement.

## 7. CITY'S RESPONSIBILITIES

In order to assist Consultant in the execution of its responsibilities under this Agreement, City agrees to, where applicable:

A. Provide access to, and upon request of Consultant, one copy of all existing relevant information on file at City. City will provide all such materials in a timely manner so as not to cause delays in Consultant's work schedule.

B. Provide blueprinting and other services through City's reproduction company for bid documents. Consultant will be required to coordinate the required bid documents with City's reproduction company. All other reproduction will be the responsibility of Consultant and as defined above.

C. Provide usable life of facilities criteria and information with regards to new facilities or facilities to be rehabilitated.

## 8. STANDARD OF CARE

**8.1** All of the services shall be performed by Consultant or under Consultant's supervision. Consultant represents that it possesses the professional and technical personnel required to perform the services required by this Agreement, and that it will perform all services in a manner commensurate with community professional standards. All services shall be performed by qualified and experienced personnel who are not employed by City, nor have any contractual relationship with City.

**8.2** Consultant represents and warrants to City that it has or shall obtain all licenses, permits, qualifications, insurance and approvals of whatsoever nature that are legally required of Consultant to practice its profession. Consultant further represents and warrants to City that Consultant shall, at its sole cost and expense, keep in effect or obtain at all times during the term of this Agreement, any and all licenses, permits, insurance and other approvals that are legally required of Consultant to practice its profession. Consultant shall maintain a City of Newport Beach business license during the term of this Agreement.

**8.3** Consultant shall not be responsible for delay, nor shall Consultant be responsible for damages or be in default or deemed to be in default by reason of strikes, lockouts, accidents, or acts of God, or the failure of City

## 11. COOPERATION

Consultant agrees to work closely and cooperate fully with City's designated Project Administrator and any other agencies that may have jurisdiction or interest in the work to be performed. City agrees to cooperate with the Consultant on the Project.

## 12. CITY POLICY

Consultant shall discuss and review all matters relating to policy and Project direction with City's Project Administrator in advance of all critical decision points in order to ensure the Project proceeds in a manner consistent with City goals and policies.

## 13. PROGRESS

Consultant is responsible for keeping the Project Administrator and/or his/her duly authorized designee informed on a regular basis regarding the status and progress of the Project, activities performed and planned, and any meetings that have been scheduled or are desired.

## 14. INSURANCE

Without limiting Consultant's indemnification of City, and prior to commencement of work, Consultant shall obtain, provide and maintain at its own expense during the term of this Agreement, a policy or policies of liability insurance of the type and amounts described below and in a form satisfactory to City.

A. *Certificates of Insurance*. Consultant shall provide certificates of insurance with original endorsements to City as evidence of the insurance coverage required herein. Insurance certificates must be approved by City's Risk Manager prior to commencement of performance or issuance of any permit. Current certification of insurance shall be kept on file with City's at all times during the term of this Agreement.

B. *Signature*. A person authorized by the insurer to bind coverage on its behalf shall sign certification of all required policies.

C. *Acceptable Insurers*. All insurance policies shall be issued by an insurance company currently authorized by the Insurance Commissioner to transact business of insurance in the State of California, with an assigned policyholders' Rating of A (or higher) and Financial Size Category Class VII (or larger) in accordance with the latest edition of Best's Key Rating Guide, unless otherwise approved by the City's Risk Manager.

D. *Coverage Requirements*.

i. Workers' Compensation Coverage. Consultant shall maintain Workers' Compensation Insurance and Employer's Liability Insurance for his or her employees in accordance with the laws of the State of California. In addition, Consultant shall require each subcontractor to similarly maintain Workers' Compensation Insurance and Employer's Liability Insurance in accordance with the laws of the State of California for all of the subcontractor's employees. Any notice of cancellation or non-renewal of all Workers' Compensation policies must be received by City at least thirty (30) calendar days (10 calendar days written notice of non-payment of premium) prior to such change. The insurer shall agree to waive all rights of subrogation against City, its officers, agents, employees and volunteers for losses arising from work performed by Consultant for City.

ii. General Liability Coverage. Consultant shall maintain commercial general liability insurance in an amount not less than one million dollars ($1,000,000) per occurrence for bodily injury, personal injury, and property damage, including without limitation, contractual liability. If commercial general liability insurance or other form with a general aggregate limit is used, either the general aggregate limit shall apply separately to the work to be performed under this Agreement, or the general aggregate limit shall be at least twice the required occurrence limit.

iii. Automobile Liability Coverage. Consultant shall maintain automobile insurance covering bodily injury and property damage for all activities of the Consultant arising out of or in connection with work to be performed under this Agreement, including coverage for any owned, hired, non-owned or rented vehicles, in an amount not less than one million dollars ($1,000,000) combined single limit for each occurrence.

iv. Professional Errors and Omissions Insurance. Consultant shall maintain professional errors and omissions insurance, which covers the services to be performed in connection with this Agreement in the minimum amount of one million dollars ($1,000,000).

E. *Endorsements*. Each general liability and automobile liability insurance policy shall be endorsed with the following specific language:

i. The City, its elected or appointed officers, officials, employees, agents and volunteers are to be covered as additional insurers with respect to liability arising out of work performed by or on behalf of the Consultant.

ii. This policy shall be considered primary insurance as respects to City, its elected or appointed officers, officials, employees, agents and volunteers as respects to all claims, losses, or liability arising directly or indirectly from the Consultant's operations or services

provided to City. Any insurance maintained by City, including any self-insured retention City may have, shall be considered excess insurance only and not contributory with the insurance provided hereunder.

iii. This insurance shall act for each insured and additional insured as though a separate policy had been written for each, except with respect to the limits of liability of the insuring company.

iv. The insurer waives all rights of subrogation against City, its elected or appointed officers, officials, employees, agents and volunteers.

v. Any failure to comply with reporting provisions of the policies shall not affect coverage provided to City, its elected or appointed officers, officials, employees, agents or volunteers.

vi. The insurance provided by this policy shall not be suspended, voided, canceled, or reduced in coverage or in limits, by either party except after thirty (30) calendar days (10 calendar days written notice of non-payment of premium) written notice has been received by City.

F. *Timely Notice of Claims*. Consultant shall give City prompt and timely notice of claim made or suit instituted arising out of or resulting from Consultant's performance under this Agreement.

G. *Additional Insurance*. Consultant shall also procure and maintain, at its own cost and expense, any additional kinds of insurance, which in its own judgment may be necessary for its proper protection and prosecution of the work.

## 15. PROHIBITION AGAINST ASSIGNMENTS AND TRANSFERS

Except as specifically authorized under this Agreement, the services to be provided under this Agreement shall not be assigned, transferred contracted or subcontracted out without the prior written approval of City. Any of the following shall be construed as an assignment: The sale, assignment, transfer or other disposition of any of the issued and outstanding capital stock of Consultant, or of the interest of any general partner or joint venture or syndicate member or cotenant if Consultant is a partnership or joint-venture or syndicate or co-tenancy, which shall result in changing the control of Consultant. Control means fifty percent (50%) or more of the voting power, or twenty-five percent (25%) or more of the assets of the corporation, partnership or joint-venture.

## 16. SUBCONTRACTING

City and Consultant agree that subconsultants may be used to complete the work outlined in the Scope of Services. The subconsultants authorized by City to perform work on this Project are identified in Exhibit A. Consultant shall be fully responsible to City for all acts and omissions of the subcontractor. Nothing in

to furnish timely information or to approve or disapprove Consultant's work promptly, or delay or faulty performance by City, contractors, or governmental agencies.

## 9. HOLD HARMLESS

To the fullest extent permitted by law, Consultant shall indemnify, defend and hold harmless City, its City Council, boards and commissions, officers, agents and employees (collectively, the "Indemnified Parties) from and against any and all claims (including, without limitation, claims for bodily injury, death or damage to property), demands, obligations, damages, actions, causes of action, suits, losses, judgments, fines, penalties, liabilities, costs and expenses (including, without limitation, attorney's fees, disbursements and court costs) of every kind and nature whatsoever (individually, a Claim; collectively, "Claims"), which may arise from or in any manner relate (directly or indirectly) to any work negligently performed or services provided under this Agreement (including, without limitation, defects in workmanship or materials and/or design defects [if the design originated with Consultant]) or Consultant's presence or activities conducted on the Project (including the negligent and/or willful acts, errors and/or omissions of Consultant, its principals, officers, agents, employees, vendors, suppliers, consultants, subcontractors, anyone employed directly or indirectly by any of them or for whose acts they may be liable or any or all of them).

Notwithstanding the foregoing, nothing herein shall be construed to require Consultant to indemnify the Indemnified Parties from any Claim arising from the active negligence or willful misconduct of the Indemnified Parties. Nothing in this indemnity shall be construed as authorizing any award of attorney's fees in any action on or to enforce the terms of this Agreement. This indemnity shall apply to all claims and liability regardless of whether any insurance policies are applicable. The policy limits do not act as a limitation upon the amount of indemnification to be provided by the Consultant.

## 10. INDEPENDENT CONTRACTOR

It is understood that City retains Consultant on an independent contractor basis and Consultant is not an agent or employee of City. The manner and means of conducting the work are under the control of Consultant, except to the extent they are limited by statute, rule or regulation and the expressed terms of this Agreement. Nothing in this Agreement shall be deemed to constitute approval for Consultant or any of Consultant's employees or agents, to be the agents or employees of City. Consultant shall have the responsibility for and control over the means of performing the work, provided that Consultant is in compliance with the terms of this Agreement. Anything in this Agreement that may appear to give City the right to direct Consultant as to the details of the performance or to exercise a measure of control over Consultant shall mean only that Consultant shall follow the desires of City with respect to the results of the services.

this Agreement shall create any contractual relationship between City and subcontractor nor shall it create any obligation on the part of City to pay or to see to the payment of any monies due to any such subcontractor other than as otherwise required by law. Except as specifically authorized herein, the services to be provided under this Agreement shall not be otherwise assigned, transferred, contracted or subcontracted out without the prior written approval of City.

## 17. OWNERSHIP OF DOCUMENTS

Each and every report, draft, map, record, plan, document and other writing produced (hereinafter "Documents"), prepared or caused to be prepared by Consultant, its officers, employees, agents and subcontractors, in the course of implementing this Agreement, shall become the exclusive property of City, and City shall have the sole right to use such materials in its discretion without further compensation to Consultant or any other party. Consultant shall, at Consultant's expense, provide such Documents to City upon prior written request.

Documents, including drawings and specifications, prepared by Consultant pursuant to this Agreement are not intended or represented to be suitable for reuse by City or others on any other project. Any use of completed Documents for other projects and any use of incomplete Documents without specific written authorization from Consultant will be at City's sole risk and without liability to Consultant. Further, any and all liability arising out of changes made to Consultant's deliverables under this Agreement by City or persons other than Consultant is waived against Consultant and City assumes full responsibility for such changes unless City has given Consultant prior notice and has received from Consultant written consent for such changes.

## 18. COMPUTER DELIVERABLES

CADD data delivered to City shall include the professional stamp of the engineer or architect in charge of or responsible for the work. City agrees that Consultant shall not be liable for claims, liabilities or losses arising out of, or connected with (a) the modification or misuse by City, or anyone authorized by City, of CADD data; (b) the decline of accuracy or readability of CADD data due to inappropriate storage conditions or duration; or (c) any use by City, or anyone authorized by City, of CADD data for additions to this Project, for the completion of this Project by others, or for any other Project, excepting only such use as is authorized, in writing, by Consultant. By acceptance of CADD data, City agrees to indemnify Consultant for damages and liability resulting from the modification or misuse of such CADD data. All original drawings shall be submitted to City in the version of AutoCAD used by CITY in ".dwg" file format on a CD, and should comply with the City's digital submission requirements for Improvement Plans. The City will provide AutoCAD file of City Title Sheets. All written documents shall be transmitted to City in the City's latest adopted version of Microsoft Word and Excel.

## 19. CONFIDENTIALITY

All Documents, including drafts, preliminary drawings or plans, notes and communications that result from the services in this Agreement, shall be kept confidential unless City authorizes in writing the release of information.

## 20. OPINION OF COST

Any opinion of the construction cost prepared by Consultant represents his/her judgment as a design professional and is supplied for the general guidance of City. Since Consultant has no control over the cost of labor and material, or over competitive bidding or market conditions, Consultant does not guarantee the accuracy of such opinions as compared to contractor bids or actual cost to City.

## 21. INTELLECTUAL PROPERTY INDEMNITY

The Consultant shall defend and indemnify City, its agents, officers, representatives and employees against any and all liability, including costs, for infringement of any United States' letters patent, trademark, or copyright infringement, including costs, contained in Consultant's drawings and specifications provided under this Agreement.

## 22. RECORDS

Consultant shall keep records and invoices in connection with the work to be performed under this Agreement. Consultant shall maintain complete and accurate records with respect to the costs incurred under this Agreement and any services, expenditures and disbursements charged to City, for a minimum period of three (3) years, or for any longer period required by law, from the date of final payment to Consultant under this Agreement. All such records and invoices shall be clearly identifiable. Consultant shall allow a representative of City to examine, audit and make transcripts or copies of such records and invoices during regular business hours. Consultant shall allow inspection of all work, data, Documents, proceedings and activities related to the Agreement for a period of three (3) years from the date of final payment to Consultant under this Agreement.

## 23. WITHHOLDINGS

City may withhold payment to Consultant of any disputed sums until satisfaction of the dispute with respect to such payment. Such withholding shall not be deemed to constitute a failure to pay according to the terms of this Agreement. Consultant shall not discontinue work as a result of such withholding. Consultant shall have an immediate right to appeal to the City Manager or his/her designee with respect to such disputed sums. Consultant shall be entitled to receive interest on any withheld sums at the rate of return that City earned on its investments during the time period, from the date of withholding of any amounts found to have been improperly withheld.

## 24. ERRORS AND OMISSIONS

In the event of errors or omissions that are due to the negligence or professional inexperience of Consultant which result in expense to City greater than what would have resulted if there were not errors or omissions in the work accomplished by Consultant, the additional design, construction and/or restoration expense shall be borne by Consultant. Nothing in this paragraph is intended to limit City's rights under any other sections of this Agreement.

## 25. CITY'S RIGHT TO EMPLOY OTHER CONSULTANTS

City reserves the right to employ other Consultants in connection with the Project.

## 26. CONFLICTS OF INTEREST

The Consultant or its employees may be subject to the provisions of the California Political Reform Act of 1974 (the "Act"), which (1) requires such persons to disclose any financial interest that may foreseeably be materially affected by the work performed under this Agreement, and (2) prohibits such persons from making, or participating in making, decisions that will foreseeably financially affect such interest.

If subject to the Act, Consultant shall conform to all requirements of the Act. Failure to do so constitutes a material breach and is grounds for immediate termination of this Agreement by City. Consultant shall indemnify and hold harmless City for any and all claims for damages resulting from Consultant's violation of this Section.

## 27. NOTICES

All notices, demands, requests or approvals to be given under the terms of this Agreement shall be given in writing, to City by Consultant and conclusively shall be deemed served when delivered personally, or on the third business day after the deposit thereof in the United States mail, postage prepaid, first-class mail, addressed as hereinafter provided. All notices, demands, requests or approvals from Consultant to City shall be addressed to City at:

Attention:

Patricia L. Temple, Planning Director
Planning Department
City of Newport Beach
3300 Newport Boulevard
Newport Beach, CA, 92663
Phone: 949-644-3200
Fax: 949-644-3229

All notices, demands, requests or approvals from CITY to Consultant shall be addressed to Consultant at:

Attention:

David Evans and Associates, Inc.
Karen L. Ruggels
Vice President Principal-in-Charge
23382 Mill Creek Drive, Suite 225
Laguna Hills, California 92602
Phone: (949) 588-5050
Fax: (949) 588-5058

## 28. TERMINATION

In the event that either party fails or refuses to perform any of the provisions of this Agreement at the time and in the manner required, that party shall be deemed in default in the performance of this Agreement. If such default is not cured within a period of two (2) calendar days, or if more than two (2) calendar days are reasonably required to cure the default and the defaulting party fails to give adequate assurance of due performance within two (2) calendar days after receipt of written notice of default, specifying the nature of such default and the steps necessary to cure such default, the non-defaulting party may terminate the Agreement forthwith by giving to the defaulting party written notice thereof.

Notwithstanding the above provisions, City shall have the right, at its sole discretion and without cause, of terminating this Agreement at any time by giving seven (7) calendar days prior written notice to Consultant. In the event of termination under this Section, City shall pay Consultant for services satisfactorily performed and costs incurred up to the effective date of termination for which Consultant has not been previously paid. On the effective date of termination, Consultant shall deliver to City all reports, Documents and other information developed or accumulated in the performance of this Agreement, whether in draft or final form.

## 29. COMPLIANCE WITH ALL LAWS

Consultant shall at its own cost and expense comply with all statutes, ordinances, regulations and requirements of all governmental entities, including federal, state, county or municipal, whether now in force or hereinafter enacted. In addition, all work prepared by Consultant shall conform to applicable City, county, state and federal laws, rules, regulations and permit requirements and be subject to approval of the Project Administrator and City.

## 30. WAIVER

A waiver by either party of any breach, of any term, covenant or condition contained herein shall not be deemed to be a waiver of any subsequent breach of the same or any other term, covenant or condition contained herein, whether of the same or a different character.

## 31. INTEGRATED CONTRACT

This Agreement represents the full and complete understanding of every kind or nature whatsoever between the parties hereto, and all preliminary negotiations and agreements of whatsoever kind or nature are merged herein. No verbal agreement or implied covenant shall be held to vary the provisions herein.

## 32. CONFLICTS OR INCONSISTENCIES

In the event there are any conflicts or inconsistencies between this Agreement and the Scope of Services or any other attachments attached hereto, the terms of this Agreement shall govern.

## 33. AMENDMENTS

This Agreement may be modified or amended only by a written document executed by both Consultant and City and approved as to form by the City Attorney.

## 34. SEVERABILITY

If any term or portion of this Agreement is held to be invalid, illegal, or otherwise unenforceable by a court of competent jurisdiction, the remaining provisions of this Agreement shall continue in full force and effect.

## 35. CONTROLLING LAW AND VENUE

The laws of the State of California shall govern this Agreement and all matters relating to it and any action brought relating to this Agreement shall be adjudicated in a court of competent jurisdiction in the County of Orange.

## 36. EQUAL OPPORTUNITY EMPLOYMENT

Consultant represents that it is an equal opportunity employer and it shall not discriminate against any subcontractor, employee or applicant for employment because of race, religion, color, national origin, handicap, ancestry, sex or age.

**IN WITNESS WHEREOF**, the parties have caused this Agreement to be executed on the day and year first written above.

**APPROVED AS TO FORM:**

By:_____
City Attorney
for the City of Newport Beach

**CITY OF NEWPORT BEACH,**
A Municipal Corporation

By:_____
Mayor
for the City of Newport Beach

**ATTEST:**

By:_____
LaVonne Harkless
City Clerk

**CONSULTANT:**

By:_____
Karen L. Ruggels
Vice President Principal-in-Charge
David Evans and Associates, Inc.

Attachments: Exhibit A – Scope of Services

Rev: 08-30-04/da

RECEIVED BY
PLANNING DEPARTMENT
CITY OF NEWPORT BEACH

JAN 06 2006

AM 7 8 9 10 11 12 1 2 3 4 5 6 PM

LAW OFFICES
PALMIERI, TYLER, WIENER, WILHELM & WALDRON LLP
A LIMITED LIABILITY PARTNERSHIP INCLUDING PROFESSIONAL CORPORATIONS

2603 MAIN STREET
EAST TOWER – SUITE 1300
IRVINE, CALIFORNIA 92614-4281
(949) 851-9400
WWW.PTWWW.COM

P.O. BOX 19712
IRVINE, CA 92623-9712

WRITER'S DIRECT
DIAL NUMBER

FACSIMILE (949) 851-1554
(949) 851-3844
(949) 757-1225

ANGELO J. PALMIERI (1926-1996)
ROBERT F. WALDRON (1927-1998)

ALAN H. WIENER*
ROBERT C. IHRKE*
JAMES E. WILHELM*
DENNIS G. TYLER*
MICHAEL J. GREENE*
DENNIS W. GHAN*
DAVID D. PARR*
CHARLES H. KANTER*
PATRICK A. HENNESSEY
DON FISHER
GREGORY N. WEILER
WARREN A. WILLIAMS
JOHN R. LISTER
CYNTHIA M. WOLCOTT
GARY C. WEISBERG
MICHAEL H. LEIFER
SCOTT R. CARPENTER
RICHARD A. SALUS
NORMAN J. RODICH
RONALD M. COLE
MICHAEL L. D'ANGELO
STEPHEN A. SCHECK
DONNA S. WOLF
HEATHER C. WHITMORE
ELISE L. ENOMOTO
RYAN M. EASTER
ELIZABETH VALADEZ
HEATHER M. GALLEGOS
MELISA R. PEREZ
ANISH J. BANKER
PATRICIA P. WANG
RENETTA A. CAYA
MICHAEL I. KEHOE
ROBERT H. GARRETSON
JASON E. BURNETT
RYAN M. PRAGER
JOSEPH W. HANEY III
JULIA A. GOWIN
*A PROFESSIONAL CORPORATION

December 9, 2005

REFER TO FILE NO.
16369-125

**VIA E-MAIL**

Coralee Newman
Government Solutions, Inc.
230 Newport Center Drive, Suite 210
Newport Beach, CA 92660

Re: Condition of Approval Regarding the Santa Barbara Condominiums and the Newport Beach Country Club

Dear Coralee:

In an effort to address the potential safety risks posed by errant golf balls from the adjacent Newport Beach Country Club ("Golf Course") to future homeowners, guests and property located within the Santa Barbara Condominiums ("Project"), Lennar Homes of California, Inc., ("Lennar") would agree to the addition of the following condition of approval to the Project entitlements set forth by the City of Newport Beach:

*Prior to the issuance of a Certificate of Occupancy for condominium units within the Project, Lennar shall perform the following: (1) develop notification mechanisms for the owners/occupants and guests of the Project of the existence of the Golf Course and the potential harm to persons and property damage arising from errant golf balls from the Golf Course; (2) record a Declaration of Covenants, Conditions and Restrictions for the Golf Course to disclose the risks to persons and property within the Project relating to errant golf balls and to provide that the future homeowners and the homeowners association acknowledge, accept, release and waive NBCC and its operator for such associated risks and; (3) upon the review and approval of the Planning Director of the City of Newport Beach, Lennar shall install reasonable safety measures to address existing errant*

*golf ball risks consistent with the current netting and landscaping improvements located within the Project area.*

Very truly yours,

Renetta A. Caya

RC:ih

**Ung, Rosalinh**

**From:** Cora Newman [cora@govsol.com]
**Sent:** Friday, December 02, 2005 9:00 AM
**To:** Ung, Rosalinh
**Cc:** Donna.Kelly@Lennar.com; George.Tellez@Lennar.com; Marice White
**Subject:** Lennar Homes - Santa Barbara Condominiums

Rosalinh: As a means of an update, Lennar Homes and the Newport Beach Country Club have had several meetings since our request for continuance on November 22, 2005. While these meetings have been productive, they have not reached a conclusion as of yet. It would be our intent to go to hearing on December 13th and present the status of these discussions to the Council at that time.

As always, we appreciate you diligence and hard work on this project.

Coralee Newman
Government Solutions, Inc.
230 Newport Center Drive, Suite 210
Newport Beach, CA 92660
(949) 717-7944

Please contact Pat Miller for scheduling at (949) 717-7943

11/22/05 #B

November 22, 2005

Mayor Heffernan &
Members of the Newport Beach City Council
3300 Newport Blvd.
Newport Beach, CA 92663

**RE: Request for Continuance**
**Lennar Homes - Public Hearing #13**
**Santa Barbara Condominiums**

Dear City Council:

As the representative for Lennar Homes, we respectfully request a continuance on their scheduled public hearing tonight to your next meeting on December 13, 2005. We are requesting this continuance based on a request we received today from the Newport Beach Country Club. While we've had on-going positive discussions with them on the interface between the golf course and the new residential community, we have been unable at this time to finalize those discussions in a mutually satisfactory manner.

Based on a discussion we had late today with the Country Club, we agreed to request a two-week continuance to your December meeting. We are hopeful your hearing calendar can accommodate this request.

Sincerely,

Coralee Newman

Coralee Newman
Principal
Government Solutions, Inc.

cc: David Wooten
CEO
Newport Beach Country Club

**TEREK SALEH**
*3419 Via Lido, #628*
*Newport Beach, CA 92663*
*949-764-9260 office*
*949-293-9682 cell*
*949-764-9264 fax*
*gwtruck1@pacbell.net*

RECEIVED BY
PLANNING DEPARTMENT
CITY OF NEWPORT BEACH

OCT 31 2005

AM 7|8|9|10|11|12|1|2|3|4|5|6 PM

Copied to PC 11-2-05

October 26, 2005

**FILE COPY**

City of Newport Beach
Planning Department
3300 Newport Blvd.,
Newport Beach, CA 92663
Attn; Barry Eaton

Dear Sir;

Please accept this letter in lieu of my appearance at the upcoming planning commission hearing. I am opposed to the proposed rezoning, parcel separation and subsequent construction of the condominium project located at 900 Newport Center Dr., next door to the Marriott Hotel in Newport Center. Referred to as Santa Barbara Condominiums (PA2004-169).

The impetus for my opposition is simply, too much residential density. The environmental, parking and residential density impact to the City of Newport Beach in general and Fashion Island specifically is just too great.

It is important to note that if the current owners chose to redevelop the property within the current APF zoning I would have no objections as that is within the City of Newport Beach's General Plan. However, I am opposed to the rezoning, amendment to the General Plan, amendment to the Local Coastal Land Use Plan, parcel separation, along with creating more residential density.

If the applicant is desirous of developing condominiums there should be plenty of available land in the Saddleback, Irvine, and nearby areas which would not create the impacts to the City of Newport Beach or Fashion Island.

Sir, over the past 20+ years the City of Newport Beach has maintained the highest standards with respect to development. Further the City has been diligent in maintaining the quality of life by minimizing the increases in density. It appears to me that increases in density has been primarily confined to areas which previously had limited or no density.

Lastly and in closing, if my views are accurate, I implore you to carefully review this project and its' impacts.

If you have any questions, please feel free to contact the undersigned at any time.

Sincerely,

Terek Saleh

FILE COPY

## Ung, Rosalinh

**From:** Ung, Rosalinh
**Sent:** Wednesday, January 05, 2005 9:12 AM
**To:** 'Dustin Fuller'
**Subject:** RE: Santa Barbara Condos

Good Morning Dustin:
Please go ahead with the air quality study. Please make sure that the emissions associated with construction/grading will be included. Thanks.
Rosalinh

-----Original Message-----
**From:** Dustin Fuller [mailto:Djf@deainc.com]
**Sent:** Tuesday, January 04, 2005 1:27 PM
**To:** RUng@city.newport-beach.ca.us
**Subject:** RE: Santa Barbara Condos

For the AQ letter report, we identified the following:

"Optional Air Quality Study - An optional air quality study will be prepared by Giroux and Associates. Work scope items to implement this analysis include:
- Characterize the existing air environment, highlighting any development opportunities presented or constraints imposed by existing (and projected future) air quality.
- Evaluate air quality implications of proposed project using the URBEMIS2002 model.
- Prepare air pollution burden calculations resulting from project-related traffic, and energy use.
- Analyze development plan consistency with SCAQMD regional air quality strategy and State Implementation Plan (SIP).
- Identify relevant mitigation measures for general development, particularly the jobs/housing balance goals and appropriate transportation control measures of the last adopted (1994) SIP."

In an area that is already non-attainment, I have found that it's difficult to come to a no impact conclusion without some supporting information to back the conclusion up.

>>> "Ung, Rosalinh" <RUng@city.newport-beach.ca.us> 01/04/05 11:53AM >>>
Thank you for coming. I do appreciate that.
For air, what is a letter report? How is that formatted? Is that a part the neg.dec. document as a technical analysis attachment or must be a separate one?
I agreed with you on the noise study.
Good suggestion on the draft. Please hold off on the draft submittal but please bring whatever you have at this time to the meeting and prepare for any discussions. It would be a good opportunity for you to ask the traffic consultant on any issues/comments that are not clear or identified in their document. Please prepare to give us a due date for the draft neg, dec.
Thanks.
Rosalinh

-----Original Message-----
**From:** Dustin Fuller [mailto:Djf@deainc.com]
**Sent:** Tuesday, January 04, 2005 11:37 AM
**To:** RUng@city.newport-beach.ca.us
**Subject:** RE: Santa Barbara Condos

Rosalinh,
I understand. I will be there tomorrow at 11.

With regard to air and noise, the main concern is any increase associated with the additional traffic. Based on the results shown in the traffic report (511 ADT) - there really wouldn't be a noticeable difference in either AQ emissions or noise levels. However, since the South Coast Air Basin is designated as "serious non-attainment" for carbon monoxide, I would suggest that we prepare a letter report for air quality becuase we are contributing to an existing non-attainment area. Additionally, it would make for a stronger document to be able to refer to data to show that we do not exceed any thresholds. I do not think a noise study is necessary based on the limited addition of trips and the end use of the site (residential).

I wanted to ask you abo[redacted] draft document. We are prepared to pr[redacted] you with a draft with holes tomorrow. However, since we now have the traffic report and will likely get answers to many questions tomorrow- would you prefer to hold off on receiving the draft so we can incorporate more and provide you with a more complete version?

Dustin

>>> "Ung, Rosalinh" <RUng@city.newport-beach.ca.us> 01/04/05 07:39AM >>>
Hi Dustin,
Happy New Year!! Sorry that I could not respond to your email sooner since yesterday was my regular day off. A later meeting with me only would be fine, but unfortunately, it is very difficult to arrange a later meeting with other folks (our traffic engineer, traffic consultant, the applicant and their architect and engineer). It there anything that you could do? We have this date set awhile ago and I deliberately picked this date to coincide with our meeting date. Please let me know ASAP.

With regard to the air and noise studies, what trigger the needs for the studies. Are there any potential impacts identified in the initial study? We have budgeted for the studies but we want to make sure there are justifications for the studies. Please call for discussion. Thanks.

Rosalinh

-----Original Message-----
**From:** Dustin Fuller [mailto:Djf@deainc.com]
**Sent:** Monday, January 03, 2005 1:40 PM
**To:** rung@city.newport-beach.ca.us
**Subject:** Santa Barbara Condos

Rosalinh,
Happy New Year! Hope your new year's celebrations were fun!

I wanted to contact you becuase I have a conflict with our meeting that's scheduled for Wed. of this week. I'm hoping that we can reschedule for the following week? This will also give us an opportunity to incorporate the results of the traffic study into the report.
I also wanted to ask you about the need for preparing air and noise studies. We had included these as optional tasks in our proposal and a decision was going to be made as to whether the City felt these studies would be necessary. Please let me know if you would like these prepared.

I apologize for the conflict and hope that a later meeting will be ok with you. Please let me know.

Dustin

Dustin Fuller
^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^

David Evans and Associates
9635 Granite Ridge Drive, Suite 300
San Diego, CA 92123

(858) 614-4360 ext. 223 (phone)
(858) 614-4366 (fax)
Mobile- 619.954.4136
Laguna Hills Office #- 949.588.5050 Ext. 219

LENNAR

*Quality. Value. Integrity.*

25 Enterprise
Aliso Viejo, California 92656

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PLANNING DEPARTMENT
CITY OF NEWPORT BEACH

OCT 28 2005

AM 7 8 9 10 11 12 1 2 3 4 5 6 PM

To:
Ms. Rosiland Ung
City Planner
City of Newport Beach
Newport Beach, CA 92658

From:
Ed Giermann
Deputy General Counsel

Date:
10/28/2005

Subject:
Santa Barbara Condominium Project

**Ms. Ung, please attach the following to the staff report for the Santa Barbara Condominium Project.**

***The applicant has relayed to the City that considering the statutory mathematics of affordable housing and DRE requirements, the HOA fees at the Santa Barbara community don't enable development of included units. The HOA fees are expected to be, at the outset, $1,500/month, and they will increase over time because the costs of operating and maintaining a common area development increase over time. That amount is a substantial multiple of the statutory mortgage payment limits for affordable housing and because the DRE requires the equal application of HOA fees across all the residents of a common area development, home buyers who can afford the $1,500 monthly fee are not allowed to subsidize those who cannot. The affordable housing economics do not work.***

**Thank you.**

# Memo

FOR INTERNAL USE ONLY

Agenda Item #5
Exhibit 2- P.6a.a

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CITY OF NEWPORT BEACH

OCT 28 2005

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25 Enterprise
Aliso Viejo, California 92656

**FILE COPY**

To:
Ms. Rosiland Ung
City Planner
City of Newport Beach
Newport Beach, CA 92658

From:
Ed Giermann
Deputy General Counsel

Date:
10/28/2005

Subject:
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**Thank you.**

# Memo

FOR INTERNAL USE ONLY

STATE OF CALIFORNIA

Governor's Office of Planning and Research

State Clearinghouse and Planning Unit

Arnold Schwarzenegger
Governor

Sean Walsh
Director

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PLANNING DEPARTMENT
CITY OF NEWPORT BEACH

AUG 23 2005

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August 16, 2005

Rosalinh Ung
*City of Newport Beach*
3300 Newport Boulevard
Newport Beach, CA 92663

Subject: Santa Barbara Condominiums
SCH#: 2005071067

Dear Rosalinh Ung:

The State Clearinghouse submitted the above named Negative Declaration to selected state agencies for review. *On the enclosed Document Details Report please note* that the Clearinghouse has listed the state agencies that reviewed your document. The review period closed on August 15, 2005, and the comments from the responding agency (ies) is (are) enclosed. If this comment package is not in order, please notify the State Clearinghouse immediately. Please refer to the project's ten-digit State Clearinghouse number in future correspondence so that we may respond promptly.

Please note that Section 21104(c) of the California Public Resources Code states that:

> "A responsible or other public agency shall only make substantive comments regarding those activities involved in a project which are within an area of expertise of the agency or which are required to be carried out or approved by the agency. Those comments shall be supported by specific documentation."

These comments are forwarded for use in preparing your final environmental document. Should you need more information or clarification of the enclosed comments, we recommend that you contact the commenting agency directly.

This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act. Please contact the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process.

Sincerely,

Terry Roberts

Terry Roberts
Director, State Clearinghouse

Enclosures
cc: Resources Agency

1400 TENTH STREET P.O. BOX 3044 SACRAMENTO, CALIFORNIA 95812-3044
TEL (916) 445-0613 FAX (916) 323-3018 www.opr.ca.gov

# Document Details Report
# State Clearinghouse Data Bas

**SCH#** 2005071067
**Project Title** Santa Barbara Condominiums
**Lead Agency** Newport Beach, City of

**Type** Neg Negative Declaration

**Description** The proposed project consists of 79 condominium units (approximately 205,232 square feet) within three residential structures (Buildings I, II, and III). The project includes eight floor plans consisting of one and two story units. The proposed project contains approximately 97,231 square feet of subterranean parking structures, which include 159 resident and 42 guest parking spaces, equaling a total of 201 parking spaces on-site. The proposed project would also provide approximately 79,140 square feet of open space and approximately 21,300 square feet of recreational area for use by residents and guests on the site. The recreational area is intended for passive uses and could contain features such as a fountain, seating, and barbecues.

## Lead Agency Contact

**Name** Rosalinh Ung
**Agency** City of Newport Beach
**Phone** (949) 644-3208 **Fax**
**email**
**Address** 3300 Newport Boulevard
**City** Newport Beach **State** CA **Zip** 92663

## Project Location

**County** Orange
**City** Newport Beach
**Region**
**Cross Streets** Santa Barbara Drive / Jamboree Road
**Parcel No.** 442-011-41
**Township** **Range** **Section** **Base**

## Proximity to:

**Highways** SR-1
**Airports**
**Railways**
**Waterways** Newport Bay
**Schools** Corona Del Mar High, Lincoln ES, Harbor View ES
**Land Use** Tennis courts and associated club house and parking
Z: Administrative, Professional, Financial Commercial (APF)
GP: APF

**Project Issues** Aesthetic/Visual; Agricultural Land; Air Quality; Archaeologic-Historic; Coastal Zone; Cumulative Effects; Flood Plain/Flooding; Geologic/Seismic; Growth Inducing; Landuse; Minerals; Noise; Population/Housing Balance; Public Services; Recreation/Parks; Schools/Universities; Sewer Capacity; Soil Erosion/Compaction/Grading; Solid Waste; Toxic/Hazardous; Traffic/Circulation; Water Quality; Water Supply; Wildlife

**Reviewing Agencies** Resources Agency; Regional Water Quality Control Board, Region 9; Department of Parks and Recreation; Native American Heritage Commission; Department of Health Services; Office of Historic Preservation; Department of Fish and Game, Marine Region; Department of Fish and Game, Region 5; Department of Water Resources; California Coastal Commission; California Highway Patrol; Caltrans, District 12; Department of Toxic Substances Control; State Water Resources Control Board, Clean Water Program; State Lands Commission

**Date Received** 07/15/2005 **Start of Review** 07/15/2005 **End of Review** 08/15/2005

Note: Blanks in data fields result from insufficient information provided by lead agency.

STATE OF CALIFORNIA - THE RESOURCES AGENCY ARNOLD SCHWARZENEGGER, Governor

**CALIFORNIA COASTAL COMMISSION**
South Coast Area Office
200 Oceangate, Suite 1000
Long Beach, CA 90802-4302
(562) 590-5071

August 11, 2005

City of Newport Beach, Planning Department
Attn: Rosalinh M. Ung, Associate Planner
3300 Newport Boulevard
Newport Beach, CA 92663

Clear 8.15.05

RECEIVED
AUG 11 2005
STATE CLEARING HOUSE

**Re: Santa Barbara Condominiums Project**
**Mitigated Negative Declaration (SCH# 2005071067)**

Dear Ms. Ung,

Thank you for the opportunity to review the Mitigated Negative Declaration (MND) for the Santa Barbara Condominiums Project. According to the Mitigated Negative Declaration, the proposed project is the development of 79 condominiums located on a 4.25 acre site that is currently in the Newport Beach Marriot Hotel's tennis complex.

The proposed project is located within the coastal zone in the City of Newport Beach. The proposed development will require a Land Use Plan (LUP) Amendment to change the land use designation from APF (Administrative, Professional, and Financial Commercial) to MFR (Multi-Family Residential) and also a coastal development permit from the California Coastal Commission.

The following comments address the issue of the proposed project's consistency with the Chapter 3 policies of the California Coastal Act of 1976. The comments contained herein are preliminary and those of Coastal Commission staff only and should not be construed as representing the opinion of the Coastal Commission itself. As described below, the proposed project raises issues related to land use and water quality.

Below are the comments by Commission staff on the Mitigated Negative Declaration.

1. Land Use

The City of Newport Beach Land Use Plan (LUP) currently designates the project site for Administrative, Professional, Financial Commercial (APF) uses, which include offices, medical offices, retail and service commercial, restaurants, hotels, motels, commercial recreation, and senior citizen housing facilities. The proposed project would require amending the City's LCP to allow Multi-Family Residential (MFR) on the project site. Section 30222 of the Coastal Act places a priority on visitor-serving commercial recreational facilities designed to enhance public opportunities for coastal recreation over private residential. Thus, the proposed project would be inconsistent with Section 30222 of the Coastal Act. In addition, the Commission is currently reviewing an update to the City of Newport Beach LUP that would designate the project site as Commercial/Visitor Serving (CV). Thus, the proposed project would also be inconsistent with the proposed LUP update. Therefore, Commission staff requests additional discussion regarding alternative uses for the project site that adhere to the current Land Use Plan designation and are consistent with Section 30222 of the Coastal Act.

2. Water Quality

The Mitigated Negative Declaration (MND) discusses water quality in terms of California Environmental Quality Act (CEQA) requirements and Regional Board requirements. In addition to CEQA, Regional Board and other regulatory requirements, the proposed project will undergo review based upon water quality provisions in the Coastal Act. Sections 30230 and 30231 of the California Coastal Act provide the broad basis for protecting coastal waters, habitats, and biodiversity from degradation of water quality associated with new development and redevelopment.

Sound water quality management utilizes a three-pronged approach: site design, source control, and treatment control Best Management Practices. A successful program would first incorporate site design measures to minimize impact to the hydrologic landscape and source control Best Management Practices (BMPs) to reduce dry weather flows and the generation and introduction of pollutants into runoff. A few examples of site design practices include minimizing impervious surfaces, using porous pavements or alternative pavers in parking areas, preserving native vegetation and root systems, minimizing erosion and sedimentation, and reducing roadway or parking lot length. Some examples of source control BMPs include planting native, drought tolerant, non-invasive vegetation; minimizing pesticide and fertilizer use; using efficient irrigation systems; and implementing parking lot and street sweeping programs, among other measures.

After site design and source control BMPs have been designed, treatment control BMPs (typically in a treatment train approach for an extensive development like the one proposed) should be designed for the development. Treatment control BMPs should be designed to treat the specific pollutants generated on each portion of the site. In addition, the proposed measures must be sized and designed to mitigate water quality impacts generated by the development. As a goal, the Commission has required post-construction structural BMPs (or suites of BMPs) should be designed to treat, infiltrate or filter the amount of stormwater runoff produced by all storms up to and including the 85th percentile, 24-hour storm event for volume-based BMPs, and/or the 85th percentile, 1-hour storm event, with an appropriate safety factor (i.e., 2 or greater), for flow-based BMPs.

Based on Section 30230 and 30231 of the Coastal Act, the Coastal Commission must ensure that a development minimizes to the maximum extent feasible polluted runoff and its impact to coastal waters. Even where there is existing development on a site, a redevelopment project needs to demonstrate that it is minimizing to the maximum extent feasible the impact to coastal water quality. Therefore, the development should incorporate, and the Mitigated Negative Declaration should discuss, the site design, source control, and treatment control Best Management Practices (BMPs) that will be used in association with the entire site. Parking lots, landscaped areas, loading and unloading docks, dry weather flows, and trash and debris are common constituents in commercial and residential areas, and BMPs should be designed to address these constituents.

Finally, Commission staff suggest use of catch basin inserts throughout the development, use of filtration systems near areas with especially high risk of pollutant generation (parking lots, etc.), and the use of biofiltration.

Thank you for the opportunity to comment on the Mitigated Negative Declaration (MND) for the Santa Barbara Condominiums Project. Commission staff request notification of any future activity associated with this project or related projects. Please note, the comments provided herein are preliminary in nature. Additional and more specific comments may be appropriate as the project develops into final form and when an application is submitted for a coastal development permit. Please feel free to contact me at 562-590-5071 with any questions.

Sincerely,

Fernie Sy
Coastal Program Analyst

Cc: State Clearinghouse

H:\fsy\EIR's\Comment Letters\Santa Barbara Condominiums Project (SCH# 2005071067)NB

**CALIFORNIA COASTAL COMMISSION**
South Coast Area Office
200 Oceangate, Suite 1000
Long Beach, CA 90802-4302
(562) 590-5071

August 10, 2005

PLANNING DEPARTMENT
CITY OF NEWPORT BEACH

AUG 15 2005

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City of Newport Beach, Planning Department
Attn: Rosalinh M. Ung, Associate Planner
3300 Newport Boulevard
Newport Beach, CA 92663

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**Mitigated Negative Declaration (SCH# 2005071067)**

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Sincerely,

Fernie Sy
Coastal Program Analyst

Cc: State Clearinghouse

H:\fsy\EIR's\Comment Letters\Santa Barbara Condominiums Project (SCH# 2005071067)NB

# AIRPORT LAND USE COMMISSION

FOR ORANGE COUNTY

3160 Airway Avenue • Costa Mesa, California 92626 • 949.252.5170 fax: 949.252.6012



RECEIVED BY
PLANNING DEPARTMENT
CITY OF NEWPORT BEACH

AUG 11 2005

AM 7|8|9|10|11|12|1|2|3|4|5|6 PM


August 8, 2005

Ms. Rosalinh Ung, Associate Planner
City of Newport Beach
Planning Department
3300 Newport Boulevard
Newport Beach, CA 92663

Subject: Notice of Preparation of a Mitigated Negative Declaration – Santa Barbara Condominiums Project

Dear Ms. Ung:

Thank you very much for the opportunity to comment on this Notice of Preparation of a Mitigated Negative Declaration for the proposed project located at 900 Newport Center Drive.

The environmental analysis has noted that the proposed project is 4.5 miles from John Wayne Airport and is not located within a hazard area. Additionally, the project is approximately three (3) miles from the nearest known heliport located at Hoag Hospital and would not create a conflict.

Our Airport Land Use Commission (ALUC) is committed to assisting local agencies by making them aware of airport-related statutory requirements. If you have any questions, I can be reached at the ALUC office at (949) 252-5170 or at jgolding@ocair.com.

Sincerely,

Joan S. Golding

Joan S. Golding
Executive Officer

**TEREK SALEH**

485 East 17th Street #370
Costa Mesa, CA 92627
949-764-9260 office
949-293-9682 cell
949-764-9264 fax
gwtruck1@pacbell.net

RECEIVED BY
PLANNING DEPARTMENT
CITY OF NEWPORT BEACH

AUG 0 9 2005

AM 7 8 9 10 11 12 1 2 3 4 5 6 PM

August 03, 2005

City of Newport Beach
Planning Department
3300 Newport Blvd.,
Newport Beach, CA 92663
Attn; Rosalinh Ungh

Dear Madam;

Please accept this letter in lieu of my appearance at the upcoming planning commission hearing. I am opposed to the proposed rezoning, parcel separation and subsequent construction of the condominium project located at 900 Newport Center Dr., next door to the Marriott Hotel in Newport Center.

The impetus for my opposition is simply, too much density. The environmental, parking and density impact to the City of Newport Beach in general and Fashion Island specifically is just too great. Further, based on the current zoning and use permits, the current owners appear to be using the rezoning, parcel separation, and condominium construction to help offset the cost of the Marriott Hotel remodel project without any real regard to the impacts previously listed.

Over the past 20+ years the City of Newport Beach has maintained the highest standards with respect to development. Further the City has been diligent in maintaining the quality of life by minimizing the increases in density. It appears that increases in density has been primarily confined to areas which previously had limited or no density. That does not appear to be the case in this project.

Lastly and in closing, if my views are accurate, I implore you to carefully review this project and its' impacts.

If you have any questions, please feel free to contact the undersigned at any time.

Sincerely,

Terek Saleh

FILE COPY

# ERRATA

## FINAL MND FOR THE SANTA BARBARA CONDOMINIUMS PROJECT

After completion of the Public Review period for the Draft Mitigated Negative Declaration, a Planned Community District (PCD) was developed for the proposed project (please contact the City of Newport -Beach Planning Department to review this document). Additionally, several typographical errors and/or clarifications to the MND text were identified. The addition of the PCD language as well as both minor typographical errors and clarifications were corrected in the text. All additions and/or corrections/modifications to the text are shown in strike-out/underline format. The additions of the PCD language and the corrections have been reviewed and none of them affect the conclusions found in the impact analysis.

All comments received during the review period for the Draft Santa Barbara Condominiums Initial Study and Mitigated Negative Declaration document were noted and incorporated into the document. All revisions to the project document are provided in strikeout – underline format below.

**Section 1.1 Introduction: page 1-1: paragraph 1**

This Initial Study evaluates and identifies the potential environmental impacts which may result from the proposed Santa Barbara Condominiums Project (proposed Project), in the City of Newport Beach. The Project proposes the development of 79 condominiums on a 4.25 acre site, currently in the Newport Beach Marriott Hotel's tennis complex. The project consists of three separate buildings with eight different floor plan options and has an approximately 79,140 square fee of open space and 21,300 square feet of recreational areas for use by residents and their guests. The four-story buildings are approximately 65 feet in height with subterranean parking levels. The project would require a General Plan Amendment and Local Coastal Plan Land Use Plan Amendment to change the current land use designation from Administrative, Professional, Financial (APF) to Multi-Family Residential (MFR); approval of a Planned Community District (PCD) to rezone the subject property from APF to PC District, to establish use and development regulations, and to consider a waiver of the 10-acre minimum land area requirement for PCD adoption; ~~a Zone change to rezone the subject property from APF to MFR;~~ a Parcel Map to subdivide the subject property from the hotel development for financing purposes; a Tract Map for the condominium ownerships; and approval of a Traffic Study pursuant to the Traffic Phasing Ordinance (TPO). ~~and a Modification Permit for the front yard setback encroachment.~~ These discretionary actions are further discussed in Section 2.4 of this Initial Study.

**Section 2.2 Description of the Proposed Project: page 2-5: paragraph 1**

The proposed Project involves a General Plan Amendment to redesignate 4.25 acres of land from Administrative, Professional, Financial Commercial (APF) to Multi-Family Residential (MFR) to accommodate the proposed residential development. ~~The proposed Project site would require a zone change from APF to MFR.~~ The proposed Project consists of three residential buildings totaling 79 condominium units (see Figure 2-3, *Proposed Site Plan).*

**Section 2.2 Description of the Proposed Project: page 2-5: new paragraph 5**

***Draft Santa Barbara Residential Planned Community District***

The proposed Project includes the Draft Santa Barbara Residential Planned Community District (PCD). Upon adoption, development on the project site would be governed by the Santa Barbara Residential PCD. Development standards identified within the proposed Santa Barbara Residential PCD are intended to guide the zoning classification and development on the project site to ensure the proposed development would comply with the applicable plans and policies of the City of Newport Beach. The Draft Santa Barbara

Residential PCD identifies the following development standards:

- Permitted Uses
- Density
- Percentage of Site Coverage
- Setbacks
- Building Height
- Signs
- Parking
- Vehicular Access
- Landscape & Irrigation
- Refuse Collection
- Telephone, Gas and Electrical Service
- Grading
- Lighting
- Screening

**Section 2.4 Discretionary Actions: page 2-7: paragraph 1**

- ***Draft Santa Barbara Residential Planned Community District (PCD) Plan No. 2005-003 Text Adoption and Waiver of Minimum Acreage*** – *The proposed project would require: a rezone of the subject property from APF to PC District; adoption of the Draft Santa Barbara Residential PCD to establish use and development regulations; and consider a waiver of the 10-acre minimum land area requirement for PCD adoption.*

- ~~***Code Amendment No. 2004-008*** – The proposed Project would also involve a rezoning of the property from the current zone of APF to MFR. The MFR zone would allow development of multi-family units with a minimum lot size of 5,000 square feet and a minimum site area per unit of 1,200 square feet.~~

- ***Tentative Parcel Map No. 2005-014*** – To subdivide the 4.25-acre subject property from the 13.79-acre Marriott Hotel development. ~~Resubdivision to Marriott's parcels for financing purposes – see drawings.~~

- ***Tentative Tract Map No. 2004-004 and [16774]*** – To subdivide the 4.25-acre subject property for Ccondominium ownership~~development~~.

- ***Traffic Study No. 2005-002*** – Traffic Analysis pursuant to the Traffic Phasing Ordinance (TPO).

- ~~***Modification Permit No. 2005-019*** – Front yard setback encroachment.~~

- ***Coastal Residential Development Permit No. 2005-004*** – For affordable housing inclusion in accordance with the Municipal Code and Housing Element of the General Plan as the project is located in the Coastal Zone.~~Since the site is located within the Coastal Zone boundaries in the City of Newport Beach and the California Coastal Commission regulates development in the Coastal Zone, the proposed Project applicant would need to obtain an approved Coastal Development Permit for the proposed project~~.

**Section 3.9 Land Use and Planning: page 3-36: paragraph 3**

**B. Would the Project conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the Project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?**

**Less than Significant Impact.** The proposed Project would involve a general plan amendment, and LCP ~~and zone change~~ to alter the land use allowed on the ~~proposed~~ Project site. The project also includes adoption of a Planned Community District (PCD) to rezone the subject property from APF to PC District and to establish use and development regulations on the Project site. The current General Plan land use designation on the proposed Project site is Administrative, Professional, Financial Commercial (APF). The general plan amendment would change it to Multi-Family Residential (MFR). According to the Land Use Element of the General Plan, this land use category has been applied where multiple dwelling units are allowed on a single subdivided lot. Smaller condominiums and other individually owned attached housing projects are also given this designation. Further, this category allows for either single ownership or condominium development.

**Section 3.9 Land Use and Planning: page 3-39: paragraph 2**

~~The proposed Project would also require a zone change from APF to MFR in order to be consistent with the proposed General Plan designation. However, as discussed above, the proposed Project would help promote Policy A of the City's General Plan and would be compatible with the residential zones to the south and northeast of the site. A less than significant impact to the zoning code is anticipated with development of the proposed Project.~~

**Section 3.9 Land Use and Planning: page 3-39: paragraph 6 through page 3-40: paragraph 1**

~~Setback requirements for the proposed Project area are governed by the City's Municipal Code. The requirements for the site are outlined in Table 3-7, *Project Setback Requirements*, below.~~

~~TABLE 3-7~~
~~*PROJECT SETBACK REQUIREMENTS*~~

| ~~*Newport Beach Municipal Code*~~ | ~~*Front Setback (ft.)*~~ | ~~*Side Setback (ft.)*~~ | ~~*Rear Setback (ft.)*~~ |
|---|---|---|---|
| ~~*Multi-Family Residential*~~ | ~~*20*~~ | ~~*4*~~ | ~~*10*~~ |
| ~~*Santa Barbara Condos*~~ | | | |
| ~~*Residential Development*~~ | ~~*15*~~ | ~~*5*~~ | ~~*10*~~ |

~~SOURCE: City of Newport Beach Municipal Code and Santa Barbara Condominiums Site Plan~~

~~Based on these requirements, the proposed Project would not meet the required setback for front yards. The proposed Project would require a Modification Permit to deviate from this setback requirement. The majority of the proposed Project would exceed the front setback requirement; however, several portions of the buildings are approximately 17 feet from property lines. Those portions encroaching within the 20 foot setback requirements include either architectural features or balconies/patios that are not habitable/living spaces. The reduced front setbacks, therefore, would not result in significant environmental impacts.~~
As discussed in Section 2, *Project Description*, of this document, a Planned Community District (PCD) has been drafted for the proposed project. Development on the project site would be governed by the Draft Santa Barbara Residential PCD. Table 3-7, *Draft Santa Barbara Residential PCD Development Requirements*, shows the development requirements as set fourth in the draft PCD.

TABLE 3-7

| DRAFT SANTA BARBARA RESIDENTIAL PCD DEVELOPMENT REQUIREMENTS | |
|---|---|
| **Density** | |
| Density | 79 dwelling units (18.59 units per gross acre) |
| **Percentage of Site Coverage** | |
| Building Coverage | 100%, less setbacks |
| Building Height | 65 feet maximum |
| Floor Area Ratio | 1.90 |
| Landscape | 10% |
| **Building Setbacks** | |
| Front | 15 feet minimum |
| Side | 7 feet minimum |
| Rear | 13 feet minimum |
| Parking | 2 spaces per unit for resident and 0.5 space for guest |

Source: Draft Santa Barbara Residential PCD

Further development standards associated with building height, signage, parking, vehicular access, landscaping and irrigation, refuse collection, telephone, gas and electric service, grading, lighting and screening are also addressed within the Draft Santa Barbara Residential PCD. The proposed Project would be developed in accordance with all the development standards as identified within the Draft Santa Barbara Residential PCD. Development of the PCD follows the requirements set forth in the City of Newport Beach Municipal Code. Development of the proposed project, under the approval of the PCD, would result in less than significant impacts.

**Section 3.15 Transportation/Traffic: page 3-60: paragraph 2**

**F. Would the Project result in inadequate parking capacity?**

**Less than Significant Impact with Mitigation.** The proposed Project provides a total of 201 on-site parking spaces (159 resident and 42 guest). The City of Newport Beach requires a total of 198 spaces for the residential development (two parking spaces per unit, plus 0.5 spaces per unit for guest parking on developments with four or more units). The Draft Santa Barbara Residential PCD provides for the required on-site parking per the City of Newport Beach Municipal Code. Thus, ~~T~~the proposed Project complies with the on-site parking requirements and therefore would not result in parking deficiency. To ensure that all City requirements for parking areas on-site are met, the following improvements are recommended from the Traffic Impact Analysis.

**Section 5.2 References: page 5-2: item 5**

City of Newport Beach, Draft Santa Barbara Residential Planned Community District, October 2005.

# Comment

STATE OF CALIFORNIA - THE RESOURCES AGENCY ARNOLD SCHWARZENEGGER, Governor

**CALIFORNIA COASTAL COMMISSION**

South Coast Area Office
200 Oceangate, Suite 1000
Long Beach, CA 90802-4302
(562) 590-5071

August 11 2005

City of Newport Beach, Planning Department
Attn: Rosalinh M. Ung, Associate Planner
3300 Newport Boulevard
Newport Beach, CA 92663

Re: **Santa Barbara Condominiums Project**
**Mitigated Negative Declaration (SCH# 2005071067)**

Dear Ms. Ung,

Thank you for the opportunity to review the Mitigated Negative Declaration (MND) for the Santa Barbara Condominiums Project. According to the Mitigated Negative Declaration, the proposed project is the development of 79 condominiums located on a 4.25 acre site that is currently in the Newport Beach Marriot Hotel's tennis complex.

The proposed project is located within the coastal zone in the City of Newport Beach. The proposed development will require a Land Use Plan (LUP) Amendment to change the land use designation from APF (Administrative, Professional, and Financial Commercial) to MFR (Multi-Family Residential) and also a coastal development permit from the California Coastal Commission.

The following comments address the issue of the proposed project's consistency with the Chapter 3 policies of the California Coastal Act of 1976. The comments contained herein are preliminary and those of Coastal Commission staff only and should not be construed as representing the opinion of the Coastal Commission itself. As described below, the proposed project raises issues related to land use and water quality.

Below are the comments by Commission staff on the Mitigated Negative Declaration.

1. Land Use

The City of Newport Beach Land Use Plan (LUP) currently designates the project site for Administrative, Professional, Financial Commercial (APF) uses, which include offices, medical offices, retail and service commercial, restaurants, hotels, motels, commercial recreation, and senior citizen housing facilities. The proposed project would require amending the City's LCP to allow Multi-Family Residential (MFR) on the project site. Section 30222 of the Coastal Act places a priority on visitor-serving commercial recreational facilities designed to enhance public opportunities for coastal recreation over private residential. Thus, the proposed project would be inconsistent with Section 30222 of the Coastal Act. In addition, the Commission is currently reviewing an update to the City of Newport Beach LUP that would designate the project site as Commercial/Visitor Serving (CV). Thus, the proposed project would also be inconsistent with the proposed LUP update. Therefore, Commission staff requests additional discussion regarding alternative uses for the project site that adhere to the current Land Use Plan designation and are consistent with Section 30222 of the Coastal Act.

1-1

# Response

1-1 Although the project site is located within the boundaries of the Coastal Zone, as discussed in the Draft Initial Study/Mitigated Negative Declaration (Draft IS/MND), the proposed project is not located in an area that provides for coastal recreation. The project site is not located on the coast and would not represent a detrimental impact to water or marine resources or the ability of coastal-visitors to utilize existing resources.

Additionally, the request to change the land use designation of the California Coastal Commission Land Use Plan (LUP) would not create a significant loss of Commercial/Visitor Serving (CV) land. The change in land use designation will reduce the land available for visistor serving commercial uses by 4.25 acres. Although this reduction in area would occur, the opportunity to construct the remaining hotel room entitlement of 79 rooms would not be lost and they could be constructed nearby within portion of Newport Center that is located within the Coastal Zone. The City recognizes that residential development is not a priorty use whereas recreational and visitor-serving uses are a priority. Recreation policies of the Coastal Act require that sites suitable for water-oriented recreational activities that cannot be supplied inland must be protected. These policies prioritize water-oriented recreational activities over other land uses and encourage aquaculture and water-oriented recreational support facilities. However, given that the site provides for coastal recreation opportunity and the change in land use would not represent a resource protection or access, detrimental impact to coastal resources nor the ability of coastal-visitors to access or enjoy existing coastal resources.

The requested zone change to the LCPLUP, as determined, would not create significant impacts to the implementation of land use plan as environmentally sensitive habitat areas, shore-line public access, water or marine resources, and coastal visitor-serving facilities would not impacted would not be impacted given the nature and location of the site and design of the project. Considering the location of the project, the proposed residential development would be compatible use with the nearby residential developments and office/commercial developments located within the Newport Center area.

California Environmental Quality Act Guidelines indicate that Negative Declarations need not evaluate alternatives. However, based on the current land use designations within the City's General Plan and existing LUP, the project site could develop with Administrative and Professional Uses (i.e., office uses). Under the updated LUP currently under review by Coastal Commission Staff, the project could be developed with an additional 79 hotel rooms. Based on Section 30222 of the Coastal Act, the project site should have the potential to enhance opportunities for coastal recreational recreation. As discussed in the Draft IS/MND the project site is not near or adjacent to coastal resources. The nearest coastal resource (Upper Newport Bay) is not visible from the site and ocean views are limited from the site due to existing development.

# Comment



2. Water Quality

The Mitigated Negative Declaration (MND) discusses water quality in terms of California Environmental Quality Act (CEQA) requirements and Regional Board requirements. In addition to CEQA, Regional Board and other regulatory requirements, the proposed project will undergo review based upon water quality provisions in the Coastal Act. Sections 30230 and 30231 of the California Coastal Act provide the broad basis for protecting coastal waters, habitats, and biodiversity from degradation of water quality associated with new development and redevelopment.

Sound water quality management utilizes a three-pronged approach: site design, source control, and treatment control Best Management Practices. A successful program would first incorporate site design measures to minimize impact to the hydrologic landscape and source control Best Management Practices (BMPs) to reduce dry weather flows and the generation and introduction of pollutants into runoff. A few examples of site design practices include minimizing impervious surfaces, using porous pavements or alternative pavers in parking areas, preserving native vegetation and root systems, minimizing erosion and sedimentation, and reducing roadway or parking lot length. Some examples of source control BMPs include planting native, drought tolerant, non-invasive vegetation; minimizing pesticide and fertilizer use; using efficient irrigation systems; and implementing parking lot and street sweeping programs, among other measures.

After site design and source control BMPs have been designed, treatment control BMPs (typically in a treatment train approach for an extensive development like the one proposed) should be designed for the development. Treatment control BMPs should be designed to treat the specific pollutants generated on each portion of the site. In addition, the proposed measures must be sized and designed to mitigate water quality impacts generated by the development. As a goal, the Commission has required post-construction structural BMPs (or suites of BMPs) should be designed to treat, infiltrate or filter the amount of stormwater runoff produced by all storms up to and including the 85th percentile, 24-hour storm event for volume-based BMPs, and/or the 85th percentile, 1-hour storm event, with an appropriate safety factor (i.e., 2 or greater), for flow-based BMPs.

Based on Section 30230 and 30231 of the Coastal Act, the Coastal Commission must ensure that a development minimizes to the maximum extent feasible polluted runoff and its impact to coastal waters. Even where there is existing development on a site, a redevelopment project needs to demonstrate that it is minimizing to the maximum extent
1-2 feasible the impact to coastal water quality. Therefore, the development should incorporate, and the Mitigated Negative Declaration should discuss, the site design, source control, and treatment control Best Management Practices (BMPs) that will be used in association with the entire site. Parking lots, landscaped areas, loading and unloading docks, dry weather flows, and trash and debris are common constituents in commercial and residential areas, and BMPs should be designed to address these constituents.

1-3 Finally, Commission staff suggest use of catch basin inserts throughout the development, use of filtration systems near areas with especially high risk of pollutant generation (parking lots, etc.), and the use of biofiltration.

# Response

1-2 Potential impacts to water quality are discussed in the Hydrology and Water Quality section (Section 3.8) of the draft Mitigated Negative Declaration. As discussed in Section 3.8, some of the BMPs that would be utilized include, but are not limited to use of sandbags, gravel bags, check dams, silt fences, soil binders, erosion control blankets, fiber rolls, riprap pads, and practices that prevent debris and pollutants (loose soils, hazardous materials, oil, grease and solvents, other construction materials) from entering the storm drain system. Additionally, the City of Newport Beach requires that a Water Quality Management Plan (WQMP) be prepared for the proposed Project. Lastly, development of the site would comply with the National Pollutant Discharge Elimination System (NPDES) General Permit for Construction Activity, which requires the developer to file a Notice of Intent with the Regional Water Quality Control Board (RWQCB) and to prepare and implement a Stormwater Pollution Prevention Plan (SWPPP) for construction activities on one acre or more. The SWPPP would identify erosion, sedimentation and stormwater pollution control measures that would be implemented during construction activities, and seek to minimize the discharge of pollutants into the stormwater and existing drainage channels to the maximum extent practicable.

1-3 Comment Noted.

## Comment



Thank you for the opportunity to comment on the Mitigated Negative Declaration (MND) for the Santa Barbara Condominiums Project. Commission staff request notification of any future activity associated with this project or related projects. Please note, the comments provided herein are preliminary in nature. Additional and more specific comments may be appropriate as the project develops into final form and when an application is submitted for a coastal development permit. Please feel free to contact me at 562-590-5071 with any questions.

Sincerely,

Fernie Sy
Coastal Program Analyst

Cc: State Clearinghouse

H:\fsy\EIR's\Comment Letters\Santa Barbara Condominiums Project (SCH# 2005071067)NB

## Response

## Comment

## Response


AIRPORT LAND USE COMMISSION
FOR ORANGE COUNTY
3160 Airway Avenue • Costa Mesa, California 92626 • 949.252.5170 fax: 949.252.6012


RECEIVED BY
PLANNING DEPARTMENT
CITY OF NEWPORT BEACH
AUG 11 2005
AM 7 8 9 10 11 12 1 2 3 4 5 6 PM

August 8, 2005

Ms. Rosalinh Ung, Associate Planner
City of Newport Beach
Planning Department
3300 Newport Boulevard
Newport Beach, CA 92663

Subject: Notice of Preparation of a Mitigated Negative Declaration – Santa Barbara Condominiums Project

Dear Ms. Ung:

Thank you very much for the opportunity to comment on this Notice of Preparation of a Mitigated Negative Declaration for the proposed project located at 900 Newport Center Drive.

2-1 The environmental analysis has noted that the proposed project is 4.5 miles from John Wayne Airport and is not located within a hazard area. Additionally, the project is approximately three (3) miles from the nearest known heliport located at Hoag Hospital and would not create a conflict.

Our Airport Land Use Commission (ALUC) is committed to assisting local agencies by making them aware of airport-related statutory requirements. If you have any questions, I can be reached at the ALUC office at (949) 252-5170 or at jgolding@ocair.com.

Sincerely,

Joan S. Golding
Executive Officer

2-1 Comment Noted.

# Comment

**TEREK SALEH**
485 East 17th Street #370
Costa Mesa, CA 92627
949-764-9260 office
949-293-9682 cell
949-764-9264 fax
gwtrock1@pacbell.net

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August 03, 2005

City of Newport Beach
Planning Department
3300 Newport Blvd.,
Newport Beach, CA 92663
Attn; Rosalinh Ungh

Dear Madam;

Please accept this letter in lieu of my appearance at the upcoming planning commission hearing. I am opposed to the proposed rezoning, parcel separation and subsequent construction of the condominium project located at 900 Newport Center Dr., next door to the Marriott Hotel in Newport Center.

3-1 The impetus for my opposition is simply, too much density. The environmental, parking and density impact to the City of Newport Beach in general and Fashion Island specifically is just too great. Further, based on the current zoning and use permits, the current owners appear to be using the rezoning, parcel separation, and condominium construction to help
3-2 offset the cost of the Marriott Hotel remodel project without any real regard to the impacts previously listed.

Over the past 20+ years the City of Newport Beach has maintained the highest standards with respect to development. Further the City has been diligent in maintaining the quality
3-3 of life by minimizing the increases in density. It appears that increases in density has been primarily confined to areas which previously had limited or no density. That does not appear to be the case in this project.

3-4 Lastly and in closing, if my views are accurate, I implore you to carefully review this project and its' impacts.

If you have any questions, please feel free to contact the undersigned at any time.

Sincerely,

Terek Saleh

# Response

3-1 As discussed in the Draft IS/MND, the proposed project would not result in any significant impacts with the implementation of identified mitigation measures.

Regarding parking, the proposed project includes 201 on-site parking spaces for residents and visitors. The total number of parking spaces provided by the proposed project is in excess of the City of Newport Beach requirements (198 spaces for the residential development {two parking spaces per unit, and 0.5 spaces per unit for guest parking on developments with four or more units}) and would not result in a significant impact.

With regard to density, the proposed project would include a density of just under 20 dwelling units per acre. According to the City's Municipal Code, 100 percent lot coverage for all residential zones (except the R-A designation) is allowed, less any setbacks. This requirement is applicable to Planned Community Districts as well. The project, as proposed, provides for 100 percent coverage, less required setbacks.

3-2 All potential impacts created by the proposed project have been identified and discussed within the Draft IS/MND. In those areas where impacts are potentially significant, mitigation measures to reduce the impacts to less than significant levels have been required.

3-3 Please see response to comment 3-1.

3-4 Comment noted.

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# MITIGATION AND MONITORING PROGRAM
for the proposed
# SANTA BARBARA CONDOMINIUMS PROJECT

**OCTOBER 31, 2005**

In accordance with the California Environmental Quality Act (CEQA), the City of Newport Beach prepared a Mitigated Negative Declaration (MND) and Initial Study for the proposed Santa Barbara Condominiums project located in the City of Newport Beach. The MND indicated that the potential adverse environmental impacts of the project, in terms of Air Quality, Cultural Resources, Geology and Soils, Noise, Public Services, Transportation/Traffic and Utilities and Service Systems could be mitigated to below levels of significance. The mitigation measures have been incorporated into the project and the MND is scheduled for adoption by the City of Newport Beach, in conjunction with the approval of the project.

Section 21081.6 of the Public Resources Code (PRC) and CEQA Guidelines section 15097 require the Lead Agency for each project which is subject to the CEQA to monitor performance of the mitigation measures included in any environmental document to ensure that implementation does, in fact, take place. The PRC requires the Lead Agency to adopt a monitoring and reporting program that is designed to ensure compliance during project implementation. In accordance with PRC Section 21081.6 and CEQA Guidelines section 15097, this Mitigation Monitoring and Reporting Program (MMRP) has been developed for the Santa Barbara Condominiums project.

## MITIGATION MEASURES

The mitigation measures which are required to reduce or avoid the potentially significant adverse impacts of future development on the project site are listed in Table 1, *Mitigation Monitoring Program*. Responsible parties, the time frame for implementation, and the monitoring parties are also identified for each measure. In order to determine if the responsible party has implemented these measures, the method of verification is also identified, along with the City of Newport Beach department or agency responsible for monitoring/verifying that the responsible party has completed each mitigation measure.

**TABLE 1**
**MITIGATION MONITORING PROGRAM**

| Mitigation Measures | Responsible Party | Time Frame for Implementation | Department or Agency Responsible for Monitoring |
|---|---|---|---|
| **Air Quality** | | | |
| The following mitigation measures would reduce emissions associated with construction of the proposed Project: | | | |
| **Mitigation Measure 3.3.A:** During grading activities, any exposed soil areas shall be watered twice per day. On windy days or when fugitive dust can be observed leaving the proposed Project site, additional applications of water shall be applied to maintain a minimum 12 percent moisture content as defined by SCAQMD Rule 403. Under windy conditions where velocities are forecast to exceed 25 miles per hour (as ascertained by phone calls to the SCAQMD), all ground disturbing activities shall be halted until winds that are forecast to abate below this threshold. | Developer/ Contractor | Construction Phase | Site Inspections by City of Newport Beach Building Department |

**TABLE 1**
**MITIGATION MONITORING PROGRAM**

| Mitigation Measures | Responsible Party | Time Frame for Implementation | Department or Agency Responsible for Monitoring |
|---|---|---|---|
| **Mitigation Measure 3.3.B:** The proposed Project shall comply with regional rules such as SCAQMD Rules 402 and 403, which would assist in reducing short-term air pollutant emissions. Rule 403 requires that fugitive dust be controlled with best available control measures so that the presence of such dust does not remain visible in the atmosphere beyond the property line of the emission source. Rule 402 requires dust suppression techniques be implemented to prevent fugitive dust from creating a nuisance offsite. These dust suppression techniques are summarized as follows:<br>a. Portions of the construction site to remain inactive longer than a period of three months shall be seeded and watered until grass cover is grown or otherwise stabilized in a manner acceptable to the City.<br>b. All on-site roads shall be paved as soon as feasible or watered periodically or chemically stabilized.<br>c. All material transported offsite shall be either sufficiently watered or securely covered to prevent excessive amounts of dust.<br>d. The area disturbed by clearing, grading, earthmoving, or excavation operations shall be minimized at all times. | Developer/ Contractor | Construction Phase | Site Inspections by City of Newport Beach Building Department |
| **Mitigation Measure 3.3.C:** All vehicles on the construction site shall travel at speeds less than 15 miles per hour. | Developer/ Contractor | Construction Phase | Site Inspections by City of Newport Beach Building Department |
| **Mitigation Measure 3.3.D:** All material stockpiles subject to wind erosion during construction activities, that will not be utilized within three days, shall be covered with plastic, an alternative cover deemed equivalent to plastic, or sprayed with a nontoxic chemical stabilizer. | Developer/ Contractor | Construction Phase | Site Inspections by City of Newport Beach Building Department |
| **Mitigation Measure 3.3.E:** Where vehicles leave the construction site and enter adjacent public streets, the streets shall be swept daily or washed down at the end of the work day to remove soil tracked onto the paved surface. Any visible track-out extending for more than fifty (50) feet from the access point shall be swept or washed within thirty (30) minutes of deposition. | Developer/ Contractor | Construction Phase | Site Inspections by City of Newport Beach Building or Public Works Departments |
| **Mitigation Measure 3.3.F:** All diesel-powered vehicles and equipment shall be properly operated and maintained. | Developer/ Contractor | Construction Phase | Site Inspections by City of Newport Beach Building Department |

**TABLE 1**
**MITIGATION MONITORING PROGRAM**

| Mitigation Measures | Responsible Party | Time Frame for Implementation | Department or Agency Responsible for Monitoring |
|---|---|---|---|
| **Mitigation Measure 3.3.G:** All diesel-powered vehicles and gasoline-powered equipment shall be turned off when not in use for more than five (5) minutes. | Developer/ Contractor | Construction Phase | Site Inspections by City of Newport Beach Building Department |
| **Mitigation Measure 3.3.H:** The construction contractor shall utilize electric or natural gas-powered equipment instead of gasoline or diesel-powered engines, where feasible. | City of Newport Beach | Construction Phase | Site Plan Review by City of Newport Beach Planning Department |
| **Mitigation Measure 3.3.I:** As much as possible, the construction contractor shall time the construction activities so as not to interfere with peak hour traffic. To minimize obstruction of through traffic lanes adjacent to the site, a flagperson shall be retained to maintain safety adjacent to existing roadways, if necessary. | Developer/ Contractor | Construction Phase | Site Inspections by City of Newport Beach Building and Public Works Departments |
| **Mitigation Measure 3.3.J:** The construction contractor shall support and encourage ridesharing and transit incentives for the construction crew. | Developer/ Contractor | Construction Phase | Site Inspections by City of Newport Beach Building Department |
| **Mitigation Measure 3.3.K:** The construction contractor shall utilize, as much as possible, pre-coated/natural colored building materials. Water-based or low VOC coatings shall be used that comply with the most stringent SCAQMD Rule 1113 limits. Spray equipment with high transfer efficiency, such as the high volume-low pressure (HVLP) paint applicators with 50 percent efficiency, or manual coatings application such as paint brush hand roller, trowel, spatula, dauber, rag, or a sponge shall be used to reduce VOC emissions, where practical. Additionally, paint application shall use lower volatility paint not exceeding 100 grams of ROG per liter. | Developer/ Contractor | Construction Phase | Site Inspections by City of Newport Beach Building Department |
| **Mitigation Measure 3.3.L:** If construction equipment powered by alternative fuel sources (LPG/CNG) is available at comparable cost, the developer shall specify that such equipment be used during all construction activities on the proposed Project site. | City of Newport Beach | Prior to Issuance of Grading Permit | Site Plan Review by City of Newport Beach Planning Department |
| **Mitigation Measure 3.3.M:** The developer shall require the use of particulate filters on diesel construction equipment if use of such filters is demonstrated to be cost-competitive for use on this proposed Project. | Developer/ Project Architect | Prior to Issuance of Grading Permit | Site Plan Review by City of Newport Beach Planning Department |

**TABLE 1**
**MITIGATION MONITORING PROGRAM**

| Mitigation Measures | Responsible Party | Time Frame for Implementation | Department or Agency Responsible for Monitoring |
|---|---|---|---|
| **Cultural Resources**<br><br>The following mitigation measures would reduce potential impacts associated with unknown cultural resources on-site: | | | |
| **Mitigation Measure 3.5.A:** Prior to the issuance of a grading permit, the applicant shall provide written evidence to the planning director that a qualified archaeologist has been retained to observe grading activities and conduct salvage excavation of archaeological resources as necessary. The archaeologist shall be present at the pre-grading conference, shall establish procedures for archaeological resources surveillance, and shall establish, in cooperation with the applicant, procedures for temporarily halting or redirecting work to permit the sampling, identification and evaluation of the artifacts as appropriate. If additional or unexpected archaeological features are discovered, the archaeologist shall report such findings to the applicant and to the Planning Department. If the archaeological resources are found to be significant, the archaeological observer shall determine appropriate actions, in cooperation with the applicant, for exploration and/or salvage. These actions, as well as final mitigation and disposition of the resources, shall be subject to the approval of the Planning Director. | Developer/ Contractor | Prior to Issuance of Grading Permit | Site Plan Review by City of Newport Beach Planning Department |
| **Mitigation Measure 3.5.B:** Prior to the issuance of a grading permit, the applicant shall provide written evidence to the planning director that a qualified paleontologist has been retained to observe grading activities and conduct salvage fossils as necessary. The paleontologist shall be present at the pre-grading conference, shall establish procedures for paleontological resource surveillance, and shall establish cooperation with the applicant, procedures for temporarily halting or redirecting work to permit the sampling, identification and evaluation of fossils. If major paleontological resources are discovered which require long term baiting or redirecting of grading, the paleontologist shall report such findings to the applicant and to the Planning Department. The paleontologist shall determine appropriate actions, in cooperation with the applicant, which ensure proper exploration and/or salvage. These actions, as well as final mitigation and disposition of the resources, shall be subject to the approval of the Planning Director. | Developer/ Contractor | Prior to Issuance of Grading Permit | Site Plan Review by City of Newport Beach Planning Department |
| **Mitigation Measure 3.5.C:** In accordance with Public Resources Code 5097.94, if human remains are found, the Orange County coroner must be notified within 24 hours of the discovery. If the coroner determines that the remains are not recent, the coroner will notify the Native American Heritage Commissions in Sacramento to determine the most likely descendent for the area. The designated Native American representative then determines in consultation with the property owner the disposition of the human remains. | Developer/ Contractor | During Construction | Site Plan Review by City of Newport Beach Planning Department |

**TABLE 1**
**MITIGATION MONITORING PROGRAM**

| Mitigation Measures | Responsible Party | Time Frame for Implementation | Department or Agency Responsible for Monitoring |
|---|---|---|---|
| **Geology and Soils** | | | |
| The following mitigation measures would reduce potential impacts associated with unsuitable on-site soils: | | | |
| **Mitigation Measure 3.6.A**: In areas where compacted fill will be required to establish design grades and in design cut areas where the depth of the proposed cut does not exceed the thickness of the existing unsuitable surficial soils, on-site surficial soils shall be excavated and recompacted to create stable soil conditions and correct poor slope performance. | Developer/ Contractor | Prior to Issuance of Grading Permit | Site Plan Review by City of Newport Beach Building Department |
| **Mitigation Measure 3.6.B**: During grading activities, where cut-to-fill transitions exist following remedial grading, they shall be eliminated by overexcavating the "cut" portions of the building pads and replacing the excavated material as properly compacted fill. | Developer/ Contractor | During Grading Activities | Site Plan Review by City of Newport Beach Building Department |
| The generally recommended depth of over excavation is one-half the maximum thickness of fill beneath the pad area, to a minimum depth of 3 feet and a maximum depth of 15 feet below proposed pad grade. The horizontal limits of overexcavation should extend to within approximately 1 to 2 feet of property lines and/or the tops and toes of slopes. The actual lots that will require overexcavation and overexcavation depths will have to be determined during grading by the proposed Project geotechnical consultant based on actual conditions encountered. | | | |
| **Mitigation Measure 3.6.C**: During remedial grading and construction of the proposed subterranean parking areas and associated improvements, temporary excavations with sidewalls varying up to approximately 13 feet in height may be necessary. Temporary excavation sidewalls will require sloping back at a ratio of approximately 12:1, horizontal to vertical. Should excessive caving be observed during grading, flatter inclinations may be required locally. | Developer/ Contractor | During Grading Activities | Site Plan Review by City of Newport Beach Building Department |
| Depending on required depths of cut and remedial grading, it may not be possible to construct temporary excavations along the east side of Buildings I and II (i.e., adjacent to Santa Barbara Drive) and along the southeast side of Building I (adjacent to the existing Marriott tower and appurtenant improvements) at a safe and stable slope ratio without encroaching into the adjacent street right-of-way and/or causing the loss of lateral support of the existing hotel building, the associated buried utilities and other improvements. For this reason, temporary shoring may be required in these areas. Recommendations for design of temporary shoring will be provided in the comprehensive preliminary geotechnical report once grading plans for the site become available for review. | | | |

**TABLE 1**
**MITIGATION MONITORING PROGRAM**

| Mitigation Measures | Responsible Party | Time Frame for Implementation | Department or Agency Responsible for Monitoring |
|---|---|---|---|
| **Noise** | | | |
| The following mitigation measures are recommended to reduce construction noise impacts on adjacent noise sensitive land uses: | | | |
| **Mitigation Measure 3.11A**: Construction activities shall be confined to the hours of 7:00 a.m. and 6:30 p.m. on weekdays and on Saturdays between the hours of 8:00 a.m. and 6:00 p.m. | Developer/ Contractor | Construction Phase | Site Inspections by City of Newport Beach Planning Department and Code Enforcement Division |
| **Mitigation Measure 3.11.B**: Equipment mufflers for construction equipment shall be used at all times. | Developer/ Contractor | Construction Phase | |
| **Mitigation Measure 3.11.C**: Idling of construction vehicles and equipment shall be limited to the extent feasible. Construction vehicles and equipment shall be properly operated and maintained and shall be turned off when not in use. | Developer/ Contractor | Construction Phase | Site Inspections by City of Newport Beach Building and Planning Departments and Code Enforcement Division |
| **Public Services** | | | |
| The following mitigation measure would reduce potential adverse impacts on school services: | | | |
| **Mitigation Measure 3.13.A:** Prior to issuance of the first building permit, school impacts fees will be paid to the Newport-Mesa Unified School District to assist in funding school facility expansion and educational services to area residents. | Developer/ Contractor | Prior to Issuance of Building Permit | Newport Beach Building Department |
| **Transportation/Traffic** | | | |
| The following mitigation measures would reduce any potential traffic and parking related impacts from the proposed Project: | | | |
| **Mitigation Measure 3.15.A:** Sight distance at the proposed Project accesses should be reviewed with respect to City of Newport Beach standards in conjunction with the preparation of final grading, landscape, and street improvement plans. | Developer/ Contractor | In conjunction with the preparation of final grading, landscape, and street improvement plans | Site Inspections by City of Newport Beach Public Works Department |
| **Mitigation Measure 3.15.B:** On-site traffic signing and striping should be implemented in conjunction with detailed construction plans for the proposed Project. | Developer/ Contractor | In conjunction with the preparation of final grading, | Site Inspections by City of Newport Beach Public Works Department |

**TABLE 1**
**MITIGATION MONITORING PROGRAM**

| Mitigation Measures | Responsible Party | Time Frame for Implementation | Department or Agency Responsible for Monitoring |
|---|---|---|---|
| | | landscape, and street improvement plans | |
| **Mitigation Measure 3.15.C:** The City of Newport Beach should periodically review traffic operations in the vicinity of the proposed Project once the proposed Project is constructed to assure that the traffic operations are satisfactory. | Developer/ Contractor | Ongoing | Site Inspections by City of Newport Beach Public Works Department |
| **Mitigation Measure 3.15.D:** The parking design shall meet all City requirements regarding parking stall width, parking stall depth, parking aisle grade, and parking aisle-turning radii. | Developer/ Contractor | Prior to Issuance of Building Permit | Site Inspections by City of Newport Beach Planning Department |
| **Mitigation Measure 3.15.E:** Each parking level should have large numbers on the pillars or walls designating on which floor level the user has parked. Letters can also be added to designate what area within a parking level the person has parked, such as 2B. | Developer/ Contractor | Prior to Issuance of Building Permit | Site Inspections by City of Newport Beach Planning Department |
| **Utilities and Service Systems**<br><br>Water conservation measures suggested by the City of Newport Beach, would reduce demand for groundwater, surface water and imported water supplies. These water conservation measures include: | | | |
| **Mitigation Measure 3.16 A:** New landscaping shall incorporate drought-tolerant plant materials and drip irrigation systems, wherever possible. | Developer/ Contractor | Prior to Issuance of Building Permit | Site Inspections by City of Newport Beach Planning Department |
| **Mitigation Measure 3.16 B:** Water leaving the project site due to over-irrigation of landscape, shall be minimized. If an incident such as this is reported, a representative from the Code and Water Quality Enforcement Division of the City Manager's Office shall visit the location, investigate, inform resident if possible, leave a note and in some cases shut-off the water. | Developer/ Contractor | Ongoing | Site Inspections by City of Newport Beach Planning Department and Code Enforcement Division |
| **Mitigation Measure 3.16 C:** Watering should be done during the early morning or evening hours to minimize evaporation (between 4:00 p.m. and 9:00 a.m., the following morning). | Developer/ Contractor | Ongoing | Site Inspections by City of Newport Beach Planning Department and Code Enforcement Division |

**TABLE 1**
**MITIGATION MONITORING PROGRAM**

| Mitigation Measures | Responsible Party | Time Frame for Implementation | Department or Agency Responsible for Monitoring |
|---|---|---|---|
| **Mitigation Measure 3.16 D:** All leaks shall be investigated by a representative from the Code and Water Quality Enforcement Division of the City Manager's Office and any the applicant shall complete all required repairs. | Developer/ Contractor | Ongoing | Site Inspections by City of Newport Beach Planning Department and Code Enforcement Division |
| **Mitigation Measure 3.16 E:** Water should not be used to clean paved surfaces, such as sidewalks, driveways, parking areas, etc., except to alleviate immediate safety or sanitation hazards. | Developer/ Contractor | Ongoing | Site Inspections by City of Newport Beach Planning Department and Code Enforcement Division |
| **Mitigation Measure 3.16 F:** Reclaimed water shall be used wherever available, assuming it is economically feasible. | Developer/ Contractor | Prior to Issuance of Building Permit | Site Inspections by City of Newport Beach Planning Department and Code Enforcement Division |
| **Mitigation Measure 3.16 G:** Installation of Ultra-Low Flush Toilets (ULFT) in the residential units. | Developer/ Contractor | Construction Phase | Site Inspections by City of Newport Beach Planning Department and Code Enforcement Division |

# Table 9
# Inclusionary Housing In-Lieu Fee Calculation
# City of Newport Beach Housing In-Lieu Fee Study

| Item | Income Category: *Very Low* | *Low* | *Moderate* | *Total or Weighted Avg.* |
|---|---|---|---|---|
| **Scenario A: Projects provide units for a mix of income levels or pay in-lieu fee based on weighted average** | | | | |
| Weighted Average Subsidy by Income Level (1) | $226,000 | $144,000 | $76,000 | |
| x Percent Inclusionary | **5.0%** | **10.0%** | **5.0%** | **20.0%** |
| ***Required Inclusionary Housing In-Lieu Fee per Market Rate Unit*** | *$11,300* | *$14,400* | *$3,800* | ***$29,500*** |
| **Scenario B: Projects provide units for a single income level; percent of units varies to level subsidies between projects** | | | | |
| Weighted Average Subsidy by Income Level (1) | $226,000 | $144,000 | $76,000 | |
| x Percent Inclusionary | **12.5%** | **20.0%** | **37.5%** | |
| ***Required Inclusionary Housing In-Lieu Fee per Market Rate Unit*** | *$28,250* | *$28,800* | *$28,500* | [redacted] |
| **Scenario C: Projects provide units for a single income level; for-sale projects provide 25% units plus added in-lieu fee** | | | | |
| Weighted Average Subsidy by Income Level (1) | $226,000 | $144,000 | $76,000 | |
| x Percent Inclusionary | **12.5%** | **20.0%** | **25.0%** | |
| Subsidy value of units required to be constructed | $28,250 | $28,800 | *$19,000* | |
| plus Additional in-lieu fee | $0 | $0 | **$9,500** | |
| ***Required Inclusionary Housing In-Lieu Fee per Market Rate Unit*** | *$28,250* | *$28,800* | *$28,500* | ***$28,500*** |

(1) Subsidies per unit are rounded to the nearest thousand dollars, and are based on rental apartments for low and very low income, for-sale units for moderate income.

*Sources: Economic & Planning Systems, Inc.*

## Table 10
## Examples of Inclusionary Housing Requirements or In-Lieu Fee Calculation
## City of Newport Beach Housing In-Lieu Fee Study

| Project | Total Units | Requirement | Scenario A | Scenario B | Scenario C |
|---|---|---|---|---|---|
| **Lennar - Santa Barbara Condominiums** | 79 | Very Low | 4 units | 10 units | 10 units |
| | | Low | and 8 units | or 16 units | or 16 units |
| | | Moderate | and 4 units | or 30 units | or 20 units + $750,500 fee |
| | | Total Units | 16 units | 10-30 units | 10-20 units |
| | | or | | | |
| | | In-Lieu Fee | $2,330,500 | $2,251,500 | $2,251,500 |
| **Brookfield Homes - Quail Street Residential** | 86 | Very Low | 4 units | 11 units | 11 units |
| | | Low | and 9 units | or 17 units | or 17 units |
| | | Moderate | and 4 units | or 32 units | or 22 units + $817,000 fee |
| | | Total Units | 17 units | 11-32 units | 11-22 units |
| | | or | | | |
| | | In-Lieu Fee | $2,537,000 | $2,451,000 | $2,451,000 |

*Sources: City of Newport Beach; Economic & Planning Systems, Inc.*

# CITY OF NEWPORT BEACH

**PUBLIC WORKS DEPARTMENT**
3300 NEWPORT BOULEVARD
P.O. BOX 1768, NEWPORT BEACH, CA 92659-1768
(949) 644-3311

## TRANSMITTAL

**TO:** Marice H. White
**GOVERNMENT SOLUTIONS**
230 Newport Center Drive, Suite 230
Newport Beach, CA 92660
**Attn: Marice White**

**DATE:** January 5, 2005

**SUBJECT:** Santa Barbara Condo Traffic Study – Additional Traffic Engineering Services Scope and Fee

We are transmitting the following:

| No. of Copies | Description |
|---|---|
| 1 | Scope and Fee Letter |
| 1 | Authorization Form |
| 1 | Consultant Scope of Work |

Comments:

Marice,

Per our phone conversation yesterday, please fond enclosed the scope, fee and authorization form for Kunzman Associates for additional traffic engineering services to prepare a general plan level traffic analysis. If you have any questions, please feel free to contact me at 949.644.3349.

David L. Keely
Associate Engineer
Public Works

Attachment
H:\dkeely\Traffic Phasing Ordinance\TPO\Santa Barbara Condominium\cb11-10-04xmt.doc

# CITY OF NEWPORT BEACH

## PUBLIC WORKS DEPARTMENT

Stephen G. Badum, Director

January 5, 2005

Marice H. White
**Government Solutions**
230 Newport Center Drive, Suite 210
Newport Beach, CA92660

**Subject:** **Traffic Phasing Ordinance Traffic Analysis – Santa Barbara Condominium (900 Newport Center Drive) – Additional Work**

Dear Ms. White:

Enclosed, please find the proposal submitted by Kunzman Associates for traffic engineering services associated with the preparation of a General Plan level traffic analysis to be incorporated into the Traffic Phasing Ordinance Traffic Analysis for the proposed 79 unit Condominium Project currently on-going. The consultant's proposal outlines the scope and cost of the additional General Plan level traffic analysis.

The scope and fees have been reviewed and are considered appropriate and warranted, and are as follows:

| | |
|---|---|
| Traffic Phasing Ordinance Analysis | $ 3,300.00 |
| City Fees (10%) | $ 330.00 |
| **Total** | **$ 3,630.00** |

Please submit a check payable to the City of Newport Beach in the amount of $3,360, and sign and return the enclosed authorization form. Your prompt response is appreciated.

Please call me at (949) 644-3349 if you have any questions.

Sincerely,

David L. Keely
Associate Engineer
Public Works

Attachments: Contract Authorization
Kunzman Associates Proposal

Cc: Rosalinh Ung, CNB Planning
*Rich Edmonston, CNB Public Works*

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# CITY OF NEWPORT BEACH

## PUBLIC WORKS DEPARTMENT

Stephen G. Badum, Director

January 5, 2005

Marice H. White
**Government Solutions**
230 Newport Center Drive, Suite 210
Newport Beach, CA92660

**Subject:** **Traffic Phasing Ordinance Traffic Analysis – Santa Barbara Condominium – Additional Work**

Dear Ms. White:

Please sign the authorization and return with a check payable to the City of Newport Beach in the amount of $3,630.00 at your earliest convenience.

## *CONTRACT APPROVAL/AUTHORIZATION:*

| | |
|---|---|
| ***Approved By:*** | David L. Keely |
| Title: | Associate Civil Engineer |
| Firm: | City of Newport Beach |
| Date: | September 21, 2001 |
| Traffic Consultant: | Kunzman Associates<br>1111 Town & Country Road, Suite 34<br>Orange, CA 92868-4667 |
| Date of Proposal | 01/04/05, Attached |
| Project Applicant: | Marice H. White |
| Applicant Approval: | _____ |
| Project Address: | Santa Barbara Condominium Project<br>900 Newport Center Drive |

Steven Badum, Public Works Director

BY: _____
David L. Keely
Associate Engineer
Public Works

Cc: Rich Edmonston, CNB Public Works

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KUNZMAN ASSOCIATES
TRAFFIC ENGINEERING AND
TRANSPORTATION PLANNING

January 4, 2005

Mr. David Keely, Associate Engineer
CITY OF NEWPORT BEACH
3300 Newport Boulevard
Newport Beach, CA 92659-1768

Dear Mr. Keely:

## INTRODUCTION

The firm of Kunzman Associates is pleased to submit this proposed agreement to provide professional engineering services for a General Plan Amendment traffic impact analysis for the Santa Barbara Condominium Project in the City of Newport Beach. The GPA study will be included within the Santa Barbara Condominium Project Traffic Impact Analysis prepared by Kunzman Associates. This proposal outlines a scope of work based on the information provided by you, and our understanding of the requirements of this traffic impact analysis.

## SCOPE OF WORK

The traffic impact analysis will consist of receiving Year 2025 without project traffic volumes from the City of Newport Beach and analyzing Year 2025 with project traffic conditions based upon the Intersection Capacity Utilization (ICU) methodology at up to eleven (11) study area intersections.

## COPIES OF REPORT

Three copies (two bound and one original) of the traffic impact analysis will be submitted.

## TIME SCHEDULE

It is estimated that the traffic impact analysis will take approximately 10 working days to complete from the date of authorization, and date of receipt of data essential for the study. Additionally, any delays resulting from circumstances beyond our control such as, but not limited to, illness, equipment malfunction, weather, or employee departure, shall extend the time schedule.

1111 TOWN & COUNTRY ROAD, SUITE 34 ▪ ORANGE, CA 92868-4667
TELEPHONE: (714) 973-8383 ▪ FACSIMILE: (714) 973-8821
E-MAIL: MAIL @ TRAFFIC-ENGINEER.COM ▪ WEB: WWW.TRAFFIC-ENGINEER.COM

## COMPENSATION

The fee for the work outlined in this proposal shall be based upon personnel charges plus direct expenses as indicated in the Standard Compensation Schedule, a copy of which is attached and is incorporated into the Memorandum of Agreement in its entirety. However, in no case will the total fee for the specified services exceed $3,300 without prior approval from you or your authorized representative. The fee includes Kunzman Associates maintaining broad form general liability insurance, workman compensation insurance, and professional liability insurance; however, any insurance required by the client above that currently maintained by Kunzman Associates shall be a reimbursable expense in addition to the total fee quoted. The fee does not include attendance or presentation at a public hearing.

This letter can serve as a Memorandum of Agreement and our authorization to proceed. Please sign one copy and return it to us for our files. We are looking forward to serving you on this project.

Respectfully submitted,

KUNZMAN ASSOCIATES

Carl Ballard
Senior Associate

#3124a

## CONTRACT APPROVAL

**Approved by:** _____

**Title:** _____

**Firm:** _____

**Date:** _____

**Place of Execution:** _____

# STANDARD COMPENSATION SCHEDULE

(Effective January, 1999)

| Classification | Hourly Rate |
|---|---|
| Principal | $150.00 |
| Senior Associate | $125.00 |
| Associate | $100.00 |
| Assistant | $ 40.00 |
| Technician | $ 40.00 |
| Secretary | $ 40.00 |

## General Provisions of Agreement

1. Travel, reproduction, and supply costs are billed at cost.

2. Hourly rates apply to work time as well as travel time and waiting time which occur at meetings, public hearings, depositions, or court testimony.

3. Statements will be submitted monthly for work in progress or upon completion of work. Statements are payable within 30 days of the statement date. Any invoice unpaid after 30 days shall be subject to a service charge of the maximum interest rate allowed by law or two percent per month, whichever is less.

4. Client hereby agrees that the balance in a billing statement is correct and binding unless the client notifies the consultant in writing within fifteen days of the date of billing and informs consultant of the alleged incorrect item.

5. All documents produced as a result of this agreement may be used by the consultant without consent from the client.

6. The consultant makes no warranty as to his findings except that the work is performed using generally accepted methods.

7. The consultant will format the report according to client instructions at the beginning of the project, or in the absence of such the absence of such instructions, in a format chosen by the consultant and consistent with accepted professional transportation engineering studies.

8. The consultant will produce an objective, professional report, and may not arrive at the findings desired by the client.

9. The client agrees to limit the consultant's liability to the client, because of professional negligent acts, errors, or omissions by the consultant, to the consultant's fee.

10. Any controversy or claim arising out of or relating to this contract, or the breach thereof, shall be settled by arbitration in accordance with the rules of the American Arbitration Association, and judgment upon the award rendered by the arbitration may be entered in any court having jurisdiction thereof.

11. Where Kunzman initiates arbitration proceedings relating to this contract, any resultant fees to process arbitration, such as filing fees and attorney fees, all shall be borne by the client.

12. If any term, condition, or provision of this Agreement is declared void, unenforceable, or limited in its application or effect, such event shall not affect any other provisions hereof and all of the provisions shall remain fully enforceable.

*Kunzman Associates*

# CITY OF NEWPORT BEACH

**PLANNING DEPARTMENT**
Patricia L. Temple, Director

November 10, 2004

Karen L. Ruggels
Vice President Principal-in-Charge
David Evans and Associates, Inc.
8989 Rio San Diego Dr, Suite 335
San Diego, CA 92108

RE: PROFESSIONAL SERVICES AGREEMENT FOR SANTA BARBARA CONDOMINIUMS PROJECT, NEWPORT BEACH, CA

Dear Ms. Ruggels:

Attached is the Professional Service Agreement for the Santa Barbara Condominiums Project. This Agreement has been reviewed and approved by the City's Attorney Office to authorize your firm to proceed with work described in the project proposal. Please review and sign the Agreement. The original Agreement should be returned to me as soon as possible to be signed by the Mayor and the City Clerk. A copy of the executed Agreement will be mailed to you at a later date. Once this process is done, I will contact your associate, Dustin Fuller, for our first organization team meeting.

Should you have any questions regarding to the Agreement, please feel free to contact me at (949) 644-3208.

Sincerely,

Rosalinh M. Ung
Associate Planner

Attachment

October 1, 2004

**City of Newport Beach**
3300 Newport Blvd., PO Box 1768
Newport Beach, CA 92658
**Attn: Rosalinh Ung**

**Subject: PROPOSAL TO PROVIDE ENVIRONMENTAL SERVICES TO THE CITY OF NEWPORT BEACH FOR THE PROPOSED SANTA BARBARA CONDOMINIUMS PROJECT**

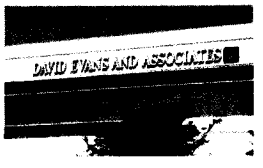
Dear Ms. Ung:

*David Evans and Associates, Inc.* (*DEA*) has the specific qualifications needed to provide environmental services for The City of Newport Beach in its review of the proposed *Santa Barbara Condominiums* project. *DEA* is a full-service multi-disciplined consulting firm. Our combined expertise and experience enable us to provide professional environmental services, as well as a wide array of planning engineering, surveying, and landscape architecture services to private and public sector clients.

*DEA* recognizes that the preparation of an understandable, well-written and objective environmental report is a critical part of the project review and implementation processes, and *DEA* has the staff and resources to ensure that we can respond to your needs. We have a proven management plan that will ensure that task orders will be completed on time and within budget.

*DEA*'s Laguna Hills office will function as the headquarters for tasks and work assignments associated with this project. We have selected **Dustin Fuller** as your environmental task leader. Karen Ruggels, Vice President, will be your Principal-in-Charge. Supported by our in-house staff of environmental analysts and specialists, as well as our team of subconsultants specifically selected for this project, we will provide the City with the particular expertise necessary to ensure the successful completion of the EIR. The *DEA* team is ready to "step in" and complete the environmental review for the project. The address and telephone numbers for our office are presented below:

***David Evans and Associates, Inc.***
23382 Mill Creek Drive, Suite 225
Laguna Hills, California 92653
Phone: (949) 588-5050; Fax: (949) 588-5058




*The DEA project team is your consultant team of choice.* It has been assembled to provide the City of Newport Beach with the quality of professional consulting services necessary for the project in the most efficient and comprehensive manner possible. *DEA* maintains strong relationships with our clients due to the quality of services we provide, and we will take every step to meet or exceed your environmental review expectations for the *Santa Barbara Condominiums* project.

We would like to express our sincere enthusiasm over the prospect of working with the City of Newport Beach. Please feel free to contact me should questions arise from this proposal, during contract negotiations, or throughout the duration of the contract. If you need additional information, or if *DEA* can be of service to the City in any way, please do not hesitate to reach me at *(949) 588-5050.*

Sincerely,
**DAVID EVANS AND ASSOCIATES, INC.**

For Karen L. Ruggels, Vice President
Principal-in-Charge

Dustin Fuller
Project Manager

GOVERNMENT SOLUTIONS

July 21, 2004

Ms. Patricia Temple
Planning Director
City of Newport Beach
3300 Newport Boulevard
Newport Beach, CA 92660

**RE: General Plan Amendment, Zone Change, Tentative Tract Map, Parcel Map and Planned Community District Submittal**
**Lennar – Santa Barbara Condos**
**900 Newport Center Drive, Newport Beach**

Dear Ms. Temple:

Please find attached, an application package for a General Plan Amendment, Zone Change, Tentative Parcel Map (Resubdivision), Tract Map and Planned Community District Submittal for the development of the 79 townhomes located at 900 Newport Center Drive in Newport Beach on the site that is currently the Newport Beach Marriott Hotel's Tennis Complex. Lennar Homes is pleased and excited to present this application to the city, as it is their desire to undertake and kick-off a major redevelopment of the project site. The location of this project site, along Santa Barbara Dr., across from The Colony Apartments provides a unique opportunity to introduce highly desirable residences on a currently underutilized site. Our goal is improve the area and to add to the existing quality and distinction of Newport Center.

We propose to remove all existing structures on the project site, including 8 tennis courts and an associated clubhouse and parking, and construct 79 new townhomes, totaling approximately 205,679 square-feet. The height of the buildings is anticipated to range from 50 feet to 60 feet and an approximately 97,231 square-foot subterranean parking garage will serve both residents and guests. Additionally, the project will provide approximately 79,140 square-feet of open space and approximately 21,300 square-feet of hardscape which includes recreational areas for use by residents and their guests.

The new development proposes only two driveway curb cuts. A main entrance will be provided for residents and guests to access the two most southerly buildings and garage and a secondary driveway will provide residents and guests access to the most northerly building and parking garage.

230 Newport Center Drive, Suite 210 • Newport Beach, CA 92660 • 949-717-7943 main • 949-717-7942 fax • www.govsol.com

Due to the location of the site, Newport Center, and the site's unique characteristics with respects to shape and size we have included a proposed draft for a Planned Community District. The Planned Community designation is in keeping with how the majority of Newport Center has been developed and provides for unique architecture and design features with respect to building heights and density – again, similar to other areas of Newport Center, and in particular The Colony across the street from the proposed project site. The Planned Community District includes: building heights ranging from 50 feet to 60 feet; the construction of 79 residential townhome units; and front yard setbacks of 15 feet to accommodate constraints the narrow site presents. Based on our review of the Planned Community designation in the City's Zoning Code, the proposed site of 4.25 acres is below the required threshold of 10 acres, as such will be seeking a waiver from the Planning Director for this requirement.

Lennar Homes is very excited to submit this project to the City of Newport Beach, eager to begin the entitlement process and can attend a DRC meeting as soon as your schedule allows.

Please let us know if you have any questions about this application package or would like any additional information. You may contact me at (949) 717-7941 or marice@govsol.com.

Sincerely,

Marice H. White
Vice President
Government Solutions, Inc.
Property Owner's Representative

cc: Donna Larson, Lennar Homes
Mark Rosene, Lennar Homes
Robert Shorb, Host Marriott
Carol Hoffman, Government Solutions, Inc.
Coralee Newman, Government Solutions, Inc.

Attachments:

1. Letter of Authorization signed by Bob Shorb, Senior Vice President, Host Marriott
2. Application for General Plan Amendment and Zone Change
    a. Environmental Information Form
    b. Assessor's Parcel Map and 2 sets of Property Owner Address Labels
3. Draft Planned Community District Text
4. Application for Tentative Tract Map
    a. Written statement

b. 8 copies of Parcel Map
c. Assessor's Parcel Map and 2 sets of Property Owner Address Labels

5. Application for Parcel Map (Resubdivision)
    a. Written statement
    b. 8 copies of Parcel Map
    c. Assessor's Parcel Map and 2 sets of Property Owner Address Labels
6. Application for Site Plan Review
7. Site Photos
8. 20 sets (8 – 30"x42" and 12 – 11"x17") of plans including the following:
    i. Site Plan of Ground Level (1)
    ii. Site Plan
    iii. Site Plan
    iv. Fire Master Plan
    v. Tentative Tract Map
    vi. Parcel Map
    vii. Grading Plan
    viii. Demolition Plan
    ix. Building 1 Plans (3 sheets)
    x. Building 2 Plans (3 sheets)
    xi. Building 3 Plans (1 sheet)
    xii. Typical Floor Plans
    xiii. Building 1 Elevations
    xiv. Building 2 Elevations
    xv. Building 3 Elevations
    xvi. Landscape Concept Plan
    xvii. Lighting Plan (2 sheets)

# CITY OF NEWPORT BEACH

**PLANNING DEPARTMENT**
Patricia L. Temple, Director

September 24, 2004

Coralee Newman
Government Solutions
230 Newport Center Drive, Ste. 210
Newport Beach, CA 92660

RE: SANTA BARBARA CONDOMINIUMS PROJECT, NEWPORT BEACH

Dear Ms. Newman:

Per your request, this letter is to confirm the height limitation zone for the proposed project. The subject property, located at 900 Newport Center Dr., is located within the High Rise Height Limitation zone pursuant to Code Section 20.65.040 and the attached map. The High Rise Height Limitation zone has building height limit of 375 feet. This height limit will be applicable to the proposed residential project. For your record, please find the attached copy of the Height Limitation Zone map.

Should you have any other questions, please contact me at (949) 644-3208.

Sincerely,

Rosalinh M. Ung
Associate Planner

Enclosures: Section 20.65.040
Height Limitation Zone map

3300 Newport Boulevard · Post Office Box 1768 · Newport Beach, California 92658-8915
Telephone: (949) 644-3200 · Fax: (949) 644-3229 · www.city.newport-beach.ca.us

# CITY OF NEWPORT BEACH

**PUBLIC WORKS DEPARTMENT**
3300 NEWPORT BOULEVARD
P.O. BOX 1768, NEWPORT BEACH, CA 92659-1768
(949) 644-3311


## MEMORANDUM

**TO:** Rosalinh Ung
Planning Department

**FROM:** David Keely – Traffic Engineering

**DATE:** September 8, 2004

**SUBJECT:** GP2004-005 900 Newport Center Drive

The following are traffic related comments, corrections and conditions for the proposed 79 unit townhome project located at 900 Newport Center Drive:

- A Traffic Phasing Ordinance (TPO) is required for this project. Additional comments, corrections and conditions may follow after the completion of the TPO study.

- Typical parking stall dimensions are 8'-6" x 17' minimum. Plans show stall to be 8'-0" x 18'. Typical drive aisle dimension is 26 feet wide adjacent to an 8'-6" parking stall. All parking stall dimensions shall comply with City's Standard Drawings STD-805-L-A.

- The main entry drive with median island shall comply with City Standard STD-103-L, which shall has a 42' minimum outside radius and a maximum planter/median radius of 7'.

- The applicant shall supply information regarding the timing of the project as it compares to the Marriott Hotel renovation Phase I and II. It is staffs understanding that the tennis club parking area will be a staging area and primary parking area for portions of the renovation.

- Show the locations of any proposed gates/kiosks to the parking areas. A vehicle turnaround area should be provided prior to gates/kiosk.

- Driveway/drive aisle slopes shall comply with City Standard STD-160-L-C, which accommodated a 15 percent maximum slope and a maximum change in grade of 11 percent.

- The entries to both parking areas on Garage Level A shall be modified to accommodate vehicles entering/exiting and traveling in both directions. Parking stall dimensions and

drive aisle widths shall comply with City Standard STD-805-L-A. Dead end drive aisles shall be accommodated by a turnaround area and a 5 foot hammerhead. Plans do not adequately show ventilation and mechanical equipment, which tend to hinder the layout of garage parking areas.

- Project shall provide prominent pavement markings and signage to direct individuals to parking areas and exits.

- The sharp 90 degree turns into Garage Level B shall be modified to ease access into and out of both parking areas. Typically ramps to parking areas terminate into drive aisle rather than parking stalls. Revise parking/ramp layout as necessary to ease access to the parking areas (Building 1A & 2A). Parking stall dimensions and drive aisle widths shall comply with City Standard STD-805-L-A. Dead end drive aisles shall be accommodated by a turnaround area and a 5 foot hammerhead. Plans do not adequately show ventilation and mechanical equipment, which tend to hinder the layout of garage parking areas.

- Based on information provided on the Fire Master Plan, fire access and know box pedestrian access is shown from the adjacent property. Verify with the Fire Department is this is acceptable, since development on the adjacent site may change the access configuration and hinder fire access.

- The site shall accommodate all deliveries/trash pick up etc. to be handled on-site. Vehicles shall not be permitted to back out onto Santa Barbara Drive.

- The applicant shall verify with the Building Department whether or not the site is required to have ADA accessible parking stalls.

- Project driveway must conform to the City's sight distance standard 110-L for a speed of 40 mph. The design shall be reviewed and approved by the City Traffic Engineer.

- Staging of construction equipment shall not be permitted on the public right-of-way.

David Keely
Associate Engineer
Public Works - Traffic Engineering

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PRELIMINARY COMMENTS FOR SANTA BARBARA RESIDENTIAL PROJECT
September 15, 2004

BUILDING DEPARTMENT:

- Disabled access is required.
- Water Quality Management Plan – draft req. as part end. review
- Preliminary code review meeting with Building & Fire Departments highly recommended.

FIRE DEPARTMENT:

- All buildings shall be provided with fire sprinklers.
- An additional fire hydrant shall be provided at the north end of the lot, 300 feet from the other hydrant.
- All elevators gurney accommodating shall be in accordance with Chapter 30 of the California Building Code.
- A Class I standpipe shall be provided in the lower level of the parking area, in addition to the other ones provided onsite.
- A fire alarm system with fire control room shall be provided at the turnaround. provide emerg. egress or 20 ft. easement w/ Marriott

PLANNING DEPARTMENT:

- Zone Change to PC is not required as property is located in High Rise zone of 375 ft. – letter of confirmation of high zone of 375 for rec. inst.
- Application includes: General Plan Amendment from APF to MFR, Zoning Change from APF to MFR, Tract Map and Parcel Map.
- Comply with the 20 ft. front yard setback requirement – mod permit for lack of setback
- Comply with the affordable housing provision – 20% of all new housing units to very low- and low-income households (projects have more than 50 units shall be required to provide units either on-site or off-site at approved location by the City), per the Housing Element.
- Environmental Determination: Mitigated Neg. Dec., EIR is being requested. 40,000 cu yd.
- Environmental Consultant Selection: David Evans and Associated.
- Coastal Residential Development permit is required.
- Identify method of trash disposal and pickup.

# CITY OF NEWPORT BEACH

**PUBLIC WORKS DEPARTMENT**
3300 NEWPORT BOULEVARD
P.O. BOX 1768, NEWPORT BEACH, CA 92659-1768
(949) 644-3311


## MEMORANDUM

**TO:** Rosalinh Ung
Planning Department

**FROM:** David Keely – Traffic Engineering

**DATE:** September 8, 2004

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David Keely
Associate Engineer
Public Works - Traffic Engineering

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# CITY OF NEWPORT BEACH

## PUBLIC WORKS DEPARTMENT

Stephen G. Badum, Director

September 21, 2004

Marice H. White
**Government Solutions**
230 Newport Center Drive, Suite 210
Newport Beach, CA92660

**Subject:** **Traffic Phasing Ordinance Traffic Analysis – Santa Barbara Condominium (900 Newport Center Drive)**

Dear Ms. White:

Enclosed, please find the proposal submitted by Kunzman Associates for traffic engineering services associated with the preparation of a Traffic Phasing Ordinance Traffic Analysis for the proposed 79 unit Condominium Project located at 900 Newport Center Drive. The consultant's proposal outlines the scope and cost of analysis to determine the impact of the subject project on the City's Traffic Circulation System and impacts of adding project-generated traffic.

The scope and fees have been reviewed and are considered appropriate and warranted, and are as follows:

| | |
|---|---|
| Traffic Phasing Ordinance Analysis | $ 15,600.00 |
| City Fees (10%) | $ 1,560.00 |
| **Total** | **$ 17,160.00** |

Please submit a check payable to the City of Newport Beach in the amount of $17,160, and sign and return the enclosed authorization form. Your prompt response is appreciated.

Please call me at (949) 644-3349 if you have any questions.

Sincerely,

David L. Keely
Associate Engineer
Public Works

Attachments: Contract Authorization
Kunzman Associates Proposal

Cc: [redacted]
Rich Edmonston, CNB Public Works

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# CITY OF NEWPORT BEACH

## PUBLIC WORKS DEPARTMENT

Stephen G. Badum, Director

September 21, 2004

Marice H. White
**Government Solutions**
230 Newport Center Drive, Suite 210
Newport Beach, CA92660

**Subject:** **Traffic Phasing Ordinance Traffic Analysis – Santa Barbara Condominium**

Dear Ms. White:

Please sign the authorization and return with a check payable to the City of Newport Beach in the amount of $17,160.00 at your earliest convenience.

## *CONTRACT APPROVAL/AUTHORIZATION:*

| | |
|---|---|
| ***Approved By:*** | David L. Keely |
| Title: | Associate Civil Engineer |
| Firm: | City of Newport Beach |
| Date: | September 21, 2001 |
| Traffic Consultant: | Kunzman Associates<br>1111 Town & Country Road, Suite 34<br>Orange, CA 92868-4667 |
| Date of Proposal | 09/21/2004, Attached |
| Project Applicant: | Marice H. White |
| Applicant Approval: | _____ |
| Project Address: | Santa Barbara Condominium Project<br>900 Newport Center Drive |

Steven Badum, Public Works Director

BY: _____
David L. Keely
Associate Engineer
Public Works

Cc: Rich Edmonston, CNB Public Works

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KUNZMAN ASSOCIATES
TRAFFIC ENGINEERING AND TRANSPORTATION PLANNING

September 20, 2004

Mr. David Keely, Associate Engineer
CITY OF NEWPORT BEACH
3300 Newport Boulevard
Newport Beach, CA 92659-1768

Dear Mr. Keely:

## INTRODUCTION

The firm of Kunzman Associates is pleased to submit this proposed agreement to provide professional engineering services for a traffic impact analysis for the Santa Barbara Condominium Project in the City of Newport Beach. This proposal outlines a scope of work based on the information provided by you, and our understanding of the requirements of this traffic impact analysis.

The proposed condominium project is located southerly of Santa Barbara Drive between Jamboree Road and Newport Center Drive West. The existing site consists of a tennis club that includes eight (8) tennis courts. The proposed project will add 79 dwelling units with subterranean parking.

The proposed expansion would require an Expanded Traffic Phasing Ordinance (TPO) traffic analysis to determine the impact of the subject project on the City of Newport Beach traffic circulation system. In addition to a standard TPO study, the traffic study is required to include a cumulative traffic analysis consistent with the California Environmental Quality Act (CEQA), examine project access, subterranean parking, and on-site circulation (ramp slopes, turning radii, loading facilities, gates, etc.). The cumulative traffic analysis includes reasonably foreseeable projects, which have not yet been approved. The scenarios to be evaluated are:

- Existing Conditions (Standard TPO);
- Existing Plus Approved Projects (Standard TPO);
- Existing Plus Approved Projects Plus Project (Standard TPO);
- Existing Plus Approved Projects Plus Cumulative Projects (Cumulative Traffic Analysis); and
- Existing Plus Approved Projects Plus Cumulative Projects Plus Project (Cumulative Traffic Analysis).

1111 TOWN & COUNTRY ROAD, SUITE 34 • ORANGE, CA 92868-4667
TELEPHONE: (714) 973-8383 • FACSIMILE: (714) 973-8821
E-MAIL: MAIL @ TRAFFIC-ENGINEER.COM • WEB: WWW.TRAFFIC-ENGINEER.COM

Feasible mitigation measures (including concept plans) will be recommended for all significantly impacted study area intersections.

## SCOPE OF WORK

The traffic impact analysis will consist of preparing an objective report suitable for submission to the reviewing agency. The report will be prepared in accordance with accepted professional transportation engineering standards. The final illustrated report will summarize the traffic impact analysis findings, methodology, and supportive data. It will quantify existing traffic conditions, traffic conditions upon project completion, and recommend mitigation measures.

Specifically, the traffic impact analysis will consist of (1) conducting a field survey; (2) documenting existing traffic conditions; (3) determining project traffic generation; (4) distributing the project traffic generation to the street system; (5) determining the project's traffic impacts; (6) analyzing site access locations; (7) examining internal circulation including emergency vehicle access; (8) mitigating the impacts; and (9) preparing a written report. Mitigation measures will include roadway sizing recommendations, intersection controls, and special treatments such as left turn pockets and right turn lanes as might be required by the project.

The traffic impact analysis will include calculation of project contribution at up to fourteen (14) study area intersections during the morning and evening peak hours on a typical weekday. The precise study area intersection locations will be identified based upon discussions with City staff. The City will provide morning and evening peak hour intersections counts for all 14 study area intersection locations.

## COPIES OF REPORT

Three copies (two bound and one original) of the traffic impact analysis will be submitted.

## DRAFT COMMENTS

This proposal does include response to one set of draft comments, whether the draft comments are verbal or written, once the report is submitted to the reviewing agency. Any changes that may be required after responding to the first set of draft comments will be charged in addition to the amounts contained in this proposal.

## MEETING ATTENDANCE

This proposal includes one general orientation meeting if necessary for report discussion, and does not include attendance at public meetings. The cost for attendance at meetings will be charged in accordance with Provisions 2 and 3 of the Standard Compensation Schedule.

## TIME SCHEDULE

It is estimated that the traffic impact analysis will take approximately 30 working days to complete from the date of authorization, and date of receipt of data essential for the study. Additionally, any delays resulting from circumstances beyond our control such as, but not limited to, illness, equipment malfunction, weather, or employee departure, shall extend the time schedule.

## QUALIFICATIONS

Kunzman Associates is located in the City of Orange and specializes in transportation planning for governmental agencies and the business community. The firm has highly qualified personnel with experience throughout Southern California at the regional, local, and individual project level. The experience of the firm's personnel in transportation planning and traffic operations for new planned communities, as well as established areas provides the special skills necessary for determining imaginative, practical, and meaningful solutions to transportation problems. The firm was established in 1976 by William Kunzman, P.E., and since then the firm has completed over 1,500 transportation studies for over 300 different clients.

Carl Ballard will be Kunzman Associates' project manager and assure that manpower and material resources are allocated to complete the project on time and within the budget. Since 1982, his work experience includes site access evaluation, intersection capacity analysis, traffic forecasting, circulation planning, traffic impact studies, and transportation demand management plans. His education includes completing undergraduate studies in mathematics at California State University, Fullerton (1986).

## EXPERIENCE DIRECTLY RELEVANT

Kunzman Associates has extensive experience in working with projects in the City of Newport Beach. Kunzman Associates personnel have conducted numerous traffic impact analyses within the study area over the past 25 years.

## COMPENSATION

The fee for the work outlined in this proposal shall be based upon personnel charges plus direct expenses as indicated in the Standard Compensation Schedule, a copy of which is attached and is incorporated into the Memorandum of Agreement in its entirety. However, in no case will the total fee for the specified services exceed $15,600 without prior approval from you or your authorized representative. The fee includes Kunzman Associates maintaining broad form general liability insurance, workman compensation insurance, and professional liability insurance; however, any insurance required by the client above that currently maintained by Kunzman Associates shall be a reimbursable expense in addition to the total fee quoted. The fee does not include attendance or presentation at a public hearing.

This letter can serve as a Memorandum of Agreement and our authorization to proceed. Please sign one copy and return it to us for our files. We are looking forward to serving you on this project.

Respectfully submitted,

KUNZMAN ASSOCIATES

Carl Ballard
Senior Associate

#3124

**CONTRACT APPROVAL**

**Approved by:** _____

**Title:** _____

**Firm:** _____

**Date:** _____

**Place of Execution:** _____

KUNZMAN ASSOCIATES
TRAFFIC ENGINEERING AND TRANSPORTATION PLANNING

# FAX TRANSMITTAL

DATE: September 20, 2004

TO: David Keely

FIRM: City of Newport Beach

FAX NO: (949) 644 3318

FROM: Carl Ballard

COMMENTS:

David, a hard copy will follow by mail. Thank you.

NUMBER OF PAGES:

THIS PAGE: 1

TEXT: 5

FIGURES/TABLES: 0

TOTAL: 6 (including this page)

If there are any problems with this transmission, please call.

1111 TOWN & COUNTRY ROAD, SUITE 34 • ORANGE, CA 92868-4667
TELEPHONE: (714) 973-8383 • FACSIMILE: (714) 973-8821
E-MAIL: MAIL @ TRAFFIC-ENGINEER.COM • WEB: WWW.TRAFFIC-ENGINEER.COM

# STANDARD COMPENSATION SCHEDULE

(Effective January, 1999)

| Classification | Hourly Rate |
|---|---|
| Principal | $150.00 |
| Senior Associate | $125.00 |
| Associate | $100.00 |
| Assistant | $ 40.00 |
| Technician | $ 40.00 |
| Secretary | $ 40.00 |

## General Provisions of Agreement

1. Travel, reproduction, and supply costs are billed at cost.

2. Hourly rates apply to work time as well as travel time and waiting time which occur at meetings, public hearings, depositions, or court testimony.

3. Statements will be submitted monthly for work in progress or upon completion of work. Statements are payable within 30 days of the statement date. Any invoice unpaid after 30 days shall be subject to a service charge of the maximum interest rate allowed by law or two percent per month, whichever is less.

4. Client hereby agrees that the balance in a billing statement is correct and binding unless the client notifies the consultant in writing within fifteen days of the date of billing and informs consultant of the alleged incorrect item.

5. All documents produced as a result of this agreement may be used by the consultant without consent from the client.

6. The consultant makes no warranty as to his findings except that the work is performed using generally accepted methods.

7. The consultant will format the report according to client instructions at the beginning of the project, or in the absence of such the absence of such instructions, in a format chosen by the consultant and consistent with accepted professional transportation engineering studies.

8. The consultant will produce an objective, professional report, and may not arrive at the findings desired by the client.

9. The client agrees to limit the consultant's liability to the client, because of professional negligent acts, errors, or omissions by the consultant, to the consultant's fee.

10. Any controversy or claim arising out of or relating to this contract, or the breach thereof, shall be settled by arbitration in accordance with the rules of the American Arbitration Association, and judgment upon the award rendered by the arbitration may be entered in any court having jurisdiction thereof.

11. Where Kunzman initiates arbitration proceedings relating to this contract, any resultant fees to process arbitration, such as filing fees and attorney fees, all shall be borne by the client.

12. If any term, condition, or provision of this Agreement is declared void, unenforceable, or limited in its application or effect, such event shall not affect any other provisions hereof and all of the provisions shall remain fully enforceable.

*Kunzman Associates*

# CITY OF NEWPORT BEACH

**PLANNING DEPARTMENT**
Patricia L. Temple, Director

(949) 644-3208


September 16, 2004

Dustin Fuller
Project Manager
David Evans and Associates
8989 Rio San Diego Drive, Ste. 335
San Diego, CA 92108

SUBJECT: REQUEST FOR PROPOSAL INTEREST FOR CONSULTING SERVICES RELATING TO THE ENVIRONMENTAL REVIEW PROCESS

Dear Mr. Fuller:

The City of Newport Beach is processing an application for the development of 79 townhomes located at 900 Newport Center Drive on the site that is currently the Newport Beach Marriott Hotel's Tennis Complex. The applicant has submitted an application package for a General Plan Amendment, Zone Change, Tentative Parcel Map, and Tentative Tract Map to be reviewed by the City's Planning Commission and City Council. The request for Planned Community District approval is no longer applicable.

Based on the information provided by the applicant for the proposed project, a traffic study is required. The Public Works Department is in the process of selecting a traffic consultant for this study. Once the study is completed, the document will be available for review and project coordination.

The Planning Department will be providing the following documents to aid in the environmental analysis:

1) Copy of the application including submitted plans;
2) Copy of the applicant's Environmental Information Form; and
3) Copy of the letter dated July 21, 2004, prepared by Governmental Solutions Inc. describing the proposed project.

Your firm has been pre-qualified to assist the City with the preparation of required environmental document to fulfill the requirements of CEQA. The developer, Lennar Homes, will fund the environmental assessment through an agreement with the City. As such, we are requesting that you review the attached project development plans and prepare an Initial Study as the first phase follow by a Mitigated Negative Declaration as the second phase.

Please provide us a letter of proposal interest by October 1, 2004, including any issues you have identified, plus your preliminary scope of work, estimated timeframe and costs to complete the environmental analysis. Also, please identify which office (San Diego or Laguna Hills) will be responsible for this project. We would prefer the Laguna Hills office as it is closer to Newport Beach. The City will scrutinize both your projected budget and timeframe in determining acceptance of your firm's proposal of interest.

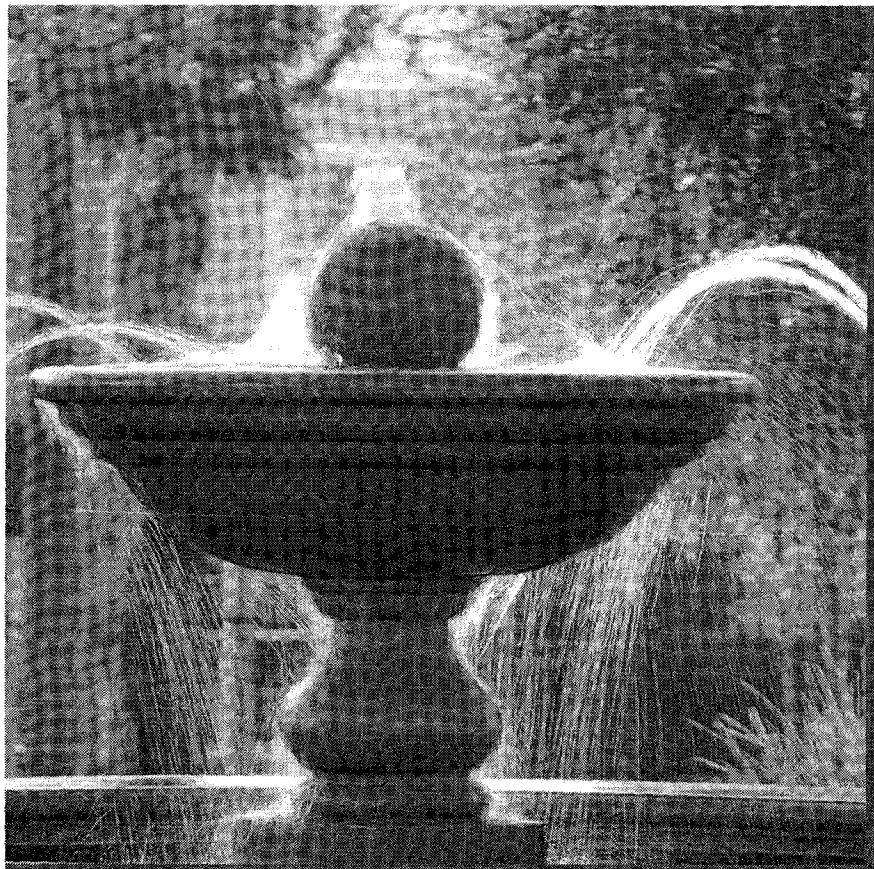
After review and potential acceptance of your proposal of interest, a professional service agreement will be prepared if the City chooses to engage your firm and will be provided to you by the City. The City reserves the right to reject your proposal and may solicit proposals from other qualified consultants. This request for proposal and/or a letter notifying the firm that they have been selected should not be construed to represent a notice to proceed or a guarantee that the City will accept your proposal or contract of services. Only upon execution of a City professional services agreement shall services begin.

Please do not hesitate to contact me at (949) 644-3208 or rung@city.newport-beach.ca.us if you have any questions.

Sincerely,

Rosalinh Ung
Associate Planner

Attachments:

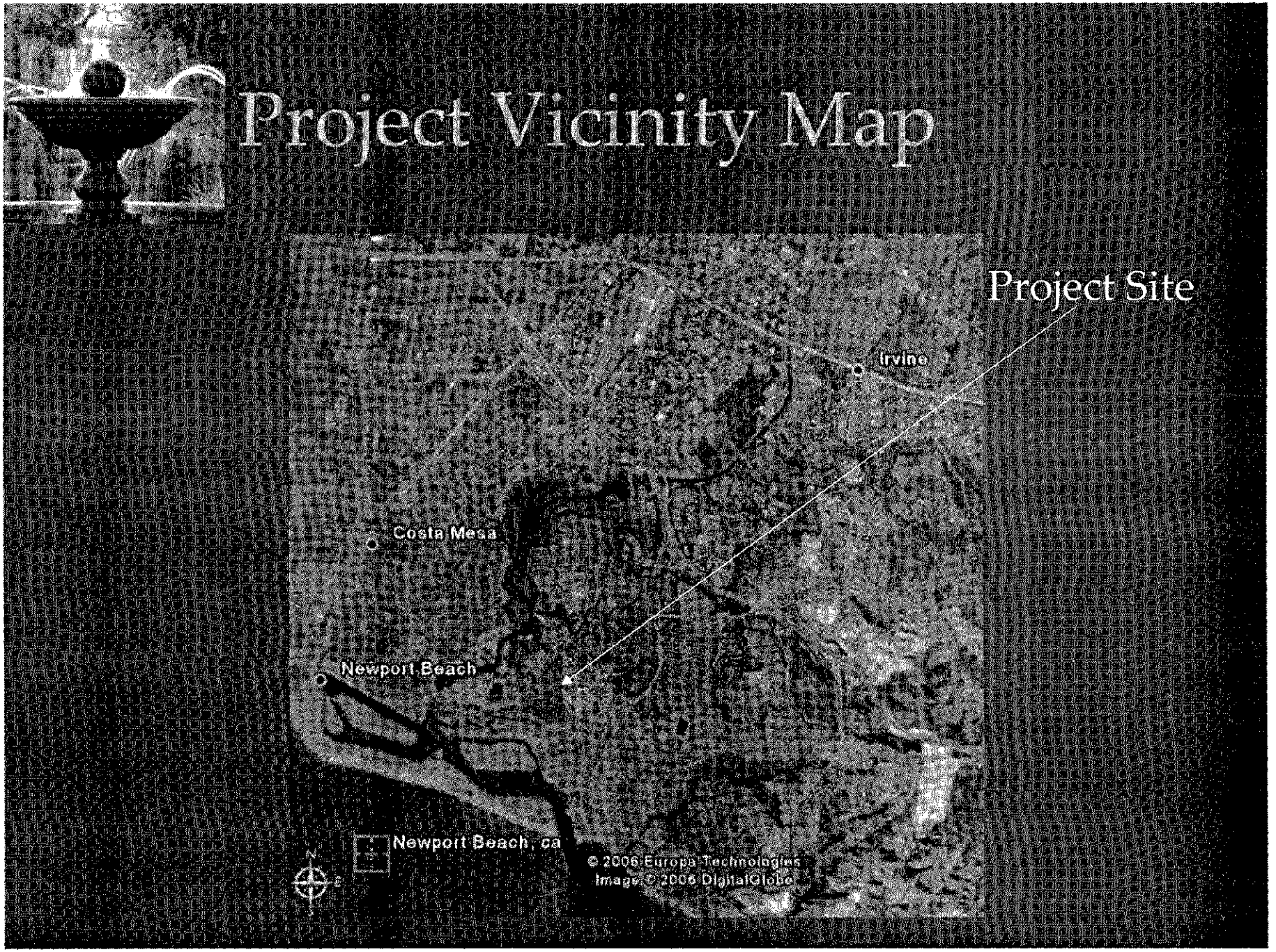


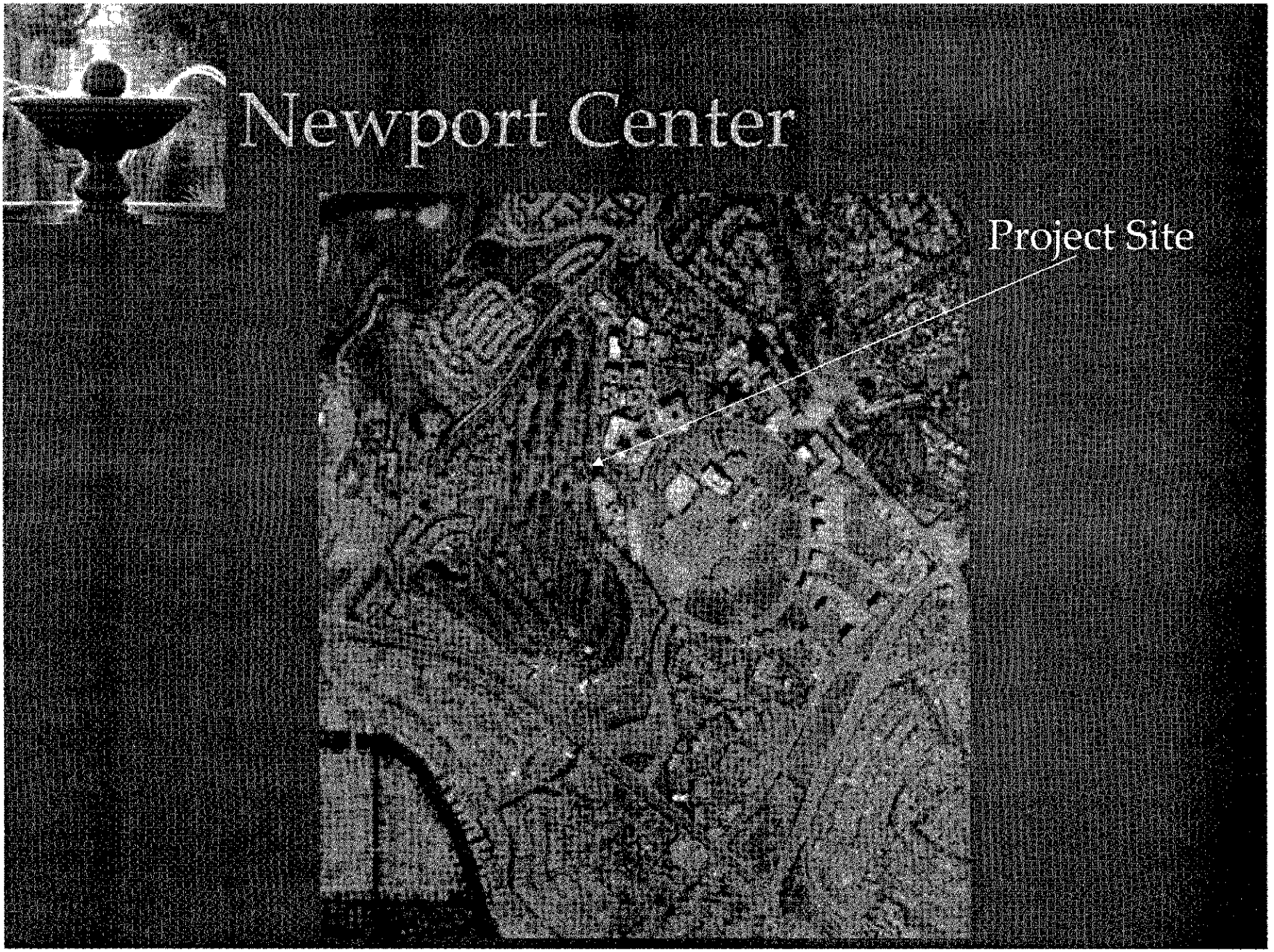
Lennar
Homes

# Santa Barbara Condominiums

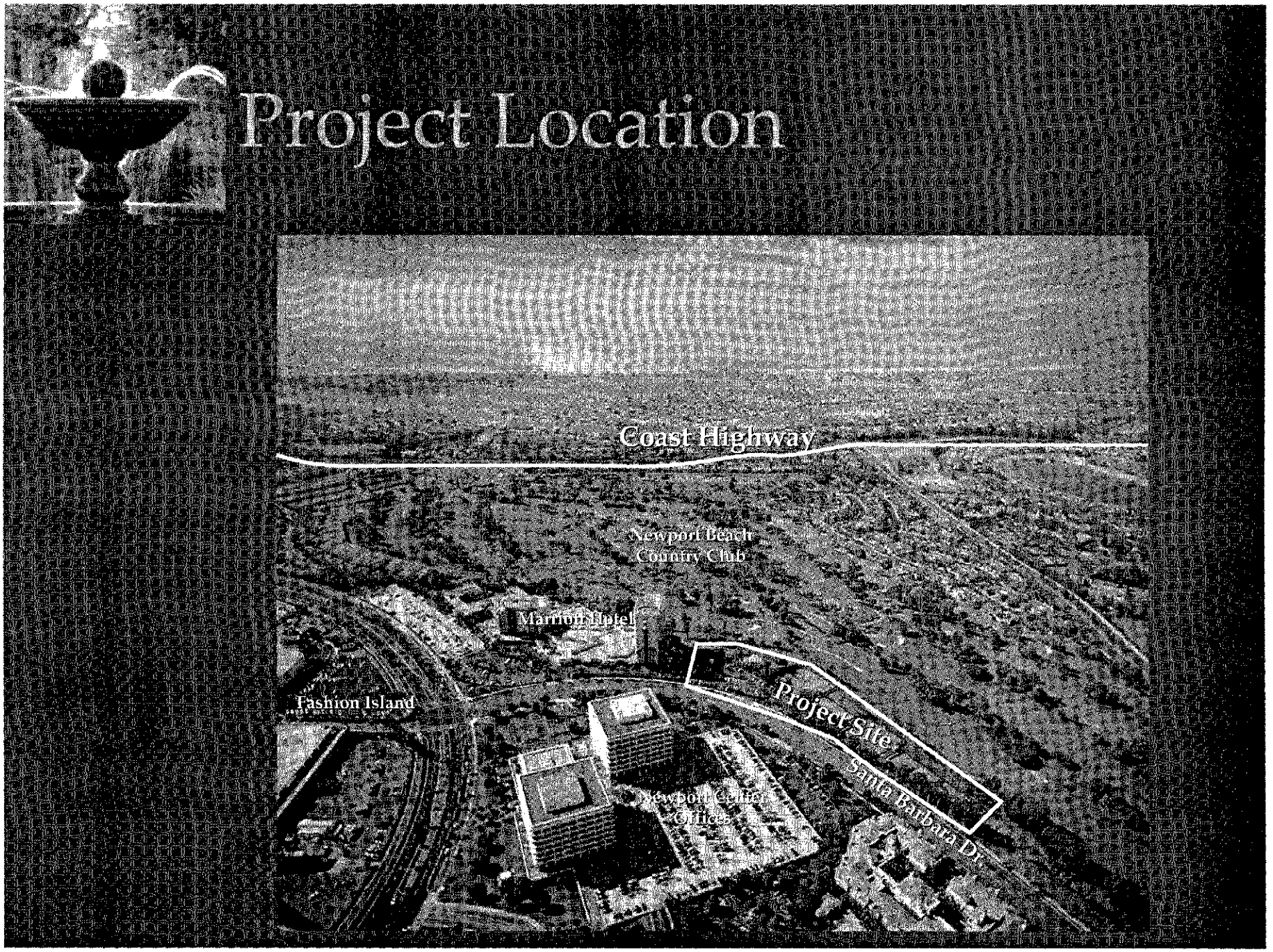
## Coastal Commission Briefing Book

# Project Vicinity Map

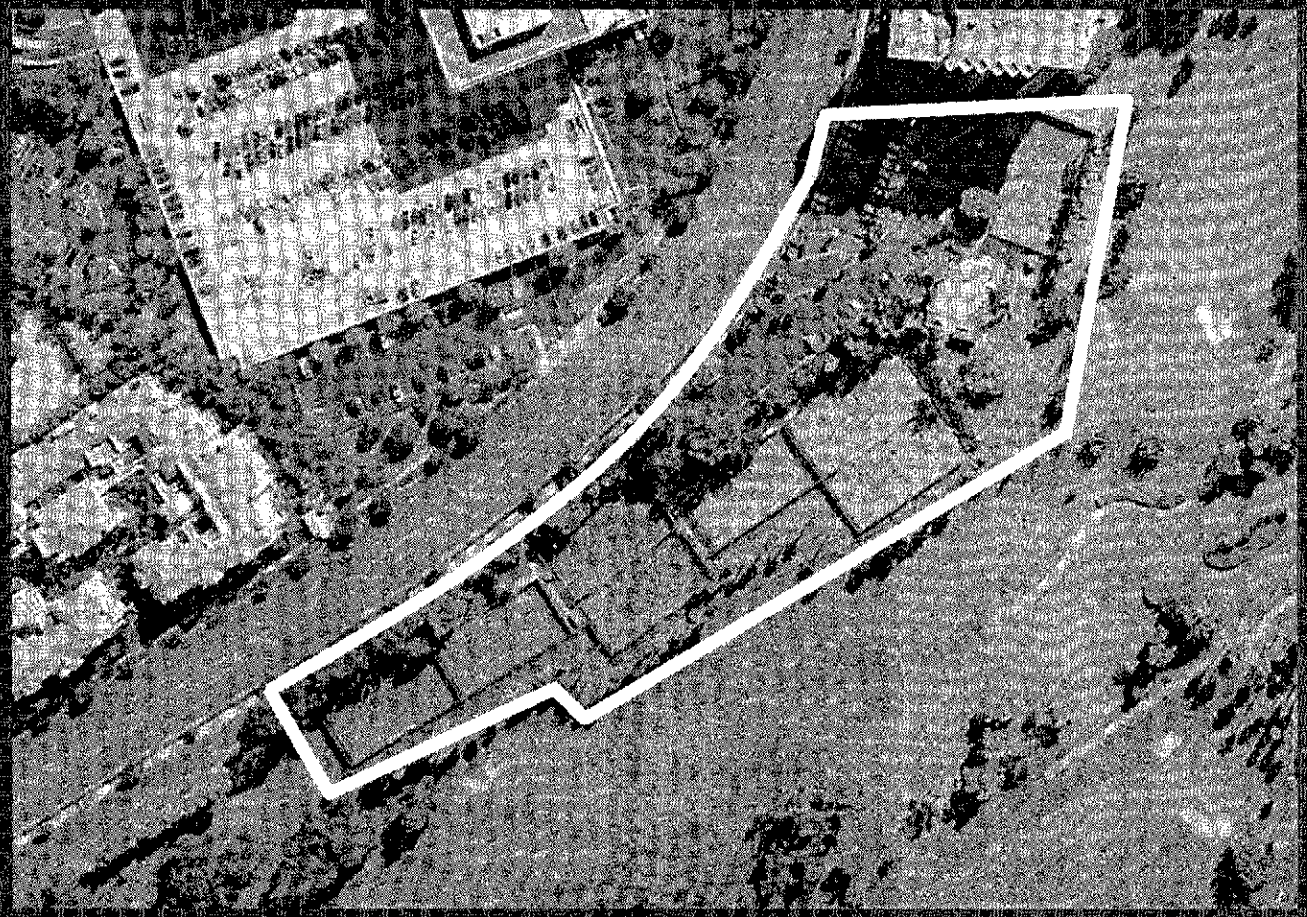



Newport Center
Project Site

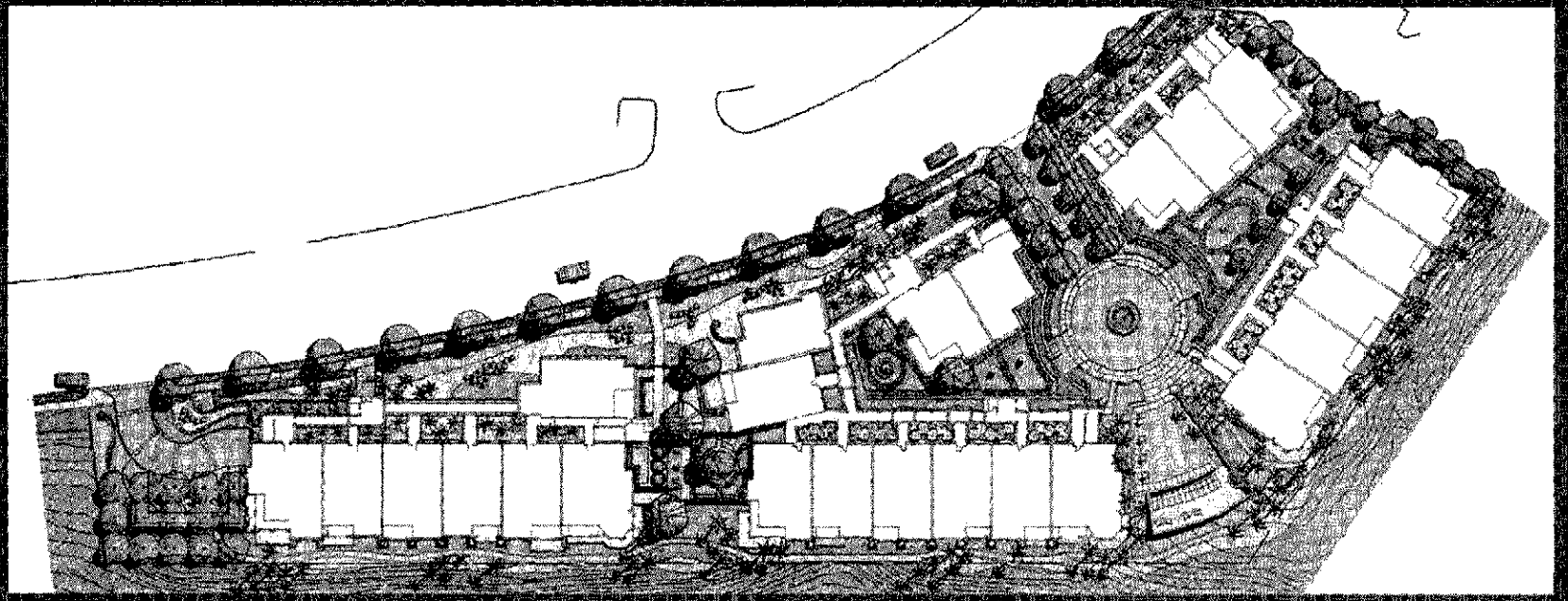
# Project Location



# Project Location



# Santa Barbara Condominiums



- 4.25-acre site
  - Represents only a 2% reduction in land of visitor serving uses within Coastal Zone (land only – not a reduction in uses or allowable rooms)
  - Land zoned as visitor serving – but NEVER used, location makes potential for visitor serving development remote
- 79 Units, 4-stories over 3 levels of parking

# Project Description

- Currently being used as a private tennis club – used by members and hotel guests – operated by the Newport Beach Marriott Hotel
  - 8 private outdoor tennis courts, a clubhouse and a parking lot (no public parking – private lot for club members) which are surrounded by landscaping on all sides
- The site is more than .5 miles from Coast Highway & nearly 3 miles from the nearest public beach (based on where existing hotels shuttle guests – Balboa & Newport Piers)

# Architecture

# Environmental Review

- City Prepared Mitigated Negative Declaration
  - Draft circulated for public review June 14, 2005
- Areas reviewed
  - Air Quality
  - Cultural Resources
  - Geology and Soils
  - Noise
  - Public Services
  - Traffic
  - Utilities and Service Systems
- No Significant Impacts Identified

# Marriott – Enhancement of Visitor Serving Uses

- $70 million recent hotel renovation
- Sale of tennis facility for residential integral to resort expansion and upgrades
- Private tennis court facility no longer integral to resort
- Upgraded resort – increase in visitors and TOT to city
- No loss of hotel room entitlements on Marriott property
- Unique opportunity for resort residential community in Newport Center

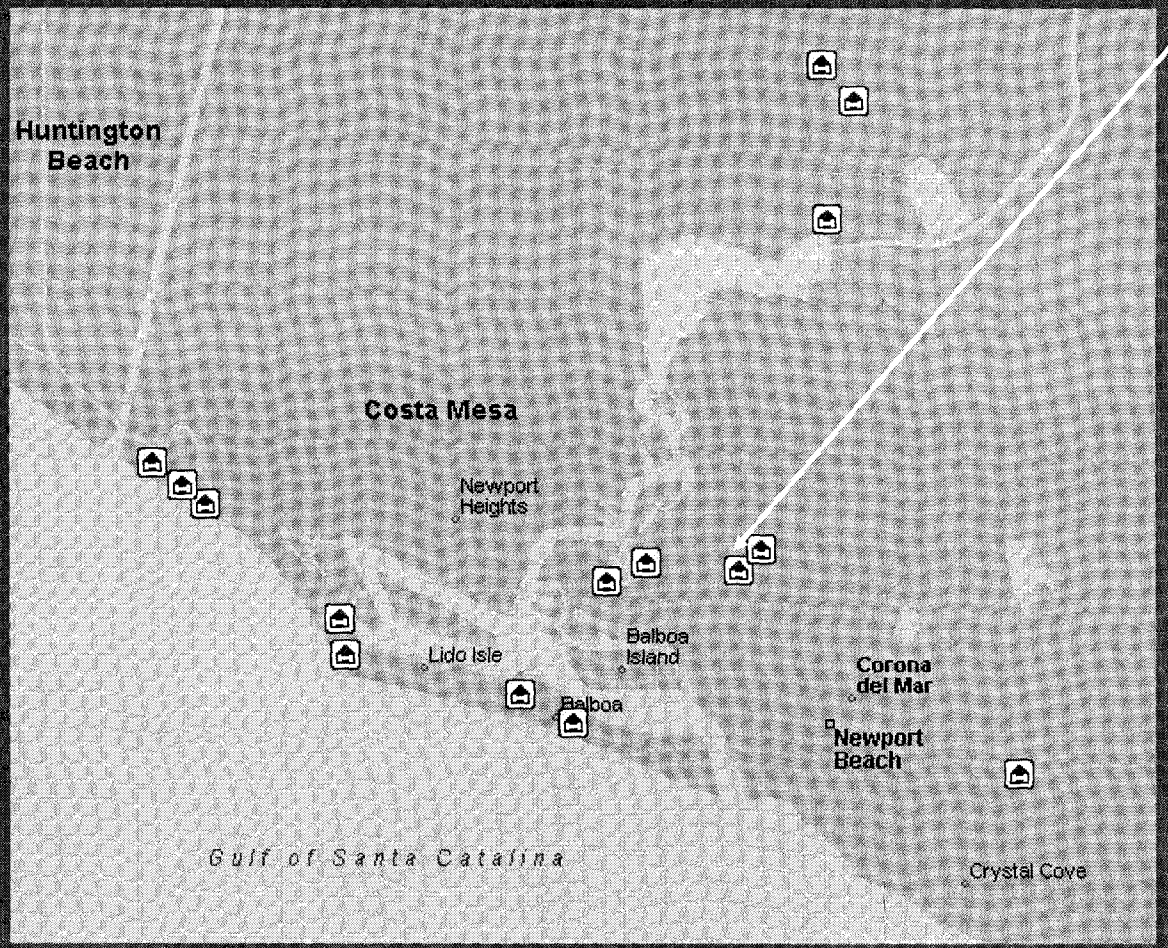
# Newport Beach Overnight Accommodations

- Balboa Bay Club
- Balboa Inn
- Bay Shores Inn on Peninsula
- Best Western Newport Beach Inn
- Doryman's Inn Bed & Breakfast
- The Fairmont Newport Beach
- Holiday Inn Express
- Hyatt Regency Newport Beach
- The Island Hotel
- Little Inn By the Bay
- Marriott Newport Beach Hotel & Spa
- Marriott Newport Beach Bayview
- Marriott Newport Coast Villas
- Newport Channel Inn
- Radisson Hotel Newport Beach
- Newport Dunes Waterfront Resort

Map Follows

# Newport Beach Overnight Accommodations

Project Site



# Newport Beach Overnight Accommodations

- Visitor accommodations range from:
  - $55/night to $995/night
- A mix of accommodations exist:
  - Camping, RV accommodations, motels, bed & breakfasts, hotels…
- NO reduction in the number and type of accommodations with approval of the proposed LCP Amendment

# General Plan/ LCP Amendment

- General Plan/LCP Amendment from Visitor Serving Commercial to Residential
  - Facilitated upgrades of Marriott
    - Renovation of resort brings facility up-to-date and offers a broader range of amenities
    - Provide for expanded/improved public spaces and recreation
  - No public access or view opportunities currently exist – project proposes to provide public access/view park

# Staff Report

Staff report states:

- *"Lower cost visitor and recreational facilities shall be protected, encouraged, and, where feasible, provided. Developments providing public recreational opportunities are preferred."*
  - No impact to *"lower cost visitor and recreational facilities"*
  - Marriott keeps all existing hotel room entitlements in General Plan
  - No loss of visitor serving rooms to City of Newport Beach
  - Project proposes public access/view park – currently no public access or view opportunities exist on the site

# Staff Report

Staff report states:

- *"The use of private lands suitable for visitor-serving commercial recreational facilities designed to enhance public opportunities for coastal recreation shall have priority over private residential..."*
  - No impact to *"lower cost visitor and recreational facilities"*
  - Project proposes *"public opportunities for coastal recreation"* via public access/view park – currently no public access or view opportunities exist on the site
  - The private tennis courts are underutilized – replacing them does not remove a publicly accessible, widely-used recreation facility from the coastal zone

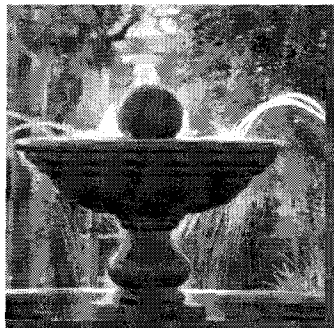
# Staff Report

Staff report states:

- *"The City included the Newport Coast Planned Community in the…tabulation. However,…(it) is not within the boundary of the City of Newport Beach certified LUP."*
  - Newport Coast LCP – SHOULD be included in Newport Beach calculations
    - Many jurisdictions have more than one LCP
    - Newport Coast annexed into city and is within the boundaries of the City of Newport Beach
    - The city's General Plan covers this area
    - Area represented by a council member

# Site Planning & Benefits

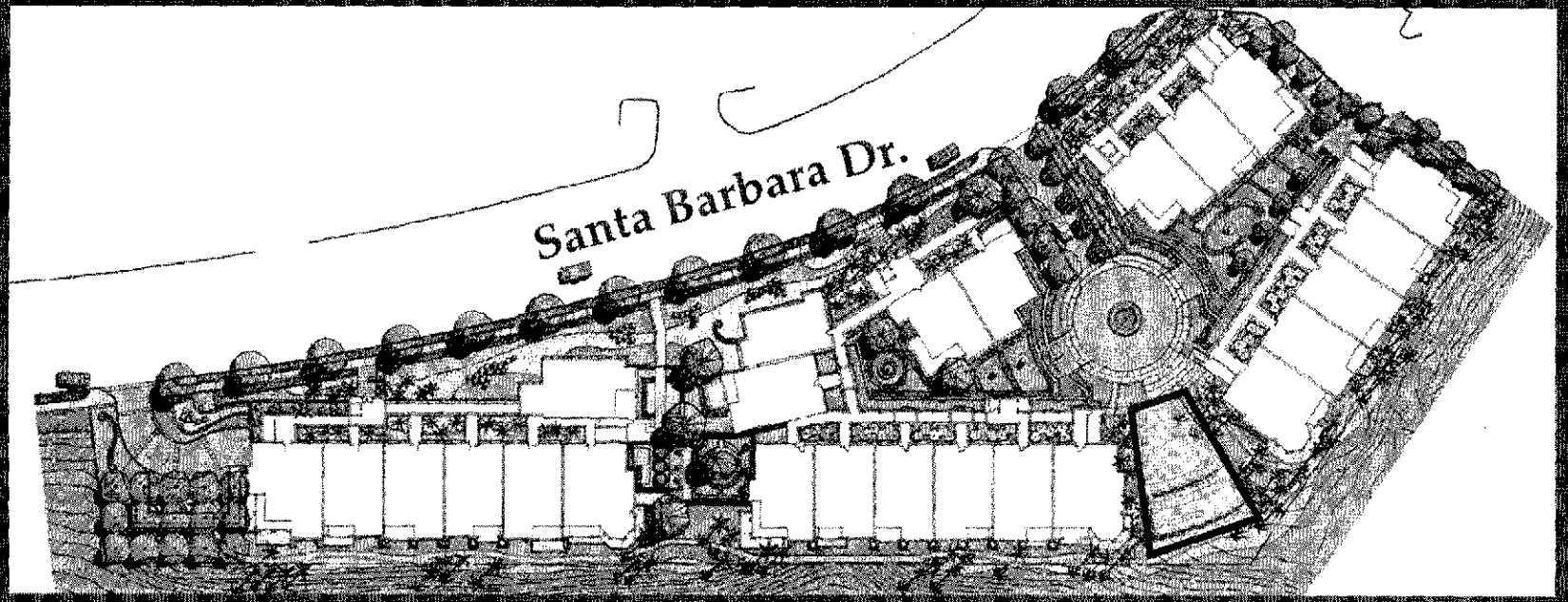
- The Marriott Hotel has determined that it is able to more than adequately continue to provide visitor serving uses on its property, and that the tennis courts are no longer necessary for the continued growth and viability of its visitor-serving operations.
  - Given the site's location, shape and proximity to the existing Marriott Hotel, replacing the tennis courts with other types of visitor serving uses would be difficult.
  - The hotel offers ample public opportunities for dining, meetings, banquets, and spa services – all of which are accessible to the public and does not need the site for additional hotel rooms.



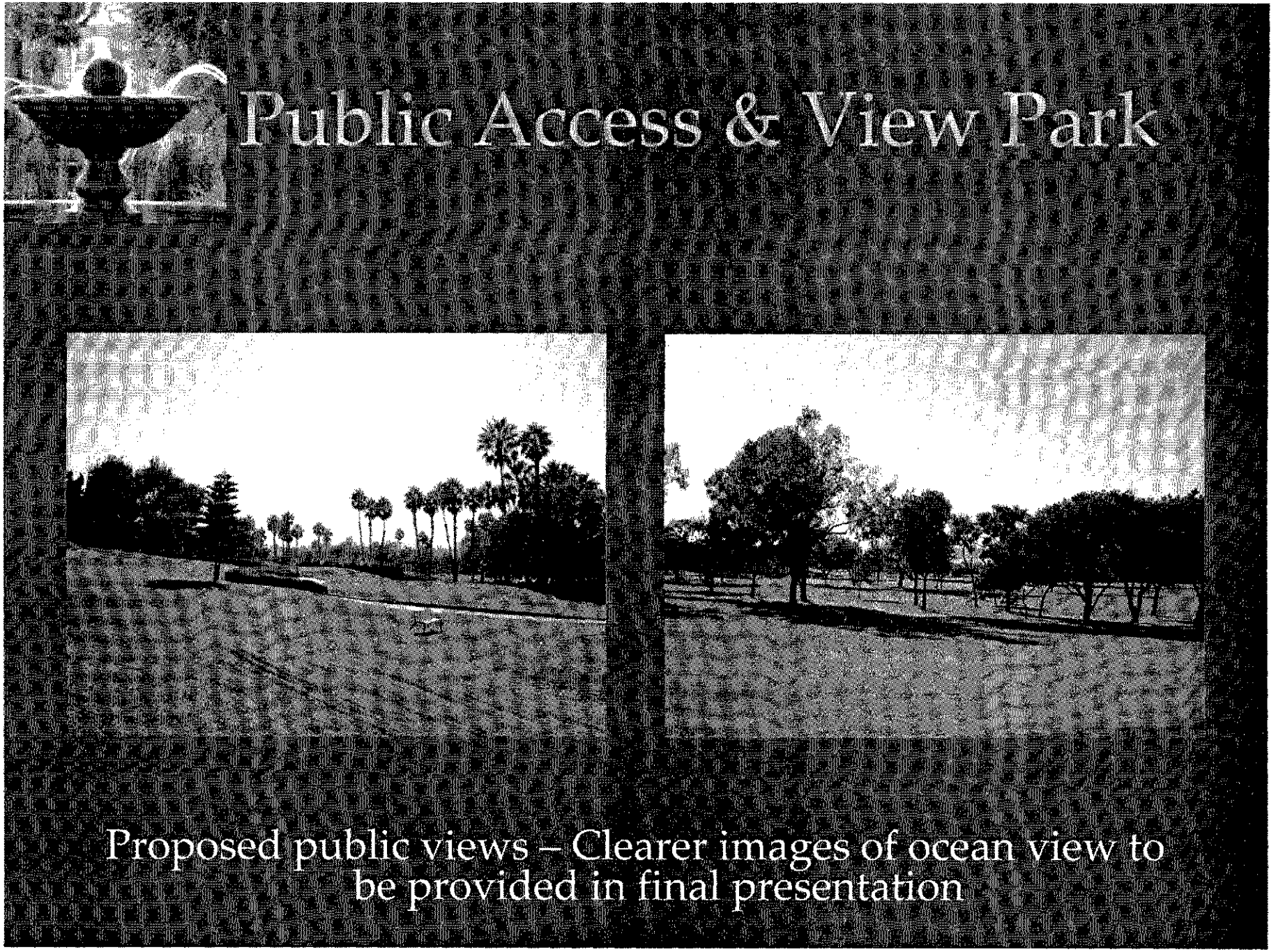
# Site Planning & Benefits

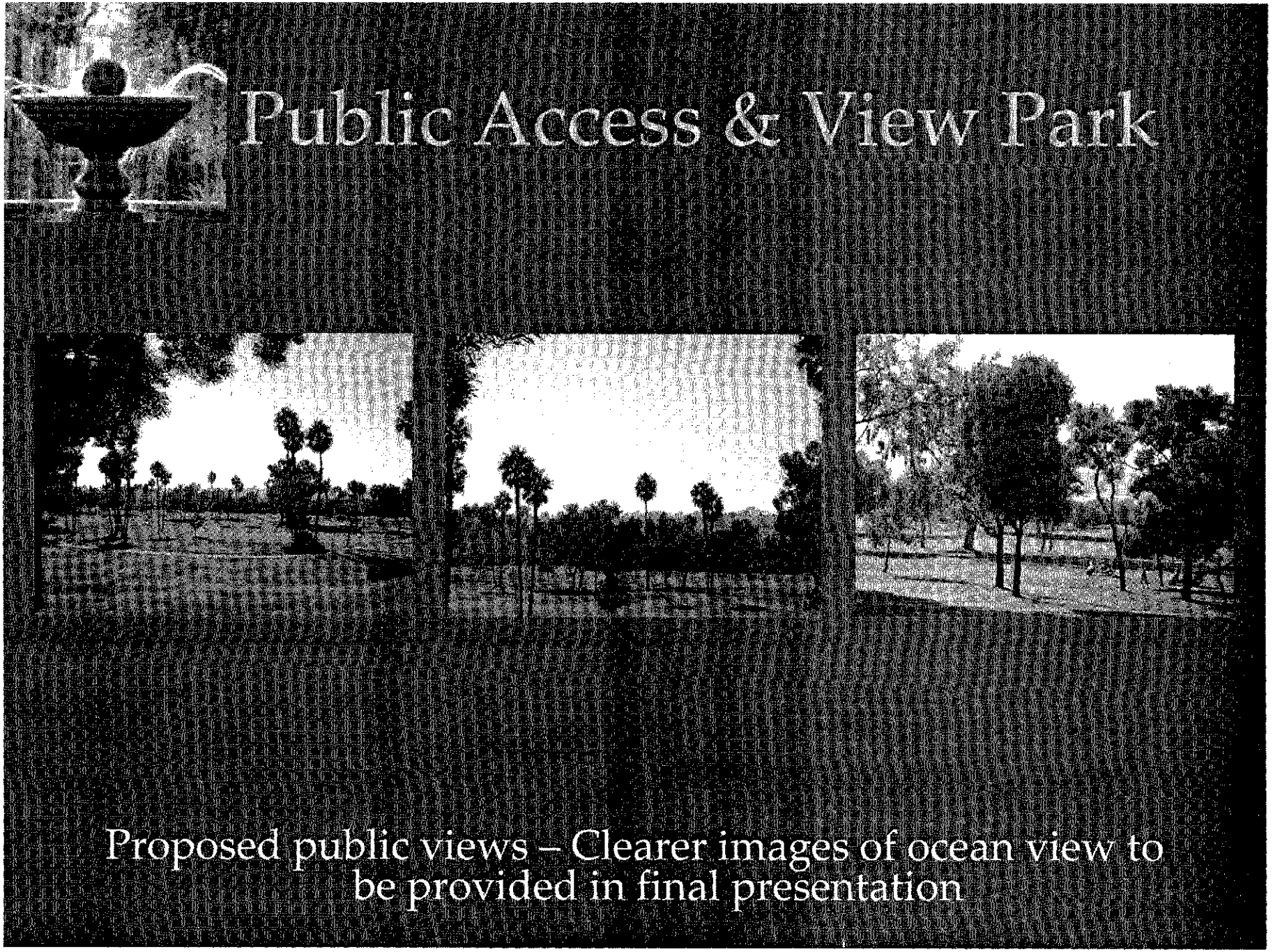
- Project NOT located in close proximity to coastal resources, coastal recreational use or the water
- Project will NOT adversely impact the adjacent visitor serving uses
- Existing tennis courts NOT a coastal dependent recreational activity
- Infill project in an urban mixed-use area which will REDUCE vehicle trips within the coastal zone and improve coastal access
  - Residents will access commercial uses, such as banks and professional services; retail; and entertainment (theaters and restaurants) without the use of cars as all uses are within close walking distance of the proposed residences. More than 2 years of planning and design
- Coastal Access and Recreational Uses NOT impacted
  - Site NOT adjacent to blufftops, blufftop access, proposed parks or public beaches

# Public Access & View Park




- Project proposes public access/view park – currently no public access or view opportunities exist on the site


Public Access & View Park
Proposed public views – Clearer images of ocean view to be provided in final presentation


Public Access & View Park
Proposed public views – Clearer images of ocean view to be provided in final presentation

# Conclusion

- In contrast to staff opinion, the preceding data demonstrates that the proposed amendment will NOT have an adverse affect on the priority *"visitor serving recreational facilities"* to be provided under Section 30222 of the Coastal Act

**Giroux & Associates**
Environmental Consultants

PA2004-169

# AIR QUALITY ANALYSIS

# SANTA BARBARA CONDOMINIUM PROJECT

# CITY OF NEWPORT BEACH, CALIFORNIA

Prepared for:

David Evans & Associates
Attn: Dustin Fuller
9635 Granite Ridge Drive, Suite 300
San Diego, California 92123

Date:

February 25, 2005

Project No.: P05-006

*3 Rushingwind, Irvine, California 92614 - Phone (949) 387-5477 - Fax (949) 387-5478*

## METEOROLOGICAL SETTING

The project site's climate, as with all Southern California, is dominated by the strength and position of the semi-permanent high pressure pattern over the Pacific Ocean near Hawaii. It creates cool summers, mild winters, and infrequent rainfall. It drives the cool daytime sea breeze, and it maintains comfortable humidities and ample sunshine after the frequent morning clouds dissipate. Unfortunately, the same atmospheric processes that create the desirable living climate combine to restrict the ability of the atmosphere to disperse the air pollution generated by the large population attracted in part by the desirable climate. Portions of the Los Angeles Basin therefore experience some of the worst air quality in the nation for certain pollutants.

Temperatures in the City of Newport Beach average 61 degrees annually. Daily and seasonal oscillations of temperature are small because of the moderating effects of the nearby oceanic thermal reservoir. In contrast to the steady temperature regime, rainfall is highly variable. Measurable precipitation occurs mainly from early November to mid-April, but total amounts are generally small. Newport Beach averages 12 inches of rain annually with January as the wettest month.

Winds in the project vicinity display several characteristic regimes. During the day, especially in summer, winds are from the south in the morning, and from the west in the afternoon. Daytime wind speeds are 7 – 9 miles per hour on average. At night, especially in winter, the land becomes cooler than the ocean, and an off-shore wind of 3-5 miles per hour develops. Early morning winds are briefly from the south-east parallel to the coastline before the daytime on-shore flow becomes well established again. One other important wind regime occurs when high pressure occurs over the western United States that creates hot, dry and gusty Santa Ana winds from the north and northeast across Newport Beach.

The net effect of the wind pattern on air pollution is that any locally generated emissions will be carried offshore at night, and toward inland Orange County by day. Daytime ventilation is much more vigorous. Unless daytime winds rotate far into the north and bring air pollution from developed areas of the air basin into Newport Beach, warm season air quality is much better in the project vicinity than in inland valleys of the air basin. Both summer and winter air quality in the project area is generally good.

In addition to winds that control the rate and direction of pollution dispersal, Southern California is notorious for strong temperature inversions that limit the vertical depth through which pollution can be mixed. In summer, coastal areas are characterized by a sharp discontinuity between the cool marine air at the surface and the warm, sinking air aloft within the high pressure cell over the ocean to the west. This marine/subsidence inversion allows for good local mixing, but acts like a giant lid over the basin. Air starting onshore at the beach is relatively clean, but becomes progressively more polluted as sources continue to add pollution from below without any dilution from above. Because of Newport Beach's location relative to the ocean, the incoming marine air during warm season onshore flow contains little air pollution. Local air quality is not substantially affected by the regional subsidence inversions.

A second inversion type forms on clear, winter nights when cold air off the mountains sinks to the surface while the air aloft remains warm. This process forms radiation inversions. These inversions, in conjunction with calm winds, trap pollutants such as automobile exhaust near their source. During the long nocturnal drainage flow from land to sea, the exhaust pollutants continually accumulate within the shallow, cool layer of air near the ground. Some areas of Orange County thus may experience elevated levels of carbon monoxide and nitrogen oxides because of this winter radiation inversion condition. However, the coastal areas of Orange County have not substantially been affected by limited nocturnal mixing effects (no elevated levels of CO) in approximately 10 years. Both types of inversions occur throughout the year to some extent, but the marine inversions are very dominant during the day in summer, and radiation inversions are much stronger on winter nights when nights are long and air is cool. The governing role of these inversions in atmospheric dispersion leads to a substantially different air quality environment in summer in the South Coast Air Basin than in winter.

## AIR QUALITY SETTING

### Ambient Air Quality Standards (AAQS)

In order to gauge the significance of the air quality impacts of the proposed Santa Barbara Condominium Project, those impacts, together with existing background air quality levels, must be compared to the applicable ambient air quality standards. These standards are the levels of air quality considered safe, with an adequate margin of safety, to protect the public health and welfare. The standards are designed to protect those people most susceptible to further respiratory distress such as asthmatics, the elderly, very young children, people already weakened by other disease or illness, and persons engaged in strenuous work or exercise, called "sensitive receptors." Healthy adults can tolerate occasional exposure to air pollutant concentrations considerably above these minimum standards before adverse effects are observed. Recent health research has shown, however, that chronic exposure to ozone (the primary ingredient in photochemical smog) may lead to adverse respiratory health even at concentrations close to the ambient standard.

National AAQS were established in 1971 for six pollution species with states retaining the option to add other pollutants, require more stringent compliance, or to include different exposure periods. The initial attainment deadline of 1977 was extended several times in air quality problem areas like Southern California. In June 2003, EPA proposed a rule which could extend and establish a new attainment deadline for ozone, which would be as late as year 2021. Because California had established AAQS several years before the federal action and because of unique air quality problems introduced by the restrictive dispersion meteorology, there is considerable difference between state and national clean air standards. Those standards currently in effect in California are shown in Table 1. Sources and health effects of various pollutants are shown in Table 2.

The Federal Clean Air Act Amendments (CAAA) of 1990 required that the U.S. Environmental Protection Agency (EPA) review all national AAQS in light of currently known health effects. EPA was charged with modifying existing standards or promulgating new ones where appropriate. EPA subsequently developed standards for chronic ozone exposure (8+ hours per day) and for very small diameter particulate matter (called "PM-2.5"). New national AAQS were adopted on July 17, 1997.

Planning and enforcement of the new federal standards for PM-2.5 and for ozone (8-hour) were challenged by trucking and manufacturing organizations. In a unanimous decision published at the end of February 2001, the U.S. Supreme Court ruled that EPA did not require specific congressional authorization to adopt national clean air standards. The Court also ruled that health-based standards did not require preparation of a cost-benefit analysis. The Court did find, however, that there was some inconsistency between existing and "new" standards in their respective attainment schedules. Such attainment-planning schedule inconsistencies centered mainly on the 8-hour ozone standard. EPA subsequently agreed to downgrade the attainment designation for a large number of communities to "non-attainment" for the 8-hour ozone standard. Because the South Coast Air Basin is far from attaining the 1-hour federal standard, the 8-hour ozone non-attainment designation will not substantially alter the attainment planning process. The compliance deadline for the 8-hour ozone standard has been extended to 2021.

# Table 1
# Ambient Air Quality Standards

| Pollutant | Averaging Time | California Standards | | Federal Standards | | |
|---|---|---|---|---|---|---|
| | | Concentration | Method | Primary | Secondary | Method |
| Ozone ($O_3$) | 1 Hour | 0.09 ppm (180 µg/m³) | Ultraviolet Photometry | 0.12 ppm (235 µg/m³) | Same as Primary Standard | Ultraviolet Photometry |
| | 8 Hour | – | | 0.08 ppm (157 µg/m³) | | |
| Respirable Particulate Matter ($PM_{10}$) | 24 Hour | 50 µg/m³ | Gravimetric or Beta Attenuation | 150 µg/m³ | Same as Primary Standard | Inertial Separation and Gravimetric Analysis |
| | Annual Arithmetic Mean | 20 µg/m³ | | 50 µg/m³ | | |
| Fine Particulate Matter ($PM_{2.5}$) | 24 Hour | No Separate State Standard | | 65 µg/m³ | Same as Primary Standard | Inertial Separation and Gravimetic Analysis |
| | Annual Arithmetic Mean | 12 µg/m³ | Gravimetric or Beta Attenuation | 15 µg/m³ | | |
| Carbon Monoxide (CO) | 8 Hour | 9.0 ppm (10 mg/m³) | Non-Dispersive Infrared Photometry (NDIR) | 9 ppm (10 mg/m³) | None | Non-Dispersive Infrared Photometry (NDIR) |
| | 1 Hour | 20 ppm (23 mg/m³) | | 35 ppm (40 mg/m³) | | |
| | 8 Hour (Lake Tahoe) | 6 ppm (7 mg/m³) | | – | – | – |
| Nitrogen Dioxide ($NO_2$) | Annual Arithmetic Mean | – | Gas Phase Chemiluminescence | 0.053 ppm (100 µg/m³) | Same as Primary Standard | Gas Phase Chemiluminescence |
| | 1 Hour | 0.25 ppm (470 µg/m³) | | – | | |
| Lead | 30-Day average | 1.5 µg/m³ | Atomic Absorption | – | – | – |
| | Calendar Quarter | – | | 1.5 µg/m³ | Same as Primary Standard | High Volume Sampler and Atomic Absorption |
| Sulfur Dioxide ($SO_2$) | Annual Arithmetic Mean | – | Ultraviolet Fluorescence | 0.030 ppm (80 µg/m³) | – | Spectrophotometry (Pararosaniline Method) |
| | 24 Hour | 0.04 ppm (105 µg/m³) | | 0.14 ppm (365 µg/m³) | – | |
| | 3 Hour | – | | – | 0.5 ppm (1,300 µg/m³) | |
| | 1 Hour | 0.25 ppm (655 µg/m³) | | – | – | |
| Visibility Reducing Particles | 8 Hour | Extinction coefficient of 0.23 per kilometer–visibility of 10 miles or more (0.07–30 miles or more for Lake Tahoe) due to particles when relative humidity is less than 70 percent. Method: Beta Attenuation and Transmittance through Filter Tape. | | No Federal Standards | | |
| Sulfates | 24 Hour | 25 µg/m³ | Ion Chromatography | | | |
| Hydrogen Sulfide | 1 Hour | 0.03 ppm (42 µg/m³) | Ultraviolet Fluorescence | | | |
| Vinyl Chloride | 24 Hour | 0.01 ppm (26 µg/m³) | Gas Chromatography | | | |

## Table 2

## Health Effects of Major Criteria Pollutants

| Pollutants | Sources | Primary Effects |
|---|---|---|
| Carbon Monoxide (CO) | • Incomplete combustion of fuels and other carbon-containing substances, such as motor exhaust.<br>• Natural events, such as decomposition of organic matter. | • Reduced tolerance for exercise.<br>• Impairment of mental function.<br>• Impairment of fetal development.<br>• Death at high levels of exposure.<br>• Aggravation of some heart diseases (angina). |
| Nitrogen Dioxide ($NO_2$) | • Motor vehicle exhaust.<br>• High temperature stationary combustion.<br>• Atmospheric reactions. | • Aggravation of respiratory illness.<br>• Reduced visibility.<br>• Reduced plant growth.<br>• Formation of acid rain. |
| Ozone ($O_3$) | • Atmospheric reaction of organic gases with nitrogen oxides in sunlight. | • Aggravation of respiratory and cardiovascular diseases.<br>• Irritation of eyes.<br>• Impairment of cardiopulmonary function.<br>• Plant leaf injury. |
| Lead (Pb) | • Contaminated soil. | • Impairment of blood function and nerve construction.<br>• Behavioral and hearing problems in children. |
| Fine Particulate Matter (PM-10) | • Stationary combustion of solid fuels.<br>• Construction activities.<br>• Industrial processes.<br>• Atmospheric chemical reactions. | • Reduced lung function.<br>• Aggravation of the effects of gaseous pollutants.<br>• Aggravation of respiratory and cardio respiratory diseases.<br>• Increased cough and chest discomfort.<br>• Soiling.<br>• Reduced visibility. |
| Fine Particulate Matter (PM-2.5) | • Fuel combustion in motor vehicles, equipment, and industrial sources.<br>• Residential and agricultural burning.<br>• Industrial processes.<br>• Also, formed from photochemical reactions of other pollutants, including NOx, sulfur oxides, and organics. | • Increases respiratory disease.<br>• Lung damage.<br>• Cancer and premature death.<br>• Reduces visibility and results in surface soiling. |
| Sulfur Dioxide ($SO_2$) | • Combustion of sulfur-containing fossil fuels.<br>• Smelting of sulfur-bearing metal ores.<br>• Industrial processes. | • Aggravation of respiratory diseases (asthma, emphysema).<br>• Reduced lung function.<br>• Irritation of eyes.<br>• Reduced visibility.<br>• Plant injury.<br>• Deterioration of metals, textiles, leather, finishes, coatings, etc. |

Source: California Air Resources Board, 2002.

Analysis of the most current data on the health effects of inhalation of fine particulate matter prompted the California Air Resources Board (ARB) to recommend adoption of the statewide PM-2.5 standard that is more stringent than the federal standard. This standard was adopted on June 20, 2002. The State PM-2.5 standard is more of a goal in that it does not have specific attainment planning requirements like a federal clean air standard. The state standard became enforceable in 2003 when it was incorporated into the California Health and Safety Code. Because of the strong evidence that chronic ozone exposure is more harmful than short-term hourly levels, the ARB has proposed adoption of a new ozone standard. The new standard would mirror the federal longer-term (8 hour) exposure limit. Adoption of the new state standard is anticipated for 2005 with implementation beginning in 2006.

## Baseline Air Quality

Existing and probable future levels of air quality in Newport Beach can be best inferred from ambient air quality measurements conducted by the South Coast Air Quality Management District (SCAQMD) at its Costa Mesa and El Toro monitoring stations. These stations measure both regional pollution levels such as dust (particulates) and smog, as well as levels of primary vehicular pollutants such as carbon monoxide.

Table 3 summarizes the last seven years of the published data from a composite of gaseous species monitored at Costa Mesa and particulates at El Toro (there are no particulate data available from Costa Mesa). The following conclusions can be drawn from these data:

1. Photochemical smog (ozone) levels periodically sometimes exceed standards. The frequency of first-stage smog episodes, as evidence of extremely degraded air quality, is, however, almost non-existent in coastal Orange County with the last first-stage smog alert as far back as 1985.

2. Annual maximum ozone levels tend to reflect some annual variations in dispersion patterns that cause concentrated airflow from more developed areas of the air basin to be carried into the coastal area during some years, while only the fringe of the basin-wide "urban plume" reaches the coastal corridor in others. Since 1993, the federal one hour standard of 0.12 ppm has not been exceeded.

3. Measurements of carbon monoxide at the Costa Mesa station reflect the history of nocturnal air mass that has passed over intensively developed areas in Central Orange County before following the Santa Ana River drainage toward the ocean. The last violation of the 8-hour CO standard in Costa Mesa was in 1992. The project area has likely been in attainment for CO even longer. The data suggests that baseline CO levels in Newport Beach are generally healthful and can accommodate a reasonable level of additional traffic emissions before any adverse air quality effects would be expected.

4. PM-10 levels as measured at El Toro, periodically exceed the state standard, but no measurements in excess of the national particulate standard has been recorded in the last seven years. With more of the air having a marine origin in Newport Beach than in El Toro area, the frequency of violations of the PM-10 standard near the proposed project site is likely to be slightly lower than that suggested in Table 3.

## Table 3

### Project Area Air Quality Monitoring Summary (1995 - 2001)
**(Number of days standards were exceeded, and *maximum* levels during such violations)**

| Pollutant/Standard | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 |
|---|---|---|---|---|---|---|---|
| **Ozone** | | | | | | | |
| 1-Hour > 0.09 ppm | 1 | 5 | 1 | 1 | 1 | 0 | 4 |
| 1-Hour > 0.12 ppm | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8-Hour > 0.08 ppm | 1 | 4 | 0 | 1 | 0 | 0 | 1 |
| Max. 1-Hour Conc. (ppm) | 0.10 | 0.12 | 0.10 | 0.10 | 0.10 | 0.09 | 0.11 |
| **Carbon Monoxide** | | | | | | | |
| 1-Hour > 20. ppm | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8-Hour > 9. ppm | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Max. 1-Hour Conc. (ppm) | 7. | 9. | 8. | 8. | 6. | 5. | xx |
| Max. 8-Hour Conc. (ppm) | 5.8 | 7.0 | 6.4 | 6.3 | 4.6 | 4.3 | 5.9 |
| **Nitrogen Dioxide** | | | | | | | |
| 1-Hour > 0.25 ppm | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Max. 1-Hour Conc. (ppm) | 0.12 | 0.12 | 0.12 | 0.11 | 0.08 | 0.11 | 0.11 |
| **Inhalable Particulates (PM-10)** | | | | | | | |
| 24-Hour > 50 $\mu g/m^3$ | 4/56 | 6/59 | 6/60 | 2/60 | 3/57 | 5/60 | 2/xx |
| 24-Hour > 150 $\mu g/m^3$ | 0/56 | 0/59 | 0/60 | 0/60 | 0/57 | 0/60 | 0/xx |
| Max. 24-Hour Conc. ($\mu g/m^3$) | 86. | 70. | 111. | 98. | 60. | 80. | 64. |
| **Ultra-Fine Particulates (PM-2.5)** | | | | | | | |
| 24-Hour > 65 $\mu g/m^3$ | - | - | 0/65 | 1/119 | 0/102 | 0/119 | 0/xxx |
| Max. 24-Hour Conc. ($\mu g/m^3$) | - | - | 57. | 95. | 53. | 58. | 51. |

Note: Entries shown as ratios = samples exceeding standards/samples taken. xx = Data not available. xxx = Data not available.

Source: South Coast Air Quality Management District, Costa Mesa Station for gaseous species; El Toro Station for particulate pollutants up to 1999, Mission Viejo from 2000-2003.

## Air Quality Management Planning

The Federal Clean Air Act (1977 Amendments) required that designated agencies in any area of the nation not meeting national clean air standards must prepare a plan demonstrating the steps that will bring the area into compliance with all national standards by December 31, 1987. The South Coast Air Basin (SCAB) could not meet the deadline for ozone, nitrogen dioxide, carbon monoxide, or PM-10. In the SCAB, the agencies designated by the governor to develop regional air quality plans are the SCAQMD and the Southern California Association of Governments (SCAG). The two agencies first adopted the Air Quality Management Plan (AQMP) in 1979 and revised it several times subsequently as earlier attainment forecasts were shown to be overly optimistic.

In 1988, because of considerable uncertainty in Federal Clean Air Act reauthorization, the California Legislature enacted the California Clean Air Act (CCAA). The CCAA requires that regional emissions be reduced by 5 percent per year until attainment can be demonstrated. In July 1991, the SCAQMD adopted a revised AQMP that was designed to meet the CCAA requirements. The 1991 AQMP deferred the attainment date to 2010, consistent with the 1990 Federal Clean Air Act.

The 1990 Federal Clean Air Act Amendments (CAAA) required that all states with air basins with "serious" or worse ozone problems submit a revision to the State Implementation Plan (SIP). The 1991 AQMP was modified/adapted and submitted as the SCAB portion of the SIP. The 1991 SIP submittal estimated that an 85 percent basin-wide reduction in volatile organic compound (VOC) emissions and a 59 percent reduction in oxides of nitrogen (NOx) between 1990 to 2010 was needed to meet federal clean air standards. About 40 percent of these reductions were to come from existing pollution control programs. The rest were to come from new rules, technologies or other reduction programs.

In 1996, EPA approved the 1994 submittal of the SCAB portion of the SIP. The plan was finally approved after considerable debate on the contingency measures that should be implemented if progress is not as rapid as anticipated in the 1994 SIP. The CAAA required that an updated plan be submitted by February 8, 1997 that included attainment plans for all pollutants exceeding federal standards. The CCAA requires an update of the state-mandated clean air plan every three years. The last update was completed December 31, 2003.

An updated 1997 AQMP to meet federal requirements was locally adopted. The California Air Resources Board (ARB) forwarded this plan on to EPA for its consideration and recommended approval. The 1997 AQMP was designed to meet both federal (EPA) and state (ARB) air quality planning guidelines. Components of the 1997 plan update included:

- Demonstration of attainment for ozone, CO, and PM-10.
- Updated emissions inventories (1993 base year) of VOC, NOx, CO, SOx and PM-10.
- Emissions budgets for future years of the inventoried compounds.
- An updated pollution control strategy.
- Contingency measures if the plan as presently proposed fails to meet stated timetables.

Additional research and photochemical computer modeling, as well as improved emissions estimates, now suggest that formerly predicted emissions reductions required to meet standards need not be quite as severe as thought earlier. Table 4 summarizes the currently proposed regional

## Table 4

### South Coast Air Basin Attainment Plan
**(Emissions in tons/day)**

| | ROG | NOx | CO |
|---|---|---|---|
| **Current Inventory**[a] | | | |
| Stationary + Areawide | 304 | 103 | 246 |
| On-Road Mobile | 276 | 581 | 2,705 |
| Off-Road Mobile | 131 | 286 | 1,003 |
| TOTAL | 710 | 970 | 3,953 |
| **2010 Forecast**[b] | | | |
| Stationary | 296 | 89 | 217 |
| On-Road Mobile | 212 | 434 | 2,048 |
| Off-Road Mobile | 122 | 257 | 1,094 |
| TOTAL | 630 | 780 | 3,359 |
| **2020 Forecast**[b] | | | |
| Stationary | 340 | 90 | 234 |
| On-Road Mobile | 130 | 206 | 1,097 |
| Off-Road Mobile | 114 | 241 | 1,104 |
| TOTAL | 584 | 537 | 2,435 |

[a]2005 Base Year.
[b]With current emissions reduction programs and adopted growth forecasts.

Source: California Air Resources Board, The 2005 California Almanac of Emission & Air Quality.

attainment planning for ozone (ROG and NOx) and for carbon monoxide (CO). Further emissions reductions of around 18 percent for ROG, 45 percent for NOx and 38 percent for CO are anticipated from the currently proposed AQMP update.

The Draft 1997 AQMP was challenged by several environmental organizations as not being consistent with the 1990 CAAA on rates of progress toward attaining the ozone standard. The Ninth Circuit Court found for these organizations. A 1999 Amendment to the proposed SIP Revisions was developed that accelerated the schedule for a number of new SCAQMD rules and regulations. The 1999 SIP Amendment complied with the court-ordered acceleration of the development of new rules and regulations designed to bring the air basin into compliance. The 1999 SIP Amendment was approved by EPA in 2000.

A new clean air plan has been approved locally (SCAQMD/SCAG) and at the state level (ARB). It was forwarded to EPA and has recently become the adopted SIP Revision. The plan continues most emissions reductions programs, but also points out that some emissions have been undercounted and incorrectly reported, and that additional control measures must be implemented if the federal attainment deadlines for clean air standards are to be met. The recent ozone trend toward increased numbers of violations of standards and higher absolute maxima than at the turn of this decade is particularly worrisome. A flattening of the improvement trend was anticipated, but the trend reversal suggests that a "backsliding" process is in motion. The likely failure to meet further near-term improvement targets may require invoking contingency measures that had been hoped as not necessary.

With the conversion of the federal 1-hour ozone standard to an 8-hour standard, a new attainment timeline will likely be adopted. EPA's proposed attainment scheduled for the South Coast Air Basin is 17 years to 2021. The progress mile-posts would be spread out over a longer period than for the current 2010 attainment deadline for the 1-hour standard.

A residential development such as the Santa Barbara Condominium residential project relates to the air quality planning process through the growth forecasts that were used as inputs into the regional transportation model. If a proposed development is consistent with those growth forecasts, and if all available emissions reduction strategies are implemented as effectively as possible on a project-specific basis, then the air quality impact on a regional basis may be considered as less-than-significant. The South Coast AQMD, while acknowledging that the AQMP is a growth-accommodating document, recommends that project air quality impacts be analyzed independent of planning consistency. Inconsistency as to project scope or schedule is considered a basis for a finding of impact significance. The converse, however, i.e., project/clean air plan consistency, is not considered an adequate basis to support a finding of a less-than-significant impact.

## AIR QUALITY IMPACT

Residential developments such as those proposed for the Santa Barbara Condominium project in Newport Beach potentially impact air quality almost exclusively through increased automotive emissions. Any single project typically does not cause enough traffic and associated air pollutants to be generated as to individually threaten clean air standards. It is the cumulative effect of hundreds of such developments that cause the small incremental impact from any one development to become cumulatively significant. Minor secondary emissions during construction, from increased fossil-fueled energy utilization and from small miscellaneous sources will also be generated, but these are usually much smaller in both duration and volume than the mobile source emissions.

### Standards of Significance

Many air quality impacts that result from the dispersed mobile sources, i.e., the dominant pollution generators in the basin, often occur hours later and miles away after photochemical processes have converted the primary exhaust pollutants into secondary contaminants such as ozone. The incremental regional air quality impact of an individual project is generally immeasurably small. The SCAQMD has therefore developed suggested significance thresholds based on the volume of pollution emitted rather than on actual ambient air quality because the direct air quality impact of a project is not quantifiable on a regional scale. Any projects in the SCAB with daily emissions that exceed any of the following thresholds are recommended by the SCAQMD to be considered individually and cumulatively significant:

**SCAQMD Emissions Significance Thresholds**
**(pounds per day)**

| Pollutant | Construction | Operations |
|---|---|---|
| ROG | 75 | 55 |
| NOx | 100 | 55 |
| CO | 550 | 550 |
| PM-10 | 150 | 150 |
| SOx | 150 | 150 |

Source: SCAQMD CEQA Air Quality Handbook, November, 1993 Rev.

## Additional Indicators

In its CEQA Handbook, the SCAQMD also states that additional indicators should be used as screening criteria to determine the need for further analysis with respect to air quality. The additional indicators are as follows:

- Project could interfere with the attainment of the Federal or State ambient air quality standards by either violating or contributing to an existing or projected air quality violation.
- Project could result in population increases within the regional statistical area which would be in excess of that projected in the AQMP.
- Project could generate vehicle trips that cause a CO hot spot.
- Project might have the potential to create or be subjected to objectionable odors.
- Project could have hazardous materials on site and could result in an accidental release of air toxic emissions.
- Project could emit an air toxic contaminant regulated by District rules or that is on a federal or State air toxic list.
- Project could involve disposal of hazardous waste.
- Project could be occupied by sensitive receptors near a facility that emits air toxics or near CO hot spots.
- Project could emit carcinogenic air contaminants that could pose a cancer risk.

Residential land uses, such as those proposed for the Santa Barbara Condominium project, are not known to trigger the above secondary significance criteria. Potential impact significance thus relates mainly to the SCAQMD CEQA Handbook numerical emissions thresholds identified above.

For PM-2.5 exhaust emissions, recently adopted policies require the gradual conversion of delivery fleets to diesel alternatives, or the use of "clean" diesel if emissions are demonstrated to be as low as those from alternative fuels. Because health risks from toxic air contaminants (TACs) are cumulative over an assumed 70-year lifespan, measurable off-site public health risk from TAC exposure would occur for only a brief portion early in project lifetime, and only in dilute quantity.

## Project-Related Sources of Potential Impact

Intensification of land uses in the Orange County area potentially impacts ambient air quality on two scales of motion. As cars drive throughout Southern California, the small incremental contribution to the basin air pollution burden from any single vehicle is added to that from several million other vehicles. The impact from the Santa Barbara Condominium development, even if it generates a significant number of new vehicle trips, is very small on a regional scale. Basin-wide air quality impacts are, therefore, addressed in terms of project compatibility with regional air quality plans. If any given project or plan has been properly incorporated into basin-wide growth projections which are the basis for regional air quality/ transportation planning, then there will be no significant basin-wide impact because of unanticipated growth.

Locally, changes in the location of any collection of automotive sources, or changes in the number of vehicles or travel speeds may impact the micro-scale air quality around any given development site. Traffic increases not only contribute air pollutants in direct proportion to their cumulative percentage of traffic volume growth, but they may slow all existing traffic to slower, more inefficient travel speeds. The development traffic/air quality impact is thus potentially compounded.

Temporary construction activity emissions will occur during project build-out. Such emissions include on-site generation of dust and equipment exhaust, and off-site emissions from construction employee commuting and/or trucks delivering building materials.

Construction activity emissions are difficult to quantify, since the exact type and amount of equipment that will be used or the acreage that may be disturbed on any given day in the future is not known with any reasonable certainty. The emphasis in environmental documents relative to construction activity emission impacts has therefore been to minimize the emissions as fully as possible through comprehensive emissions control even if the exact amount of emissions cannot be precisely quantified.

## Construction Activity Impacts

Construction has traditionally been considered mainly a source of potential nuisance from dust or odors such that these temporary emissions are typically categorized as insignificant in many air quality impact analyses. However, because construction activities are substantial contributors to the basin-wide air pollution burden, they have become increasingly important in the regional air pollution attainment strategy. Regulatory programs such as SCAQMD Rule 403 have been strengthened, and CEQA-based discretionary emissions reduction measures for construction are actively encouraged and pursued.

Dust is normally the primary concern during construction of new buildings and amenities. Dust includes small inhalable particulate matter, as well as larger diameter particles that rapidly settle out on any surface adjacent to the source. Because such emissions are not amenable to collection and discharge through a controlled source, they are called "fugitive" emissions.

Dust (PM-10) emission rates vary as a function of many parameters (soil silt, soil moisture, wind speed, area disturbed, number of vehicles, depth of disturbance or excavation, etc.). Regulatory agencies typically use one universal factor based on the area disturbed assuming that all other input parameters into emission rate prediction fall into mid-range average values. The SCAQMD, in its 1993 "CEQA Air Quality Handbook," estimates daily PM-10 emissions during construction to be 26.4 pounds per day per acre disturbed when "standard" dust control procedures required by SCAQMD Rule 403 are used. Upgraded dust control procedures will reduce the average daily PM-10 emission rate to as low as around 10.0 pounds per day when a highly aggressive control program is implemented.

Use of "standard" daily PM-10 emission factors allows for the simultaneous disturbance of around 5.7 acres to generate a potentially significant emission level of 150 pounds per day determined to be

potentially significant in the SCAQMD Handbook (150 ÷ 26.4 = 5.7). If strongly enhanced dust control procedures are implemented, around 15 acres of the project site could be under simultaneous disturbance to maintain a less-than-significant daily PM-10 emission rate.

The proposed project site occupies approximately 4.25 acres of land currently developed with tennis courts, along the southerly side of Santa Barbara Drive, between Jamboree Road and Newport Center Drive. It is unknown whether the entire site will undergo simultaneous disturbance. The California Air Resources Board (CARB) emissions computer model URBEMIS2002 predicts that the maximum daily disturbance "footprint" for the proposed land uses will be 1.0 acres. Calculated PM-10 emissions have been calculated with the application of "standard" dust control, and with the application of enhanced dust control measures. A comparison of PM-10 dust emissions for the entire site and the predicted disturbance area are as follows (pounds/day):

| Disturbance Area | With Standard Dust Control | With Best Available Control Measures |
|---|---|---|
| Entire Site: 4.25 acres | 1122. pounds/day* | 42.5 pounds/day* |
| Predicted Area: 1.0 acres | 26.4 pounds/day* | 10.0 pounds/day* |

*Below the 150-pound/day suggested significance threshold.

As shown above, limiting the grading footprint area and/or use of best available control measures (BACMs) are not required to achieve a less-than-significant dust (PM-10) emission rate. However, the non-attainment status of the air basin for PM-10 dictates that all reasonably available control measures be implemented. Use of BACMs during construction is therefore recommended even if thresholds are not exceeded.

A new federal clean air standard for ultra-fine diameter particulate matter of 2.5 microns or less (called "PM-2.5") was promulgated in 1997. This standard is believed more closely tied to any adverse health effects from particulate inhalation. A baseline PM-2.5 level has not yet been established. However, construction activities are known to generate only very small amounts of PM-2.5 within their total particulate burden. Chemical analysis of airborne PM-2.5 in the South Coast Air Basin has found that only 5 to 10 percent of all PM-2.5 is in the form of "crustal material," i.e., soil particulate matter. For PM-10 dust, about one-third of the suspended fine particulate matter derives from soil disturbance. In the almost complete absence of PM-2.5 within the fugitive dust generated during grading and construction activities, project-related construction activities will not adversely impact PM-2.5 exposure in the City of Newport Beach area.

In addition to fine particles that remain suspended in the atmosphere semi-indefinitely, construction activities generate many larger particles with shorter atmospheric residence times. This dust is comprised mainly of large diameter inert silicates that are chemically non-reactive and are further readily filtered out by human breathing passages. These fugitive dust particles are therefore more of a potential soiling nuisance as they settle out on parked cars, outdoor furniture or landscape foliage rather than any adverse health hazard. Any dust nuisance potential will tend to be highly localized when a new tract is built in very close proximity to an already completed development.

Exhaust emissions will result from on- and off-site heavy equipment during grading. Emissions will also be generated during finish construction, especially during the application of paints or other coatings. The types and numbers of equipment will vary among contractors such that such emissions cannot be quantified with certainty. During grading, the following equipment fleet has been assumed to be utilized as a basis for estimating maximum daily equipment exhaust emissions:

1 Excavator
1 Rubber Tire Loader
1 Tractor/Loader/Backhoe
1 Other Equipment
1 Trencher

The CARB's URBEMIS2002 computer model was used to estimate daily emissions during grading and finish construction with the following results (pounds/day):

| Activity | ROG | NOx | CO | $SO_2$ | PM-10 Total | PM-10 Equipment Exhaust | PM-10 Dust |
|---|---|---|---|---|---|---|---|
| Grading | 7.0 | 48.7 | 57.1 | 0.0 | 12.1 | 2.1 | 10.0 |
| Finish Work | 143.1[a] | 30.8 | 35.7 | 0.0 | 1.4 | 1.3 | 0.1 |
| SCAQMD Threshold | 75. | 100. | 550. | 150. | 150. | - | - |

[a] Exceeds threshold due to application of paints and coatings.

During finish work, application of paintings and coatings can create ROG emissions exceeding the SCAQMD threshold. This estimate is based upon every unit completed in a single month (22 working days). The actual project build-out will be phased over a much longer period. Nevertheless, use of available emissions reduction measures are recommended to reduce ROG emissions. Emissions minimization can be accomplished as follows:

- Use pre-coated building materials
- Use high pressure-low volume (HPLV) paint applicators with 50 percent efficiency
- Use lower volatility paint not exceeding 100 grams of ROG per liter

Use of the above measures can reduce emissions from architectural coatings to perhaps 1/3 of their calculated values. Daily emissions can be reduced to about 48 pounds per day (143.1 ÷ 3 = 47.7). This is less than the identified daily significance threshold. With the above recommended measures, ROG emissions from paints and coatings can likely be maintained at less-than-significant levels.

Construction activity air quality impacts occur mainly in close proximity to individual disturbance areas. There may, however, be some "spill-over" into the surrounding community. That spillover may be physical as vehicles drop or carry out dirt or silt is washed into public streets. Passing non-project vehicles then pulverize the dirt to create off-site dust impacts. Spill-over could also occur

via congestion effects. Construction may entail roadway encroachment, detours, lane closures and competition between construction vehicles (trucks and contractor employee commuting) and ambient traffic for available roadway capacity. Emissions controls require good housekeeping procedures and a construction traffic management plan that maintains such "spill-over" effects at a less-than-significant level.

## Operational Impacts

There are 330 projected 'new' vehicle trips that will be generated at project completion. For typical local commuter trips in Orange County, averaging 10 miles one way, additional vehicle travel from project implementation will be about 3,300 vehicle miles traveled (VMT) per day. The California ARB land use and air pollution emissions computer model URBEMIS2002 was run for a worst-case project build-out of year 2007. The project-related mobile source emissions burden, along with a comparison of SCAQMD recommended significance thresholds, is shown in Table 5. Thresholds will not be exceeded and all pollutant emissions are below significance levels by a wide margin of safety.

## Micro-Scale Impact Analysis

In addition to regional air quality concerns that focus on the photochemical conversion of air pollution emissions to more harmful forms, vehicular exhaust may impact air quality immediately adjacent to the roadway travel lanes. Such impacts occur during periods of maximum traffic congestion and minimum atmospheric dispersion.

As seen in Table 5, the carbon monoxide impacts from the proposed project are only nineteen (19) percent of the significance threshold. Any associated micro-scale air quality impacts would be expected to be minimal. In order to determine whether any possible traffic congestion may contribute to localized air pollution standard violations, a screening procedure based upon the California roadway dispersion model CALINE4 was run at those intersections near the project site area with the most degraded levels-of-service (LOS). Carbon monoxide (CO) was used as an indicator pollutant to determine "hot spot" potential. Rush hour traffic was combined with minimum dispersion conditions in order to create the theoretical worst-case impact estimate. The result of these calculations is shown in Table 6.

Calculations were performed for three traffic scenarios, including:

Traffic Phasing Ordinance (TPO) Compliance
California Environmental Quality Act (CEQA) Consistency
General Plan (GPA) Build-out

The proposed project will add negligibly to any localized CO exposures. The maximum project-related CO increment is + 0.1 ppm (0.5 percent of the 1-hour standard) for the CEQA-based analysis. The project increment is less than 0.05 ppm (0.25 percent of the most stringent CO standard) for the TPO or GPA traffic scenarios.

**Table 5**

**Average Daily Project Mobile Source Air Pollution Emissions (pounds/day)**

| Condominium Residential Uses | ROG | NOx | CO | SOx | PM-10 |
|---|---|---|---|---|---|
| Area Source Emissions | 4.1 | 0.6 | 1.4 | 0.0 | 0.0 |
| Vehicle Source Emissions | 8.5 | 9.4 | 101.8 | 0.1 | 9.1 |
| TOTAL | 12.6 | 10.0 | 103.2 | 0.1 | 9.1 |
| SCAQMD Threshold | 55. | 55. | 550. | 150. | 150. |
| Exceeds Threshold? | No | No | No | No | No |
| Percent of Threshold | 23 | 18 | 19 | <1 | 6 |

Source: URBEMIS2002 computer model, Output in Appendix

**Table 6**

**Micro-scale Impact Assessment**
**(1-Hour CO concentrations [ppm] above background levels)**

| A.M. Peak Hour | TPO Analysis | | CEQA Analysis | | GPA Analysis | |
|---|---|---|---|---|---|---|
| Intersection: | Existing + Approved | Existing + Approved + Project | Existing + Approved + Cumulative | Existing + Approved + Cumulative + Project | Existing + Approved + Cumulative | Existing + Approved + Cumulative + Project |
| **Jamboree Road:** | | | | | | |
| Eastbluff Drive | 4.6 | 4.6 | 6.2 | 6.2 | - | - |
| Coast Highway | - | - | - | - | 8.8 | 8.8 |
| **MacArthur Boulevard:** | | | | | | |
| Ford Road | 6.7 | 6.7 | 8.4 | 8.4 | 7.7 | 7.7 |
| San Joaquin Hills Road | 4.6 | 4.6 | 5.0 | 5.0 | 6.4 | 6.4 |

| P.M. Peak Hour | TPO Analysis | | CEQA Analysis | | GPA Analysis | |
|---|---|---|---|---|---|---|
| Intersection: | Existing + Approved | Existing + Approved + Project | Existing + Approved + Cumulative | Existing + Approved + Cumulative + Project | Existing + Approved + Cumulative | Existing + Approved + Cumulative + Project |
| **Jamboree Road:** | | | | | | |
| Eastbluff Drive | 3.1 | 3.1 | 4.3 | 4.4 | - | - |
| Coast Highway | - | - | - | - | 8.9 | 8.9 |
| **MacArthur Boulevard:** | | | | | | |
| Ford Road | 4.2 | 4.2 | 5.9 | 6.0 | 16.1 | 16.1 |
| San Joaquin Hills Road | 6.0 | 6.0 | 6.6 | 6.6 | 11.0 | 11.0 |

TPO = Traffic Phasing Ordinance
CEQA = California Environmental Quality Act
GPA = General Plan Amendment

Maximum background one-hour CO levels in Newport Beach are approximately 4 ppm. The worst-case p.m. peak hour local contribution under the GPA analysis is 16.1 ppm at MacArthur Boulevard and Ford Road because this intersection would operate at LOS = F. The sum of background plus local CO levels could exceed the one-hour CO standard. The cumulative impact from the project is negligible, however, because:

a. The project contribution is immeasurably small,
b. The GPA build-out condition will not be achieved until well into the future when cars are cleaner whereas the analysis was conducted assuming a 2005 traffic fleet, and,
c. GPA build-out causing LOS = F conditions may not be achieved. Non-GPA bould-out scenarios predict no violations of CO standards.

There are thus no "hot spot" CO impacts (individually or cumulatively) associated with implementation of the Santa Barbara Condominium residential project in the City of Newport Beach.

## IMPACT MITIGATION

Operational emissions from project-related traffic will not exceed suggested SCAQMD significance thresholds.

Air quality impacts during construction could temporarily exceed significance threshold levels for ROG emissions in the absence of any mitigation measures.

A mitigation plan for dust and air pollution should be developed to insure that scheduling and pollution management practices are followed as assumed in the air quality impact analysis. Even if the construction activity PM-10 emissions are maintained below SCAQMD thresholds, any increase in air pollution in a non-attainment area should be considered as an adverse impact and reduced to the extent reasonable and feasible. Emissions from construction activities should therefore be minimized where possible. Project conditions for approval should incorporate emissions control requirements to address these construction impact concerns. SCAQMD Rule 403 requires use of at least one dust control measure. An enhanced program incorporating multiple measures is recommended, including:

1. During grading activities, any exposed soil areas shall be watered twice per day. On windy days or when fugitive dust can be observed leaving the project site, additional applications of water shall be applied to maintain a minimum 12 percent moisture content as defined by SCAQMD Rule 403. Under windy conditions where velocities are forecast to exceed 25 miles per hour (as ascertained by phone calls to the SCAQMD), all ground disturbing activities shall be halted until winds that are forecast to abate below this threshold.

2. The project shall comply with regional rules such as SCAQMD Rules 402 and 403, which would assist in reducing short-term air pollutant emissions. Rule 403 requires that fugitive dust be controlled with best available control measures so that the presence of such dust does not remain visible in the atmosphere beyond the property line of the emission source. Rule 402 requires dust suppression techniques be implemented to prevent fugitive dust from creating a nuisance offsite. These dust suppression techniques are summarized as follows:

    a. Portions of the construction site to remain inactive longer than a period of three months shall be seeded and watered until grass cover is grown or otherwise stabilized in a manner acceptable to the City.

    b. All on-site roads shall be paved as soon as feasible or watered periodically or chemically stabilized.

    c. All material transported offsite shall be either sufficiently watered or securely covered to prevent excessive amounts of dust.

    d. The area disturbed by clearing, grading, earthmoving, or excavation operations shall be minimized at all times.

3. All vehicles on the construction site shall travel at speeds less than 15 miles per hour.

4. All material stockpiles subject to wind erosion during construction activities, that will not be utilized within three days, shall be covered with plastic, an alternative cover deemed equivalent to plastic, or sprayed with a nontoxic chemical stabilizer.

5. Where vehicles leave the construction site and enter adjacent public streets, the streets shall be swept daily or washed down at the end of the work day to remove soil tracked onto the paved surface. Any visible track-out extending for more than fifty (50) feet from the access point shall be swept or washed within thirty (30) minutes of deposition.

6. All diesel-powered vehicles and equipment shall be properly operated and maintained.

7. All diesel-powered vehicles and gasoline-powered equipment shall be turned off when not in use for more than five (5) minutes.

8. The construction contractor shall utilize electric or natural gas-powered equipment instead of gasoline or diesel-powered engines, where feasible.

9. As much as possible, the construction contractor shall time the construction activities so as not to interfere with peak hour traffic. To minimize obstruction of through traffic lanes adjacent to the site, a flagperson shall be retained to maintain safety adjacent to existing roadways, if necessary.

10. The construction contractor shall support and encourage ridesharing and transit incentives for the construction crew.

11. The construction contractor shall utilize as much as possible pre-coated/natural colored building materials. Water-based or low VOC coatings shall be used that comply with the most stringent SCAQMD Rule 1113 limits. Spray equipment with high transfer efficiency, such as the high volume-low pressure (HVLP) spray method, or manual coatings application such as paint brush hand roller, trowel, spatula, dauber, rag, or a sponge shall be used to reduce VOC emissions, where practical.

12. If construction equipment powered by alternative fuel sources (LPG/CNG) is available at comparable cost, the developer shall specify that such equipment be used during all construction activities on the project site.

13. The developer shall require the use of particulate filters on diesel construction equipment if use of such filters is demonstrated to be cost-competitive for use on this project.

# APPENDIX

# URBEMIS2002 Computer Model Output

# Project Build-out Year 2007

URBEMIS 2002 For Windows 7.5.0

File Name: <Not Saved>
Project Name: Santa Barbara
Project Location: South Coast Air Basin (Los Angeles area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Pounds/Day - Summer)

CONSTRUCTION EMISSION ESTIMATES

| *** 2005 *** | ROG | NOx | CO | SO2 | PM10 TOTAL | PM10 EXHAUST | PM10 DUST |
|---|---|---|---|---|---|---|---|
| TOTALS (lbs/day,unmitigated) | 7.04 | 48.70 | 57.11 | 0.00 | 12.06 | 2.05 | 10.01 |

| *** 2006 *** | ROG | NOx | CO | SO2 | PM10 TOTAL | PM10 EXHAUST | PM10 DUST |
|---|---|---|---|---|---|---|---|
| TOTALS (lbs/day,unmitigated) | 143.10 | 30.83 | 35.72 | 0.00 | 1.41 | 1.35 | 0.06 |

AREA SOURCE EMISSION ESTIMATES

| | ROG | NOx | CO | SO2 | PM10 |
|---|---|---|---|---|---|
| TOTALS (lbs/day,unmitigated) | 4.08 | 0.61 | 1.42 | 0.00 | 0.00 |

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

| | ROG | NOx | CO | SO2 | PM10 |
|---|---|---|---|---|---|
| TOTALS (lbs/day,unmitigated) | 8.52 | 9.41 | 101.87 | 0.06 | 9.13 |

SUM OF AREA AND OPERATIONAL EMISSION ESTIMATES

| | ROG | NOx | CO | SO2 | PM10 |
|---|---|---|---|---|---|
| TOTALS (lbs/day,unmitigated) | 12.59 | 10.02 | 103.29 | 0.06 | 9.13 |

URBEMIS 2002 For Windows 7.5.0

File Name: <Not Saved>
Project Name: Santa Barbara
Project Location: South Coast Air Basin (Los Angeles area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
(Pounds/Day - Summer)

Construction Start Month and Year: June, 2005
Construction Duration: 12
Total Land Use Area to be Developed: 0 acres
Maximum Acreage Disturbed Per Day: 1 acres
Single Family Units: 0 Multi-Family Units: 79
Retail/Office/Institutional/Industrial Square Footage: 0

CONSTRUCTION EMISSION ESTIMATES UNMITIGATED (lbs/day)

| Source | ROG | NOx | CO | SO2 | PM10 TOTAL | PM10 EXHAUST | PM10 DUST |
|---|---|---|---|---|---|---|---|
| *** 2005*** | | | | | | | |
| Phase 1 - Demolition Emissions | | | | | | | |
| Fugitive Dust | - | - | - | - | 0.00 | - | 0.00 |
| Off-Road Diesel | 0.00 | 0.00 | 0.00 | - | 0.00 | 0.00 | 0.00 |
| On-Road Diesel | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Worker Trips | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Maximum lbs/day | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Phase 2 - Site Grading Emissions | | | | | | | |
| Fugitive Dust | - | - | - | - | 10.00 | - | 10.00 |
| Off-Road Diesel | 6.92 | 48.56 | 54.32 | - | 2.05 | 2.05 | 0.00 |
| On-Road Diesel | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Worker Trips | 0.12 | 0.14 | 2.79 | 0.00 | 0.01 | 0.00 | 0.01 |
| Maximum lbs/day | 7.04 | 48.70 | 57.11 | 0.00 | 12.06 | 2.05 | 10.01 |
| Phase 3 - Building Construction | | | | | | | |
| Bldg Const Off-Road Diesel | 4.16 | 31.85 | 30.89 | - | 1.45 | 1.45 | 0.00 |
| Bldg Const Worker Trips | 0.19 | 0.11 | 2.29 | 0.00 | 0.03 | 0.00 | 0.03 |
| Arch Coatings Off-Gas | 0.00 | - | - | - | - | - | - |
| Arch Coatings Worker Trips | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Asphalt Off-Gas | 0.00 | - | - | - | - | - | - |
| Asphalt Off-Road Diesel | 0.00 | 0.00 | 0.00 | - | 0.00 | 0.00 | 0.00 |
| Asphalt On-Road Diesel | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Asphalt Worker Trips | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Maximum lbs/day | 4.36 | 31.96 | 33.18 | 0.00 | 1.48 | 1.45 | 0.03 |
| Max lbs/day all phases | 7.04 | 48.70 | 57.11 | 0.00 | 12.06 | 2.05 | 10.01 |
| *** 2006*** | | | | | | | |
| Phase 1 - Demolition Emissions | | | | | | | |
| Fugitive Dust | - | - | - | - | 0.00 | - | 0.00 |
| Off-Road Diesel | 0.00 | 0.00 | 0.00 | - | 0.00 | 0.00 | 0.00 |
| On-Road Diesel | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Worker Trips | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Maximum lbs/day | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Phase 2 - Site Grading Emissions | | | | | | | |
| Fugitive Dust | - | - | - | - | 0.00 | - | 0.00 |
| Off-Road Diesel | 0.00 | 0.00 | 0.00 | - | 0.00 | 0.00 | 0.00 |
| On-Road Diesel | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Worker Trips | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Maximum lbs/day | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Phase 3 - Building Construction | | | | | | | |
| Bldg Const Off-Road Diesel | 4.16 | 30.67 | 31.63 | - | 1.35 | 1.35 | 0.00 |
| Bldg Const Worker Trips | 0.18 | 0.10 | 2.17 | 0.00 | 0.03 | 0.00 | 0.03 |
| Arch Coatings Off-Gas | 138.60 | - | - | - | - | - | - |
| Arch Coatings Worker Trips | 0.17 | 0.08 | 2.05 | 0.00 | 0.03 | 0.00 | 0.03 |
| Asphalt Off-Gas | 0.00 | - | - | - | - | - | - |
| Asphalt Off-Road Diesel | 0.00 | 0.00 | 0.00 | - | 0.00 | 0.00 | 0.00 |
| Asphalt On-Road Diesel | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Asphalt Worker Trips | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Maximum lbs/day | 143.10 | 30.83 | 35.72 | 0.00 | 1.41 | 1.35 | 0.06 |
| Max lbs/day all phases | 143.10 | 30.83 | 35.72 | 0.00 | 1.41 | 1.35 | 0.06 |

Phase 1 - Demolition Assumptions: Phase Turned OFF

Phase 2 - Site Grading Assumptions
Start Month/Year for Phase 2: Jun '05
Phase 2 Duration: 1.3 months
On-Road Truck Travel (VMT): 0
Off-Road Equipment

| No. | Type | Horsepower | Load Factor | Hours/Day |
|---|---|---|---|---|
| 1 | Excavators | 180 | 0.580 | 8.0 |
| 1 | Other Equipment | 190 | 0.620 | 8.0 |
| 1 | Rubber Tired Loaders | 165 | 0.465 | 8.0 |
| 1 | Tractor/Loaders/Backhoes | 79 | 0.465 | 8.0 |
| 1 | Trenchers | 82 | 0.695 | 8.0 |

Phase 3 - Building Construction Assumptions
Start Month/Year for Phase 3: Jul '05
Phase 3 Duration: 10.7 months
Start Month/Year for SubPhase Building: Jul '05
SubPhase Building Duration: 10.7 months
Off-Road Equipment

| No. | Type | Horsepower | Load Factor | Hours/Day |
|---|---|---|---|---|
| 1 | Cranes | 190 | 0.430 | 8.0 |
| 1 | Other Equipment | 190 | 0.620 | 8.0 |
| 1 | Tractor/Loaders/Backhoes | 79 | 0.465 | 8.0 |

Start Month/Year for SubPhase Architectural Coatings: Apr '06
SubPhase Architectural Coatings Duration: 1.1 months
Start Month/Year for SubPhase Asphalt: May '06
SubPhase Asphalt Duration: 0.5 months
Acres to be Paved: 0
Off-Road Equipment

| No. | Type | Horsepower | Load Factor | Hours/Day |
|---|---|---|---|---|

AREA SOURCE EMISSION ESTIMATES (Summer Pounds per Day, Unmitigated)

| Source | ROG | NOx | CO | SO2 | PM10 |
|---|---|---|---|---|---|
| Natural Gas | 0.05 | 0.60 | 0.25 | - | 0.00 |
| Wood Stoves - No summer emissions | | | | | |
| Fireplaces - No summer emissions | | | | | |
| Landscaping | 0.16 | 0.01 | 1.17 | 0.00 | 0.00 |
| Consumer Prdcts | 3.86 | - | - | - | - |
| TOTALS(lbs/day,unmitigated) | 4.08 | 0.61 | 1.42 | 0.00 | 0.00 |

UNMITIGATED OPERATIONAL EMISSIONS

| | ROG | NOx | CO | SO2 | PM10 |
|---|---|---|---|---|---|
| Condo/townhouse general | 6.40 | 6.66 | 73.26 | 0.04 | 6.50 |
| Tennis Courts | 2.12 | 2.75 | 28.62 | 0.02 | 2.63 |
| TOTAL EMISSIONS (lbs/day) | 8.52 | 9.41 | 101.87 | 0.06 | 9.13 |

Does not include correction for passby trips.
Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2007 Temperature (F): 90 Season: Summer

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

| Unit Type | Trip Rate | Size | Total Trips |
|---|---|---|---|
| Condo/townhouse general | 8.10 trips / dwelling units | 79.00 | 639.90 |
| Tennis Courts | 38.70 trips / Court | 8.00 | 309.60 |

Vehicle Assumptions:

Fleet Mix:

| Vehicle Type | Percent Type | Non-Catalyst | Catalyst | Diesel |
|---|---|---|---|---|
| Light Auto | 55.20 | 1.80 | 97.80 | 0.40 |
| Light Truck < 3,750 lbs | 15.10 | 3.30 | 94.00 | 2.70 |
| Light Truck 3,751- 5,750 | 16.10 | 1.90 | 96.90 | 1.20 |
| Med Truck 5,751- 8,500 | 7.10 | 1.40 | 95.80 | 2.80 |
| Lite-Heavy 8,501-10,000 | 1.10 | 0.00 | 81.80 | 18.20 |
| Lite-Heavy 10,001-14,000 | 0.40 | 0.00 | 50.00 | 50.00 |
| Med-Heavy 14,001-33,000 | 1.00 | 0.00 | 20.00 | 80.00 |
| Heavy-Heavy 33,001-60,000 | 0.90 | 0.00 | 11.10 | 88.90 |
| Line Haul > 60,000 lbs | 0.00 | 0.00 | 0.00 | 100.00 |
| Urban Bus | 0.10 | 0.00 | 0.00 | 100.00 |
| Motorcycle | 1.70 | 82.40 | 17.60 | 0.00 |
| School Bus | 0.10 | 0.00 | 0.00 | 100.00 |
| Motor Home | 1.20 | 8.30 | 83.30 | 8.40 |

Travel Conditions

| | Residential | | | Commercial | | |
|---|---|---|---|---|---|---|
| | Home-Work | Home-Shop | Home-Other | Commute | Non-Work | Customer |
| Urban Trip Length (miles) | 11.5 | 4.9 | 6.0 | 10.3 | 5.5 | 5.5 |
| Rural Trip Length (miles) | 11.5 | 4.9 | 6.0 | 10.3 | 5.5 | 5.5 |
| Trip Speeds (mph) | 35.0 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 |
| % of Trips - Residential | 20.0 | 37.0 | 43.0 | | | |
| % of Trips - Commercial (by land use) | | | | | | |
| Tennis Courts | | | | 2.0 | 1.0 | 97.0 |

Changes made to the default values for Land Use Trip Percentages

Changes made to the default values for Construction

Changes made to the default values for Area

Changes made to the default values for Operations

The operational emission year changed from 2004 to 2007.
The double counting internal work trip limit changed from  to 6.192.
The double counting shopping trip limit changed from  to 3.096.
The double counting other trip limit changed from  to 275.157.
The travel mode environment settings changed from  both to: none

PA2004-169

# FINAL INITIAL STUDY and MITIGATED NEGATIVE DECLARATION for the proposed SANTA BARBARA CONDOMINIUMS PROJECT


Prepared for:
***City of Newport Beach***
Planning Department
3300 Newport Boulevard
Newport Beach, CA 92663
Rosalinh M. Ung, Associated Planner
(949) 644-3208

Prepared by:
***David Evans and Associates, Inc.***
9635 Granite Ridge Drive, Suite 300
San Diego, CA 92123
Dustin Fuller, Project Manager
(858) 614-4360



Draft: July 15, 2005
Final: January 10, 2006

# ERRATA

## FINAL MND FOR THE SANTA BARBARA CONDOMINIUMS PROJECT

After completion of the Public Review period for the Draft Mitigated Negative Declaration, a Planned Community District (PCD) was developed for the proposed project (please contact the City of Newport -Beach Planning Department to review this document). Additionally, as a result of comments received, several typographical errors and/or clarifications to the MND text were identified. The addition of the PCD language as well as both minor typographical errors and clarifications were corrected in the text. All additions and/or corrections/modifications to the text are shown in strike-out/underline format provided below. The additions of the PCD language and the corrections have been reviewed and none of them affect the conclusions found in the impact analysis.

All comments received during the review period from July 15 through August 15, 2005 and during the Planning Commission public meeting on November 3, 2005 for the Draft Santa Barbara Condominiums Initial Study and Mitigated Negative Declaration document were noted and incorporated into the document. All revisions to the project document are provided in strikeout – underline format below.

**Section 1.1 Introduction: page 1-1: paragraph 1**

This Initial Study evaluates and identifies the potential environmental impacts which may result from the proposed Santa Barbara Condominiums Project (proposed Project), in the City of Newport Beach. The Project proposes the development of 79 condominiums on a 4.25 acre site, currently in the Newport Beach Marriott Hotel's tennis complex. The project consists of three separate buildings with eight different floor plan options and has an approximately 79,140 square fee of open space and 21,300 square feet of recreational areas for use by residents and their guests. The four-story buildings are approximately 65 feet in height with subterranean parking levels. The project would require a General Plan Amendment and Local Coastal Plan Land Use Plan Amendment to change the current land use designation from Administrative, Professional, Financial (APF) to Multi-Family Residential (MFR); approval of a Planned Community District (PCD) to rezone the subject property from APF to PC District, to establish use and development regulations, and to consider a waiver of the 10-acre minimum land area requirement for PCD adoption; ~~a Zone change to rezone the subject property from APF to MFR;~~ a Parcel Map to subdivide the subject property from the hotel development for financing purposes; a Tract Map for the condominium ownerships; and approval of a Traffic Study pursuant to the Traffic Phasing Ordinance (TPO). ~~and a Modification Permit for the front yard setback encroachment.~~ These discretionary actions are further discussed in Section 2.4 of this Initial Study.

**Section 1.3 Summary of Findings: pages 1-3 and 1-4: Mitigation Measures 3.3.E, 3.3.N and 3.3.O:**

**Mitigation Measure 3.3.E:** Where vehicles leave the construction site and enter adjacent public streets, the streets shall be swept daily ~~or washed down~~ at the end of the work day to remove soil tracked onto the paved surface. Any visible track-out extending for more than fifty (50) feet from the access point shall be swept or washed within thirty (30) minutes of deposition.

**Mitigation Measure 3.3.N:** Per review and approval by the City, during demolition and excavation, daily total haul trucks shall travel no more than a cumulative 2,400 miles per day hauling materials from the site to and from the dumping site.

**Mitigation Measure 3.3.O:** Per review and approval by the City, prior to commencement of demolition and grading the project applicant shall submit to the City calculations showing the proposed travel route for haul trucks, the distance traveled, and how many daily truck trips that can be accommodated while keeping the cumulative miles traveled to below 2,400 miles each day. The daily haul truck trips shall not exceed 2,400 miles during demolition and excavation activities.

**Section 1.3 Summary of Findings: page 1-5: Mitigation Measure 3.11.C**

**Mitigation Measure 3.11.C:** Idling of construction vehicles and equipment shall be limited to the extent feasible. Construction vehicles and equipment shall be properly operated and maintained and shall be turned off when not in use for more than five (5) minutes.

**Section 2.2 Description of the Proposed Project: page 2-5: paragraph 1**

The proposed Project involves a General Plan Amendment to redesignate 4.25 acres of land from Administrative, Professional, Financial Commercial (APF) to Multi-Family Residential (MFR) to accommodate the proposed residential development. ~~The proposed Project site would require a zone change from APF to MFR.~~ The proposed Project consists of three residential buildings totaling 79 condominium units (see Figure 2-3, *Proposed Site Plan).*

**Section 2.2 Description of the Proposed Project: page 2-5: new paragraph 5**

***Draft Santa Barbara Residential Planned Community District***

The proposed Project includes the Draft Santa Barbara Residential Planned Community District (PCD). Upon adoption, development on the project site would be governed by the Santa Barbara Residential PCD. Development standards identified within the proposed Santa Barbara Residential PCD are intended to guide the zoning classification and development on the project site to ensure the proposed development would comply with the applicable plans and policies of the City of Newport Beach. The Draft Santa Barbara Residential PCD identifies the following development standards:

- Permitted Uses
- Density
- Percentage of Site Coverage
- Setbacks
- Building Height
- Signs
- Parking
- Vehicular Access
- Landscape & Irrigation
- Refuse Collection
- Telephone, Gas and Electrical Service
- Grading
- Lighting
- Screening

**Section 2.4 Discretionary Actions: page 2-7: paragraph 1**

- ***Draft Santa Barbara Residential Planned Community District (PCD) Plan No. 2005-003 Text Adoption and Waiver of Minimum Acreage*** – *The proposed project would require: a rezone of the subject property from APF to PC District; adoption of the Draft Santa Barbara Residential PCD to establish use and development regulations; and consider a waiver of the 10-acre minimum land area requirement for PCD adoption.*

- ~~***Code Amendment No. 2004-008*** – The proposed Project would also involve a rezoning of the property from the current zone of APF to MFR. The MFR zone would allow development of multi-family units with a minimum lot size of 5,000 square feet and a minimum site area per unit of 1,200 square feet.~~

- ***Tentative Parcel Map No. 2005-014*** – To subdivide the 4.25-acre subject property from the 13.79-acre Marriott Hotel development. ~~Resubdivision to Marriott's parcels for financing purposes – see drawings.~~

- ***Tentative Tract Map No. 2004-004 ~~and (16774)~~*** – To subdivide the 4.25-acre subject property for ~~C~~condominium ownership~~development~~.

- ***Traffic Study No. 2005-002*** – Traffic Analysis pursuant to the Traffic Phasing Ordinance (TPO).

- ~~***Modification Permit No. 2005-019***~~ – ~~Front yard setback encroachment.~~

- ***Coastal Residential Development Permit No. 2005-004*** – For affordable housing inclusion in accordance with the Municipal Code and Housing Element of the General Plan as the project is located in the Coastal Zone. ~~Since the site is located within the Coastal Zone boundaries in the City of Newport Beach and the California Coastal Commission regulates development in the Coastal Zone, the proposed Project applicant would need to obtain an approved Coastal Development Permit for the proposed project~~.

**Section 3.3 Air Quality: page 3-10: new paragraph 4 and 5**

It is unknown at this time where the excavated material will be hauled. This will not be determined until after the grading permit is issued and just prior to beginning excavation. The location is often dependant on other construction projects and where fill material is being accepted. For the purpose of calculating emissions, it is assumed as a worst-case estimate that a 30-mile round trip would be required to reach the disposal site. The project applicant has proposed to remove the excavated material using 80 truck trips per day over a 36 day period.

The California Air Resources Board (CARB) emissions ~~computer model~~ URBEMIS2002 and EMFAC2002 computer models ~~were~~as used to estimate daily emissions during grading, hauling and finish construction with the following results (pounds/day) shown in Table 3-4, *Estimated Project Emissions During Construction*, provided below.

**Section 3.3 Air Quality: page 3-11: Table 3-4 and paragraph 1**

**TABLE 3-4**
**ESTIMATED PROJECT EMISSIONS DURING CONSTRUCTION**

| Activity | ROG | NOx | CO | $SO_2$ | PM-10 Total | PM-10 Equipment Exhaust | PM-10 Dust |
|---|---|---|---|---|---|---|---|
| Grading | 7.0 | 48.7 | 57.1 | 0.0 | 12.1 | 2.1 | 10.0[ab] |
| Hauling | 1.1 | 31.1 | 4.7 | 0.3 | 45.4 | 0.6 | 44.8[b] |
| Finish Work | 143.1[ca] | 30.8 | 35.7 | 0.0 | 1.4 | 1.3 | 0.1 |
| SCAQMD Threshold | 75. | 100. | 550. | 150. | 150. | ~~150~~ | ~~150~~ |

[ab] Maximum daily disturbance "footprint" during grading is 1.0 acre. Calculated PM-10 emissions have been calculated with the application of "standard" dust control, and with the application of enhanced dust control measures (see Air Quality Analysis for more details).

[ba] 0.031 lb/ton truck filling and dumping~~Exceeds threshold due to application of paints and coatings~~.

[c] Exceeds threshold due to application of paints and coatings

Source: Air Quality Analysis

As shown above, grading and hauling will not cause SCAQMD thresholds to be exceeded; however, during finish work, application of paintings and coatings could create ROG emissions exceeding the SCAQMD threshold. Additionally, limiting the grading footprint area and/or use of best available control measures (BACMs) are not required to achieve a less-than-significant dust (PM-10) emission rate. However, the non-attainment status of the air basin for PM-10 dictates that all reasonably available control measures be implemented. Use of BACMs during construction is therefore recommended even if thresholds are not exceeded.

**Section 3.3 Air Quality: page 3-12: Mitigation Measures 3.3.E, 3.3.N and 3.3.O**

**Mitigation Measure 3.3.E:** Where vehicles leave the construction site and enter adjacent public streets, the streets shall be swept daily ~~or washed down~~ at the end of the work day to remove soil tracked onto the paved surface. Any visible track-out extending for more than fifty (50) feet from the access point shall be swept or washed within thirty (30) minutes of deposition.

**Mitigation Measure 3.3.N:** Per review and approval by the City, during demolition and excavation, daily total haul trucks shall travel no more than a cumulative 2,400 miles per day hauling materials from the site to and from the dumping site.

**Mitigation Measure 3.3.O:** Per review and approval by the City, prior to commencement of demolition and grading the project applicant shall submit to the City calculations showing the proposed travel route for haul trucks, the distance traveled, and how many daily truck trips that can be accommodated while keeping the cumulative miles traveled to below 2,400 miles each day. The daily haul truck trips shall not exceed 2,400 miles during demolition and excavation activities.

**Section 3.9 Land Use and Planning: page 3-36: paragraph 3**

**B. Would the Project conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the Project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?**

**Less than Significant Impact.** The proposed Project would involve a general plan amendment~~,~~ and LCP ~~and zone change~~ to alter the land use allowed on the ~~proposed~~ Project site. The project also includes adoption of a Planned Community District (PCD) to rezone the subject property from APF to PC District and to establish use and development regulations on the Project site. The current General Plan land use designation on the proposed Project site is Administrative, Professional, Financial Commercial (APF). The general plan amendment would change it to Multi-Family Residential (MFR). According to the Land Use Element of the General Plan, this land use category has been applied where multiple dwelling units are allowed on a single subdivided lot. Smaller condominiums and other individually owned attached housing projects are also given this designation. Further, this category allows for either single ownership or condominium development.

**Section 3.9 Land Use and Planning: page 3-39: paragraph 2**

~~The proposed Project would also require a zone change from APF to MFR in order to be consistent with the proposed General Plan designation. However, as discussed above, the proposed Project would help promote Policy A of the City's General Plan and would be compatible with the residential zones to the south and northeast of the site. A less than significant impact to the zoning code is anticipated with development of the proposed Project.~~

**Section 3.9 Land Use and Planning: page 3-39: paragraph 6 through page 3-40: paragraph 1**

~~Setback requirements for the proposed Project area are governed by the City's Municipal Code. The requirements for the site are outlined in Table 3-7, *Project Setback Requirements*, below.~~

| ~~TABLE 3-7 PROJECT SETBACK REQUIREMENTS~~ | | | |
|---|---|---|---|
| ~~*Newport Beach Municipal Code*~~ | ~~*Front Setback (ft.)*~~ | ~~*Side Setback (ft.)*~~ | ~~*Rear Setback (ft.)*~~ |
| ~~*Multi-Family Residential*~~ | ~~*20*~~ | ~~*4*~~ | ~~*10*~~ |
| ~~*Santa Barbara Condos*~~ | | | |
| ~~*Residential Development*~~ | ~~*15*~~ | ~~*5*~~ | ~~*10*~~ |

~~SOURCE: City of Newport Beach Municipal Code and Santa Barbara Condominiums Site Plan~~

~~Based on these requirements, the proposed Project would not meet the required setback for front yards. The proposed Project would require a Modification Permit to deviate from this setback requirement. The majority of the proposed Project would exceed the front setback requirement; however, several portions of the buildings are approximately 17 feet from property lines. Those portions encroaching within the 20-foot setback requirements include either architectural features or balconies/patios that are not habitable/living spaces. The reduced front setbacks, therefore, would not result in significant environmental impacts.~~

As discussed in Section 2, *Project Description*, of this document, a Planned Community District (PCD) has been drafted for the proposed project. Development on the project site would be governed by the Draft Santa Barbara Residential PCD. Table 3-7, *Draft Santa Barbara Residential PCD Development Requirements*, shows the development requirements as set fourth in the draft PCD.

| TABLE 3-7 DRAFT SANTA BARBARA RESIDENTIAL PCD DEVELOPMENT REQUIREMENTS | |
|---|---|
| **Density** | |
| Density | 79 dwelling units (18.59 units per gross acre) |
| **Percentage of Site Coverage** | |
| Building Coverage | 100%, less setbacks |
| Building Height | 65 feet maximum |
| Floor Area Ratio | 1.90 |
| Landscape | 10% |
| **Building Setbacks** | |
| Front | 15 feet minimum |
| Side | 7 feet minimum |
| Rear | 13 feet minimum |
| Parking | 2 spaces per unit for resident and 0.5 space for guest |

Source: Draft Santa Barbara Residential PCD

Further development standards associated with building height, signage, parking, vehicular access, landscaping and irrigation, refuse collection, telephone, gas and electric service, grading, lighting and screening are also addressed within the Draft Santa Barbara Residential PCD. The proposed Project would be developed in accordance with all the development standards as identified within the Draft Santa Barbara Residential PCD. Development of the PCD follows the requirements set forth in the City of Newport Beach Municipal Code. Development of the proposed project, under the approval of the PCD, would result in less than significant impacts.

**Section 3.11 Noise: page 3-44: paragraph 3**

**Mitigation Measure 3.11.C:** Idling of construction vehicles and equipment shall be limited to the extent feasible. Construction vehicles and equipment shall be properly operated and maintained and shall be turned off when not in use for more than five (5) minutes.

**Section 3.15 Transportation/Traffic: page 3-60: paragraph 2**

**F. Would the Project result in inadequate parking capacity?**

**Less than Significant Impact with Mitigation.** The proposed Project provides a total of 201 on-site parking spaces (159 resident and 42 guest). The City of Newport Beach requires a total of 198 spaces for the residential development (two parking spaces per unit, plus 0.5 spaces per unit for guest parking on developments with four or more units). The Draft Santa Barbara Residential PCD provides for the required on-site parking per the City of Newport Beach Municipal Code. Thus, ~~T~~the proposed Project complies with the on-site parking requirements and therefore would not result in parking deficiency. To ensure that all City requirements for parking areas on-site are met, the following improvements are recommended from the Traffic Impact Analysis.

**Section 4.2 Mitigation Measures: page 4-3: Mitigation Measures 3.3.E, 3.3.N and 3.3.O.**

**Mitigation Measure 3.3.E:** Where vehicles leave the construction site and enter adjacent public streets, the streets shall be swept daily ~~or washed down~~ at the end of the work day to remove soil tracked onto the paved surface. Any visible track-out extending for more than fifty (50) feet from the access point shall be swept or washed within thirty (30) minutes of deposition.

**Mitigation Measure 3.3.N:** Per review and approval by the City, during demolition and excavation, daily total haul trucks shall travel no more than a cumulative 2,400 miles per day hauling materials from the site to and from the dumping site.

**Mitigation Measure 3.3.O:** Per review and approval by the City, prior to commencement of demolition and grading the project applicant shall submit to the City calculations showing the proposed travel route for haul trucks, the distance traveled, and how many daily truck trips that can be accommodated while keeping the cumulative miles traveled to below 2,400 miles each day. The daily haul truck trips shall not exceed 2,400 miles during demolition and excavation activities.

**Section 4.2 Mitigation Measures: page 4-5: Mitigation Measure 3.11.C**

**Mitigation Measure 3.11.C:** Idling of construction vehicles and equipment shall be limited to the extent feasible. Construction vehicles and equipment shall be properly operated and maintained and shall be turned off when not in use for more than five (5) minutes

**Section 5.2 References: page 5-2: item 5**

City of Newport Beach, Draft Santa Barbara Residential Planned Community District, October 2005.

**Changes made to the Mitigation and Monitoring Program for the proposed Santa Barbara Condominiums Project:**

**Mitigation Measure 3.3.E:** Where vehicles leave the construction site and enter adjacent public streets, the streets shall be swept daily ~~or washed down~~ at the end of the work day to remove soil tracked onto the paved surface. Any visible track-out extending for more than fifty (50) feet from the access point shall be swept or washed within thirty (30) minutes of deposition.

**Mitigation Measure 3.3.N:** Per review and approval by the City, during demolition and excavation, daily total haul trucks shall travel no more than a cumulative 2,400 miles per day hauling materials from the site to and from the dumping site.

**Mitigation Measure 3.3.O:** Per review and approval by the City, prior to commencement of demolition and grading the project applicant shall submit to the City calculations showing the proposed travel route for haul trucks, the distance traveled, and how many daily truck trips that can be accommodated while keeping the cumulative miles traveled to below 2,400 miles each day. The daily haul truck trips shall not exceed 2,400 miles during demolition and excavation activities

**Mitigation Measure 3.11.C:** Idling of construction vehicles and equipment shall be limited to the extent feasible. Construction vehicles and equipment shall be properly operated and maintained and shall be turned off when not in use for more than five (5) minutes.

**Proposed Change to the "Air Quality Analysis Santa Barbara Condominiums Project City of Newport Beach, California" technical report document prepared for the project: page 15.**

See Attachment

Exhaust emissions will result from on- and off-site heavy equipment during grading. Emissions will also be generated during finish construction, especially during the application of paints or other coatings. The types and numbers of equipment will vary among contractors such that such emissions cannot be quantified with certainty. During excavation and grading, the following equipment fleet has been assumed to be utilized as a basis for estimating maximum daily equipment exhaust emissions:

| | |
|---|---|
| 1 Excavator | 1 Other Equipment |
| 1 Rubber Tire Loader | 1 Trencher |
| 1 Tractor/Loader/Backhoe | 80 Truck Trips with Excavated Material |

The CARB's URBEMIS2002 and EMFAC2002 computer models wereas used to estimate daily emissions during grading, hauling and finish construction with the following results (pounds/day):

| Activity | ROG | NOx | CO | $SO_2$ | PM-10 Total | PM-10 Equipment Exhaust | PM-10 Dust |
|---|---|---|---|---|---|---|---|
| Grading | 7.0 | 48.7 | 57.1 | 0.0 | 12.1 | 2.1 | 10.0 |
| Hauling | 1.1 | 31.1 | 4.7 | 0.3 | 45.4 | 0.6 | 44.8[a] |
| Finish Work | 143.1 [ba] | 30.8 | 35.7 | 0.0 | 1.4 | 1.3 | 0.1 |
| SCAQMD Threshold | 75. | 100. | 550. | 150. | 150. | - | - |

[a] 0.031 lb/ton truck filling and dumping. [b]Exceeds threshold due to application of paints and coatings.

Simultaneous grading and hauling will not cause SCAQMD thresholds to be exceeded. However, dDuring finish work, application of paintings and coatings can create ROG emissions exceeding the SCAQMD threshold. This estimate is based upon every unit completed in a single month (22 working days). The actual project build-out will be phased over a much longer period. Nevertheless, use of available emissions reduction measures isare recommended to reduce ROG emissions. Emissions minimization can be accomplished by using pre-coated materials, using high efficiency paint applicators (HPLV), and by extending the painting schedule using low-VOC paints.~~as follows:~~

~~Use pre-coated building materials~~
~~□Use high pressure-low volume (HPLV) paint applicators with 50 percent efficiency~~
~~□Use lower volatility paint not exceeding 100 grams of ROG per liter~~

Use of the above measures can reduce emissions from architectural coatings to perhaps 1/3 of their calculated values. Daily emissions can be reduced to about 48 pounds per day (143.1 ÷ 3 = 47.7). This is less than the identified daily significance threshold. With the above –recommended measures, ROG emissions from paints and coatings can likely be maintained at less-than-significant levels.

# MITIGATION AND MONITORING PROGRAM
for the proposed
# SANTA BARBARA CONDOMINIUMS PROJECT

In accordance with the California Environmental Quality Act (CEQA), the City of Newport Beach prepared a Mitigated Negative Declaration (MND) and Initial Study for the proposed Santa Barbara Condominiums project located in the City of Newport Beach. The MND indicated that the potential adverse environmental impacts of the project, in terms of Air Quality, Cultural Resources, Geology and Soils, Noise, Public Services, Transportation/Traffic and Utilities and Service Systems could be mitigated to below levels of significance. The mitigation measures have been incorporated into the project and the MND is scheduled for adoption by the City of Newport Beach, in conjunction with the approval of the project.

Section 21081.6 of the Public Resources Code (PRC) and CEQA Guidelines section 15097 require the Lead Agency for each project which is subject to the CEQA to monitor performance of the mitigation measures included in any environmental document to ensure that implementation does, in fact, take place. The PRC requires the Lead Agency to adopt a monitoring and reporting program that is designed to ensure compliance during project implementation. In accordance with PRC Section 21081.6 and CEQA Guidelines section 15097, this Mitigation Monitoring and Reporting Program (MMRP) has been developed for the Santa Barbara Condominiums project.

## MITIGATION MEASURES

The mitigation measures which are required to reduce or avoid the potentially significant adverse impacts of future development on the project site are listed in Table 1, *Mitigation Monitoring Program*. Responsible parties, the time frame for implementation, and the monitoring parties are also identified for each measure. In order to determine if the responsible party has implemented these measures, the method of verification is also identified, along with the City of Newport Beach department or agency responsible for monitoring/verifying that the responsible party has completed each mitigation measure.

**TABLE 1**
**MITIGATION MONITORING PROGRAM**

| Mitigation Measures | Responsible Party | Time Frame for Implementation | Department or Agency Responsible for Monitoring |
|---|---|---|---|
| **Air Quality**<br>The following mitigation measures would reduce emissions associated with construction of the proposed Project:<br><br>**Mitigation Measure 3.3.A:** During grading activities, any exposed soil areas shall be watered twice per day. On windy days or when fugitive dust can be observed leaving the proposed Project site, additional applications of water shall be applied to maintain a minimum 12 percent moisture content as defined by SCAQMD Rule 403. Under windy conditions where velocities are forecast to exceed 25 miles per hour (as ascertained by phone calls to the SCAQMD), all ground disturbing activities shall be halted until winds that are forecast to abate below this threshold. | Developer/ Contractor | Construction Phase | Site Inspections by City of Newport Beach Building Department |

**TABLE 1**
**MITIGATION MONITORING PROGRAM**

| Mitigation Measures | Responsible Party | Time Frame for Implementation | Department or Agency Responsible for Monitoring |
|---|---|---|---|
| **Mitigation Measure 3.3.B:** The proposed Project shall comply with regional rules such as SCAQMD Rules 402 and 403, which would assist in reducing short-term air pollutant emissions. Rule 403 requires that fugitive dust be controlled with best available control measures so that the presence of such dust does not remain visible in the atmosphere beyond the property line of the emission source. Rule 402 requires dust suppression techniques be implemented to prevent fugitive dust from creating a nuisance offsite. These dust suppression techniques are summarized as follows:<br><br>a. Portions of the construction site to remain inactive longer than a period of three months shall be seeded and watered until grass cover is grown or otherwise stabilized in a manner acceptable to the City.<br><br>b. All on-site roads shall be paved as soon as feasible or watered periodically or chemically stabilized.<br><br>c. All material transported offsite shall be either sufficiently watered or securely covered to prevent excessive amounts of dust.<br><br>d. The area disturbed by clearing, grading, earthmoving, or excavation operations shall be minimized at all times. | Developer/ Contractor | Construction Phase | Site Inspections by City of Newport Beach Building Department |
| **Mitigation Measure 3.3.C:** All vehicles on the construction site shall travel at speeds less than 15 miles per hour. | Developer/ Contractor | Construction Phase | Site Inspections by City of Newport Beach Building Department |
| **Mitigation Measure 3.3.D:** All material stockpiles subject to wind erosion during construction activities, that will not be utilized within three days, shall be covered with plastic, an alternative cover deemed equivalent to plastic, or sprayed with a nontoxic chemical stabilizer. | Developer/ Contractor | Construction Phase | Site Inspections by City of Newport Beach Building Department |
| **Mitigation Measure 3.3.E:** Where vehicles leave the construction site and enter adjacent public streets, the streets shall be swept daily ~~or washed down~~ at the end of the work day to remove soil tracked onto the paved surface. Any visible track-out extending for more than fifty (50) feet from the access point shall be swept or washed within thirty (30) minutes of deposition. | Developer/ Contractor | Construction Phase | Site Inspections by City of Newport Beach Building or Public Works Departments |
| **Mitigation Measure 3.3.F:** All diesel-powered vehicles and equipment shall be properly operated and maintained. | Developer/ Contractor | Construction Phase | Site Inspections by City of Newport Beach Building Department |

**TABLE 1**
**MITIGATION MONITORING PROGRAM**

| Mitigation Measures | Responsible Party | Time Frame for Implementation | Department or Agency Responsible for Monitoring |
|---|---|---|---|
| **Mitigation Measure 3.3.G:** All diesel-powered vehicles and gasoline-powered equipment shall be turned off when not in use for more than five (5) minutes. | Developer/ Contractor | Construction Phase | Site Inspections by City of Newport Beach Building Department |
| **Mitigation Measure 3.3.H:** The construction contractor shall utilize electric or natural gas-powered equipment instead of gasoline or diesel-powered engines, where feasible. | City of Newport Beach | Construction Phase | Site Plan Review by City of Newport Beach Planning Department |
| **Mitigation Measure 3.3.I:** As much as possible, the construction contractor shall time the construction activities so as not to interfere with peak hour traffic. To minimize obstruction of through traffic lanes adjacent to the site, a flagperson shall be retained to maintain safety adjacent to existing roadways, if necessary. | Developer/ Contractor | Construction Phase | Site Inspections by City of Newport Beach Building and Public Works Departments |
| **Mitigation Measure 3.3.J:** The construction contractor shall support and encourage ridesharing and transit incentives for the construction crew. | Developer/ Contractor | Construction Phase | Site Inspections by City of Newport Beach Building Department |
| **Mitigation Measure 3.3.K:** The construction contractor shall utilize, as much as possible, pre-coated/natural colored building materials. Water-based or low VOC coatings shall be used that comply with the most stringent SCAQMD Rule 1113 limits. Spray equipment with high transfer efficiency, such as the high volume-low pressure (HVLP) paint applicators with 50 percent efficiency, or manual coatings application such as paint brush hand roller, trowel, spatula, dauber, rag, or a sponge shall be used to reduce VOC emissions, where practical. Additionally, paint application shall use lower volatility paint not exceeding 100 grams of ROG per liter. | Developer/ Contractor | Construction Phase | Site Inspections by City of Newport Beach Building Department |
| **Mitigation Measure 3.3.L:** If construction equipment powered by alternative fuel sources (LPG/CNG) is available at comparable cost, the developer shall specify that such equipment be used during all construction activities on the proposed Project site. | City of Newport Beach | Prior to Issuance of Grading Permit | Site Plan Review by City of Newport Beach Planning Department |
| **Mitigation Measure 3.3.M:** The developer shall require the use of particulate filters on diesel construction equipment if use of such filters is demonstrated to be cost-competitive for use on this proposed Project. | Developer/ Project Architect | Prior to Issuance of Grading Permit | Site Plan Review by City of Newport Beach Planning Department |
| **Mitigation Measure 3.3.N:** Per review and approval by the City, during demolition and excavation, daily total haul trucks shall travel no more than a cumulative 2,400 miles per day hauling materials from the site to and from the dumping site. | Developer/ Contractor | During demolition and grading activities | Planning Department and Building Department |

**TABLE 1**
**MITIGATION MONITORING PROGRAM**

| Mitigation Measures | Responsible Party | Time Frame for Implementation | Department or Agency Responsible for Monitoring |
|---|---|---|---|
| **Mitigation Measure 3.3.O:** Per review and approval by the City, prior to commencement of demolition and grading the project applicant shall submit to the City calculations showing the proposed travel route for haul trucks, the distance traveled, and how many daily truck trips that can be accommodated while keeping the cumulative miles traveled to below 2,400 miles each day. The daily haul truck trips shall not exceed 2,400 miles during demolition and excavation activities. | Project Applicant | Prior to issuance of Demolition Permit | Planning Department and Traffic Engineer |
| **Cultural Resources**<br><br>The following mitigation measures would reduce potential impacts associated with unknown cultural resources on-site: | | | |
| **Mitigation Measure 3.5.A:** Prior to the issuance of a grading permit, the applicant shall provide written evidence to the planning director that a qualified archaeologist has been retained to observe grading activities and conduct salvage excavation of archaeological resources as necessary. The archaeologist shall be present at the pre-grading conference, shall establish procedures for archaeological resources surveillance, and shall establish, in cooperation with the applicant, procedures for temporarily halting or redirecting work to permit the sampling, identification and evaluation of the artifacts as appropriate. If additional or unexpected archaeological features are discovered, the archaeologist shall report such findings to the applicant and to the Planning Department. If the archaeological resources are found to be significant, the archaeological observer shall determine appropriate actions, in cooperation with the applicant, for exploration and/or salvage. These actions, as well as final mitigation and disposition of the resources, shall be subject to the approval of the Planning Director. | Developer/ Contractor | Prior to Issuance of Grading Permit | Site Plan Review by City of Newport Beach Planning Department |
| **Mitigation Measure 3.5.B:** Prior to the issuance of a grading permit, the applicant shall provide written evidence to the planning director that a qualified paleontologist has been retained to observe grading activities and conduct salvage fossils as necessary. The paleontologist shall be present at the pre-grading conference, shall establish procedures for paleontological resource surveillance, and shall establish cooperation with the applicant, procedures for temporarily halting or redirecting work to permit the sampling, identification and evaluation of fossils. If major paleontological resources are discovered which require long term baiting or redirecting of grading, the paleontologist shall report such findings to the applicant and to the Planning Department. The paleontologist shall determine appropriate actions, in cooperation with the applicant, which ensure proper exploration and/or salvage. These actions, as well as final mitigation and disposition of the resources, shall be subject to the approval of the Planning Director. | Developer/ Contractor | Prior to Issuance of Grading Permit | Site Plan Review by City of Newport Beach Planning Department |

**TABLE 1**
**MITIGATION MONITORING PROGRAM**

| Mitigation Measures | Responsible Party | Time Frame for Implementation | Department or Agency Responsible for Monitoring |
|---|---|---|---|
| **Mitigation Measure 3.5.C:** In accordance with Public Resources Code 5097.94, if human remains are found, the Orange County coroner must be notified within 24 hours of the discovery. If the coroner determines that the remains are not recent, the coroner will notify the Native American Heritage Commissions in Sacramento to determine the most likely descendent for the area. The designated Native American representative then determines in consultation with the property owner the disposition of the human remains. | Developer/ Contractor | During Construction | Site Plan Review by City of Newport Beach Planning Department |
| **Geology and Soils**<br><br>The following mitigation measures would reduce potential impacts associated with unsuitable on-site soils: | | | |
| **Mitigation Measure 3.6.A:** In areas where compacted fill will be required to establish design grades and in design cut areas where the depth of the proposed cut does not exceed the thickness of the existing unsuitable surficial soils, on-site surficial soils shall be excavated and recompacted to create stable soil conditions and correct poor slope performance. | Developer/ Contractor | Prior to Issuance of Grading Permit | Site Plan Review by City of Newport Beach Building Department |
| **Mitigation Measure 3.6.B:** During grading activities, where cut-to-fill transitions exist following remedial grading, they shall be eliminated by overexcavating the "cut" portions of the building pads and replacing the excavated material as properly compacted fill.<br><br>The generally recommended depth of over excavation is one-half the maximum thickness of fill beneath the pad area, to a minimum depth of 3 feet and a maximum depth of 15 feet below proposed pad grade. The horizontal limits of overexcavation should extend to within approximately 1 to 2 feet of property lines and/or the tops and toes of slopes. The actual lots that will require overexcavation and overexcavation depths will have to be determined during grading by the proposed Project geotechnical consultant based on actual conditions encountered. | Developer/ Contractor | During Grading Activities | Site Plan Review by City of Newport Beach Building Department |
| **Mitigation Measure 3.6.C:** During remedial grading and construction of the proposed subterranean parking areas and associated improvements, temporary excavations with sidewalls varying up to approximately 13 feet in height may be necessary. Temporary excavation sidewalls will require sloping back at a ratio of approximately 12:1, horizontal to vertical. Should excessive caving be observed during grading, flatter inclinations may be required locally.<br><br>Depending on required depths of cut and remedial grading, it may not be possible to construct temporary excavations along the east side of Buildings I and II (i.e., adjacent | Developer/ Contractor | During Grading Activities | Site Plan Review by City of Newport Beach Building Department |

**TABLE 1**
**MITIGATION MONITORING PROGRAM**

| Mitigation Measures | Responsible Party | Time Frame for Implementation | Department or Agency Responsible for Monitoring |
|---|---|---|---|
| to Santa Barbara Drive) and along the southeast side of Building I (adjacent to the existing Marriott tower and appurtenant improvements) at a safe and stable slope ratio without encroaching into the adjacent street right-of-way and/or causing the loss of lateral support of the existing hotel building, the associated buried utilities and other improvements. For this reason, temporary shoring may be required in these areas. Recommendations for design of temporary shoring will be provided in the comprehensive preliminary geotechnical report once grading plans for the site become available for review. | | | |
| **Noise**<br><br>The following mitigation measures are recommended to reduce construction noise impacts on adjacent noise sensitive land uses:<br><br>**Mitigation Measure 3.11A**: Construction activities shall be confined to the hours of 7:00 a.m. and 6:30 p.m. on weekdays and on Saturdays between the hours of 8:00 a.m. and 6:00 p.m.<br><br>**Mitigation Measure 3.11.B**: Equipment mufflers for construction equipment shall be used at all times.<br><br>**Mitigation Measure 3.11.C**: Idling of construction vehicles and equipment shall be limited to the extent feasible. Construction vehicles and equipment shall be properly operated and maintained and shall be turned off when not in use for more than five (5) minutes. | Developer/ Contractor<br><br>Developer/ Contractor<br><br>Developer/ Contractor | Construction Phase<br><br>Construction Phase<br><br>Construction Phase | Site Inspections by City of Newport Beach Planning Department and Code Enforcement Division<br><br>Site Inspections by City of Newport Beach Building and Planning Departments and Code Enforcement Division |
| **Public Services**<br><br>The following mitigation measure would reduce potential adverse impacts on school services:<br><br>**Mitigation Measure 3.13.A:** Prior to issuance of the first building permit, school impacts fees will be paid to the Newport-Mesa Unified School District to assist in funding school facility expansion and educational services to area residents. | Developer/ Contractor | Prior to Issuance of Building Permit | Newport Beach Building Department |
| **Transportation/Traffic**<br><br>The following mitigation measures would reduce any potential traffic and parking related impacts from the proposed Project: | | | |

**TABLE 1**
**MITIGATION MONITORING PROGRAM**

| Mitigation Measures | Responsible Party | Time Frame for Implementation | Department or Agency Responsible for Monitoring |
|---|---|---|---|
| **Mitigation Measure 3.15.A:** Sight distance at the proposed Project accesses should be reviewed with respect to City of Newport Beach standards in conjunction with the preparation of final grading, landscape, and street improvement plans. | Developer/ Contractor | In conjunction with the preparation of final grading, landscape, and street improvement plans | Site Inspections by City of Newport Beach Public Works Department |
| **Mitigation Measure 3.15.B:** On-site traffic signing and striping should be implemented in conjunction with detailed construction plans for the proposed Project. | Developer/ Contractor | In conjunction with the preparation of final grading, landscape, and street improvement plans | Site Inspections by City of Newport Beach Public Works Department |
| **Mitigation Measure 3.15.C:** The City of Newport Beach should periodically review traffic operations in the vicinity of the proposed Project once the proposed Project is constructed to assure that the traffic operations are satisfactory. | Developer/ Contractor | Ongoing | Site Inspections by City of Newport Beach Public Works Department |
| **Mitigation Measure 3.15.D:** The parking design shall meet all City requirements regarding parking stall width, parking stall depth, parking aisle grade, and parking aisle-turning radii. | Developer/ Contractor | Prior to Issuance of Building Permit | Site Inspections by City of Newport Beach Planning Department |
| **Mitigation Measure 3.15.E:** Each parking level should have large numbers on the pillars or walls designating on which floor level the user has parked. Letters can also be added to designate what area within a parking level the person has parked, such as 2B. | Developer/ Contractor | Prior to Issuance of Building Permit | Site Inspections by City of Newport Beach Planning Department |
| **Utilities and Service Systems**<br><br>Water conservation measures suggested by the City of Newport Beach, would reduce demand for groundwater, surface water and imported water supplies. These water conservation measures include: | | | |
| **Mitigation Measure 3.16 A:** New landscaping shall incorporate drought-tolerant plant materials and drip irrigation systems, wherever possible. | Developer/ Contractor | Prior to Issuance of Building Permit | Site Inspections by City of Newport Beach Planning Department |
| **Mitigation Measure 3.16 B:** Water leaving the project site due to over-irrigation of landscape, shall be minimized. If an incident such as this is reported, a representative | Developer/ Contractor | Ongoing | Site Inspections by City of Newport Beach Planning |

**TABLE 1**
**MITIGATION MONITORING PROGRAM**

| Mitigation Measures | Responsible Party | Time Frame for Implementation | Department or Agency Responsible for Monitoring |
|---|---|---|---|
| from the Code and Water Quality Enforcement Division of the City Manager's Office shall visit the location, investigate, inform resident if possible, leave a note and in some cases shut-off the water. | | | Department and Code Enforcement Division |
| **Mitigation Measure 3.16 C:** Watering should be done during the early morning or evening hours to minimize evaporation (between 4:00 p.m. and 9:00 a.m., the following morning). | Developer/ Contractor | Ongoing | Site Inspections by City of Newport Beach Planning Department and Code Enforcement Division |
| **Mitigation Measure 3.16 D:** All leaks shall be investigated by a representative from the Code and Water Quality Enforcement Division of the City Manager's Office and any the applicant shall complete all required repairs. | Developer/ Contractor | Ongoing | Site Inspections by City of Newport Beach Planning Department and Code Enforcement Division |
| **Mitigation Measure 3.16 E:** Water should not be used to clean paved surfaces, such as sidewalks, driveways, parking areas, etc., except to alleviate immediate safety or sanitation hazards. | Developer/ Contractor | Ongoing | Site Inspections by City of Newport Beach Planning Department and Code Enforcement Division |
| **Mitigation Measure 3.16 F:** Reclaimed water shall be used wherever available, assuming it is economically feasible. | Developer/ Contractor | Prior to Issuance of Building Permit | Site Inspections by City of Newport Beach Planning Department and Code Enforcement Division |
| **Mitigation Measure 3.16 G:** Installation of Ultra-Low Flush Toilets (ULFT) in the residential units. | Developer/ Contractor | Construction Phase | Site Inspections by City of Newport Beach Planning Department and Code Enforcement Division |

## Comment

STATE OF CALIFORNIA - THE RESOURCES AGENCY ARNOLD SCHWARZENEGGER, Governor

**CALIFORNIA COASTAL COMMISSION**

South Coast Area Office
200 Oceangate, Suite 1000
Long Beach, CA 90802-4302
(562) 590-5071

August 11 2005

City of Newport Beach, Planning Department
Attn: Rosalinh M. Ung, Associate Planner
3300 Newport Boulevard
Newport Beach, CA 92663

Re: Santa Barbara Condominiums Project
Mitigated Negative Declaration (SCH# 2005071067)

Dear Ms. Ung,

Thank you for the opportunity to review the Mitigated Negative Declaration (MND) for the Santa Barbara Condominiums Project. According to the Mitigated Negative Declaration, the proposed project is the development of 79 condominiums located on a 4.25 acre site that is currently in the Newport Beach Marriot Hotel's tennis complex.

The proposed project is located within the coastal zone in the City of Newport Beach. The proposed development will require a Land Use Plan (LUP) Amendment to change the land use designation from APF (Administrative, Professional, and Financial Commercial) to MFR (Multi-Family Residential) and also a coastal development permit from the California Coastal Commission.

The following comments address the issue of the proposed project's consistency with the Chapter 3 policies of the California Coastal Act of 1976. The comments contained herein are preliminary and these of Coastal Commission staff only and should not be construed as representing the opinion of the Coastal Commission itself. As described below, the proposed project raises issues related to land use and water quality.

Below are the comments by Commission staff on the Mitigated Negative Declaration.

1. Land Use

The City of Newport Beach Land Use Plan (LUP) currently designates the project site for Administrative, Professional, Financial Commercial (APF) uses, which include offices, medical offices, retail and service commercial, restaurants, hotels, motels, commercial recreation, and senior citizen housing facilities. The proposed project would require amending the City's LCP to allow Multi-Family Residential (MFR) on the project site. Section 30222 of the Coastal Act places a priority on visitor-serving commercial recreational facilities designed to enhance public opportunities for coastal recreation over private residential. Thus, the proposed project would be inconsistent with Section 30222 of the Coastal Act. In addition, the Commission is currently reviewing an update to the City of Newport Beach LUP that would designate the project site as Commercial/Visitor Serving (CV). Thus, the proposed project would also be inconsistent with the proposed LUP update. Therefore, Commission staff requests additional discussion regarding alternative uses for the project site that adhere to the current Land Use Plan designation and are consistent with Section 30222 of the Coastal Act.

1-1

## Response

1-1 Although the project site is located within the boundaries of the Coastal Zone, as discussed in the Draft Initial Study/Mitigated Negative Declaration (Draft IS/MND), the proposed project is not located in an area that provides for coastal recreation. The project site is not located on the coast and would not represent a detrimental impact to water or marine resources or the ability of coastal-visitors to utilize existing resources.

Additionally, the request to change the land use designation of the California Coastal Commission Land Use Plan (LUP) would not create a significant loss of Commercial/Visitor Serving (CV) land. The change in land use designation will reduce the land available for visistor serving commercial uses by 4.25 acres. Although this reduction in area would occur, the opportunity to construct the remaining hotel room entitlement of 79 rooms would not be lost and they could be constructed nearby within the portion of Newport Center that is located within the Coastal Zone. The City recognizes that residential development is not a priorty use whereas recreational and visitor-serving uses are a priority. Recreation policies of the Coastal Act require that sites suitable for water-oriented recreational activities that cannot be supplied inland must be protected. These policies prioritize water-oriented recreational activities over other land uses and encourage aquaculture and water-oriented recreational support facilities. However, given that the site provides for coastal recreation opportunity and the change in land use would not represent a resource protection or access, detrimental impact to coastal resources nor the ability of coastal-visitors to access or enjoy existing coastal resources.

The requested zone change to the LCPLUP, as determined, would not create significant impacts to the implementation of land use plan as environmentally sensitive habitat areas, shore-line public access, water or marine resources, and coastal visitor-serving facilities would not impacted would not be impacted given the nature and location of the site and design of the project. Considering the location of the project, the proposed residential development would be compatible use with the nearby residential developments and office/commercial developments located within the Newport Center area.

California Environmental Quality Act Guidelines indicate that Negative Declarations need not evaluate alternatives. However, based on the current land use designations within the City's General Plan and existing LUP, the project site could develop with Administrative and Professional Uses (i.e., office uses). Under the updated LUP currently under review by Coastal Commission Staff, the project could be developed with an additional 79 hotel rooms. Based on Section 30222 of the Coastal Act, the project site should have the potential to enhance opportunities for coastal recreational recreation. As discussed in the Draft IS/MND the project site is not near or adjacent to coastal resources. The nearest coastal resource (Upper Newport Bay) is not visible from the site and ocean views are limited from the site due to existing development.

# Comment



2. Water Quality

The Mitigated Negative Declaration (MND) discusses water quality in terms of California Environmental Quality Act (CEQA) requirements and Regional Board requirements. In addition to CEQA, Regional Board and other regulatory requirements, the proposed project will undergo review based upon water quality provisions in the Coastal Act. Sections 30230 and 30231 of the California Coastal Act provide the broad basis for protecting coastal waters, habitats, and biodiversity from degradation of water quality associated with new development and redevelopment.

Sound water quality management utilizes a three-pronged approach: site design, source control, and treatment control Best Management Practices. A successful program would first incorporate site design measures to minimize impact to the hydrologic landscape and source control Best Management Practices (BMPs) to reduce dry weather flows and the generation and introduction of pollutants into runoff. A few examples of site design practices include minimizing impervious surfaces, using porous pavements or alternative pavers in parking areas, preserving native vegetation and root systems, minimizing erosion and sedimentation, and reducing roadway or parking lot length. Some examples of source control BMPs include planting native, drought tolerant, non-invasive vegetation; minimizing pesticide and fertilizer use; using efficient irrigation systems; and implementing parking lot and street sweeping programs, among other measures.

After site design and source control BMPs have been designed, treatment control BMPs (typically in a treatment train approach for an extensive development like the one proposed) should be designed for the development. Treatment control BMPs should be designed to treat the specific pollutants generated on each portion of the site. In addition, the proposed measures must be sized and designed to mitigate water quality impacts generated by the development. As a goal, the Commission has required post-construction structural BMPs (or suites of BMPs) should be designed to treat, infiltrate or filter the amount of stormwater runoff produced by all storms up to and including the 85th percentile, 24-hour storm event for volume-based BMPs, and/or the 85th percentile, 1-hour storm event, with an appropriate safety factor (i.e., 2 or greater), for flow-based BMPs.

Based on Section 30230 and 30231 of the Coastal Act, the Coastal Commission must ensure that a development minimizes to the maximum extent feasible polluted runoff and its impact to coastal waters. Even where there is existing development on a site, a redevelopment project needs to demonstrate that it is minimizing to the maximum extent feasible the impact to coastal water quality. Therefore, the development should incorporate, and the Mitigated Negative Declaration should discuss, the site design, source control, and treatment control Best Management Practices (BMPs) that will be used in association with the entire site. Parking lots, landscaped areas, loading and unloading docks, dry weather flows, and trash and debris are common constituents in commercial and residential areas, and BMPs should be designed to address these constituents.

1-2

1-3 Finally, Commission staff suggest use of catch basin inserts throughout the development, use of filtration systems near areas with especially high risk of pollutant generation (parking lots, etc.), and the use of biofiltration.

# Response

1-2 Potential impacts to water quality are discussed in the Hydrology and Water Quality section (Section 3.8) of the draft Mitigated Negative Declaration. As discussed in Section 3.8, some of the BMPs that would be utilized include, but are not limited to use of sandbags, gravel bags, check dams, silt fences, soil binders, erosion control blankets, fiber rolls, riprap pads, and practices that prevent debris and pollutants (loose soils, hazardous materials, oil, grease and solvents, other construction materials) from entering the storm drain system. Additionally, the City of Newport Beach requires that a Water Quality Management Plan (WQMP) be prepared for the proposed Project. Lastly, development of the site would comply with the National Pollutant Discharge Elimination System (NPDES) General Permit for Construction Activity, which requires the developer to file a Notice of Intent with the Regional Water Quality Control Board (RWQCB) and to prepare and implement a Stormwater Pollution Prevention Plan (SWPPP) for construction activities on one acre or more. The SWPPP would identify erosion, sedimentation and stormwater pollution control measures that would be implemented during construction activities, and seek to minimize the discharge of pollutants into the stormwater and existing drainage channels to the maximum extent practicable.

1-3 Comment Noted.

## Comment

## Response



Thank you for the opportunity to comment on the Mitigated Negative Declaration (MND) for the Santa Barbara Condominiums Project. Commission staff request notification of any future activity associated with this project or related projects. Please note, the comments provided herein are preliminary in nature. Additional and more specific comments may be appropriate as the project develops into final form and when an application is submitted for a coastal development permit. Please feel free to contact me at 562-590-5071 with any questions.

Sincerely,

Fernie Sy
Coastal Program Analyst

Cc: State Clearinghouse

H:\My\EIR's\Comment Letters\Santa Barbara Condominiums Project (SCH# 2005071067)\NB

## Comment

## Response

# AIRPORT LAND USE COMMISSION

FOR ORANGE COUNTY

3160 Airway Avenue • Costa Mesa, California 92626 • 949.252.5170 fax: 949.252.6012

RECEIVED BY
PLANNING DEPARTMENT
CITY OF NEWPORT BEACH

AUG 11 2005

AM 7 8 9 10 11 12 1 2 3 4 5 6 PM

August 8, 2005

Ms. Rosalinh Ung, Associate Planner
City of Newport Beach
Planning Department
3300 Newport Boulevard
Newport Beach, CA 92663

Subject: Notice of Preparation of a Mitigated Negative Declaration – Santa Barbara Condominiums Project

Dear Ms. Ung:

Thank you very much for the opportunity to comment on this Notice of Preparation of a Mitigated Negative Declaration for the proposed project located at 900 Newport Center Drive.

2-1 The environmental analysis has noted that the proposed project is 4.5 miles from John Wayne Airport and is not located within a hazard area. Additionally, the project is approximately three (3) miles from the nearest known heliport located at Hoag Hospital and would not create a conflict.

Our Airport Land Use Commission (ALUC) is committed to assisting local agencies by making them aware of airport-related statutory requirements. If you have any questions, I can be reached at the ALUC office at (949) 252-5170 or at jgolding@ocair.com.

Sincerely,

Joan S. Golding
Executive Officer

2-1 Comment Noted.

## Comment

**TEREK SALEH**
485 East 17th Street #370
Costa Mesa, CA 92627
949-764-9260 office
949-293-9682 cell
949-764-9264 fax
gwtreak1@pacbell.net

RECEIVED BY
PLANNING DEPARTMENT
CITY OF NEWPORT BEACH

AUG 0 9 2005

AM PM
7 8 9 10 11 12 1 2 3 4 5 6

August 03, 2005

City of Newport Beach
Planning Department
3300 Newport Blvd.,
Newport Beach, CA 92663
Attn; Rosalinh Ungh

Dear Madam;

Please accept this letter in lieu of my appearance at the upcoming planning commission hearing. I am opposed to the proposed rezoning, parcel separation and subsequent construction of the condominium project located at 900 Newport Center Dr., next door to the Marriott Hotel in Newport Center.

3-1 The impetus for my opposition is simply, too much density. The environmental, parking and density impact to the City of Newport Beach in general and Fashion Island specifically is just too great. Further, based on the current zoning and use permits, the current owners appear to be using the rezoning, parcel separation, and condominium construction to help
3-2 offset the cost of the Marriott Hotel remodel project without any real regard to the impacts previously listed.

Over the past 20+ years the City of Newport Beach has maintained the highest standards with respect to development. Further the City has been diligent in maintaining the quality
3-3 of life by minimizing the increases in density. It appears that increases in density has been primarily confined to areas which previously had limited or no density. That does not appear to be the case in this project.

3-4 Lastly and in closing, if my views are accurate, I implore you to carefully review this project and its' impacts.

If you have any questions, please feel free to contact the undersigned at any time.

Sincerely,

Terek Saleh

## Response

3-1 As discussed in the Draft IS/MND, the proposed project would not result in any significant impacts with the implementation of identified mitigation measures.

Regarding parking, the proposed project includes 201 on-site parking spaces for residents and visitors. The total number of parking spaces provided by the proposed project is in excess of the City of Newport Beach requirements (198 spaces for the residential development {two parking spaces per unit, and 0.5 spaces per unit for guest parking on developments with four or more units}) and would not result in a significant impact.

With regard to density, the proposed project would include a density of just under 20 dwelling units per acre. According to the City's Municipal Code, 100 percent lot coverage for all residential zones (except the R-A designation) is allowed, less any setbacks. This requirement is applicable to Planned Community Districts as well. The project, as proposed, provides for 100 percent coverage, less required setbacks.

3-2 All potential impacts created by the proposed project have been identified and discussed within the Draft IS/MND. In those areas where impacts are potentially significant, mitigation measures to reduce the impacts to less than significant levels have been required.

3-3 Please see response to comment 3-1.

3-4 Comment noted.

# DRAFT INITIAL STUDY and MITIGATED NEGATIVE DECLARATION for the proposed SANTA BARBARA CONDOMINIUMS PROJECT

Prepared for:
***City of Newport Beach***
Planning Department
3300 Newport Boulevard
Newport Beach, CA 92663
Rosalinh M. Ung, Associated Planner
(949) 644-3208

Prepared by:
***David Evans and Associates, Inc.***
9635 Granite Ridge Drive, Suite 300
San Diego, CA 92123
Dustin Fuller, Project Manager
(858) 614-4360

Draft: July 15, 2005

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## 1.1 INTRODUCTION

This Initial Study evaluates and identifies the potential environmental impacts which may result from the proposed Santa Barbara Condominiums Project (proposed Project), in the City of Newport Beach. The Project proposes the development of 79 condominiums on a 4.25 acre site, currently in the Newport Beach Marriott Hotel's tennis complex. The project consists of three separate buildings with eight different floor plan options and has an approximately 79,140 square fee of open space and 21,300 square feet of recreational areas for use by residents and their guests. The four-story buildings are approximately 65 feet in height with subterranean parking levels. The project would require a General Plan Amendment and Local Coastal Plan Land Use Plan Amendment to change the current land use designation from Administrative, Professional, Financial (APF) to Multi-Family Residential (MFR); a Zone change to rezone the subject property from APF to MFR; a Parcel Map to subdivide the subject property from the hotel development for financing purposes; a Tract Map for the condominium ownerships; and a Modification Permit for the front yard setback encroachment. These discretionary actions are further discussed in Section 2.4 of this Initial Study.

The proposed residential development is considered a project under the California Environmental Quality Act (CEQA), and the City of Newport Beach is acting as the Lead Agency for the proposed Santa Barbara Condominiums Project. Section 21067 of CEQA defines a Lead Agency as the public agency that has the principal responsibility for carrying out or approving a project which may have a significant effect on the environment. The City of Newport Beach would be responsible for approving the proposed Project; thus, the City will serve as the Lead Agency, and has the authority to oversee and complete the environmental review process for the proposed Project.

## 1.2 PURPOSE OF THE MITIGATED NEGATIVE DECLARATION AND INITIAL STUDY

As part of the environmental review process for the proposed Project, the City of Newport Beach has authorized the preparation of this Initial Study. The Initial Study provides a basis for understanding whether there are environmental impacts associated with the proposed Project and, if environmental impacts are likely to occur, whether such impacts could be significant. The purposes of this Initial Study, as stated in Section 15063 of the CEQA Guidelines, are as follows:

- To provide the City of Newport Beach with information to use as the basis for deciding whether to prepare an Environmental Impact Report (EIR) or Negative Declaration (ND) for the proposed Santa Barbara Condominiums Project;
- To enable the City of Newport Beach to modify the proposed Project, by reducing or eliminating any adverse impacts before an EIR is prepared, thereby enabling the proposed Project to qualify for a negative declaration;
- To assist in the preparation of an EIR, if one is required, by focusing the EIR on the effects determined to be significant; identifying effects determined not to be significant; and explaining reasons for determining that potentially significant effects would not be significant;
- To identify whether a program EIR, tiering, or another appropriate process can be used for the analysis of the project's environmental effects;
- To facilitate the environmental review of the project early in its design;

- To provide documentation for findings in a Negative Declaration that the project would not have a significant effect on the environment;
- To eliminate unnecessary environmental impact reports; and
- To determine whether a previously prepared EIR can be used for the project.

Based on the findings of the Initial Study, the City of Newport Beach could then determine the subsequent environmental review needed for the proposed Project, which may take the form of a (Mitigated) Negative Declaration (MND/ND) or an EIR. Adoption of the MND ends the environmental review process for the proposed Project by identifying measures or incorporating changes to the proposed Project that would reduce or prevent the proposed Project's potential adverse impact and thereby, eliminating the need for an EIR.

## 1.3 SUMMARY OF FINDINGS

Based on the findings of the environmental analysis in Section 3 of this Initial Study, the proposed Santa Barbara Condominiums Project has the potential for creating significant adverse impacts in terms of Air Quality, Cultural Resources, Geology and Soils, Noise, Public Services, Transportation/Traffic and Utilities and Service Systems. Mitigation measures have been identified to prevent or reduce these impacts to less than significant levels. These measures are listed below.

### *Air Quality*

The following mitigation measures would reduce emissions associated with construction of the proposed Project:

**Mitigation Measure 3.3.A:** During grading activities, any exposed soil areas shall be watered twice per day. On windy days or when fugitive dust can be observed leaving the proposed Project site, additional applications of water shall be applied to maintain a minimum 12 percent moisture content as defined by SCAQMD Rule 403. Under windy conditions where velocities are forecast to exceed 25 miles per hour (as ascertained by phone calls to the SCAQMD), all ground disturbing activities shall be halted until winds that are forecast to abate below this threshold.

**Mitigation Measure 3.3.B:** The proposed Project shall comply with regional rules such as SCAQMD Rules 402 and 403, which would assist in reducing short-term air pollutant emissions. Rule 403 requires that fugitive dust be controlled with best available control measures so that the presence of such dust does not remain visible in the atmosphere beyond the property line of the emission source. Rule 402 requires dust suppression techniques be implemented to prevent fugitive dust from creating a nuisance offsite. These dust suppression techniques are summarized as follows:

a. Portions of the construction site to remain inactive longer than a period of three months shall be seeded and watered until grass cover is grown or otherwise stabilized in a manner acceptable to the City.

b. All on-site roads shall be paved as soon as feasible or watered periodically or chemically stabilized.

c. All material transported offsite shall be either sufficiently watered or securely covered to prevent excessive amounts of dust.

d. The area disturbed by clearing, grading, earthmoving, or excavation operations shall be minimized at all times.

**Mitigation Measure 3.3.C:** All vehicles on the construction site shall travel at speeds less than 15 miles per hour.

**Mitigation Measure 3.3.D:** All material stockpiles subject to wind erosion during construction activities, that will not be utilized within three days, shall be covered with plastic, an alternative cover deemed equivalent to plastic, or sprayed with a nontoxic chemical stabilizer.

**Mitigation Measure 3.3.E:** Where vehicles leave the construction site and enter adjacent public streets, the streets shall be swept daily or washed down at the end of the work day to remove soil tracked onto the paved surface. Any visible track-out extending for more than fifty (50) feet from the access point shall be swept or washed within thirty (30) minutes of deposition.

**Mitigation Measure 3.3.F:** All diesel-powered vehicles and equipment shall be properly operated and maintained.

**Mitigation Measure 3.3.G:** All diesel-powered vehicles and gasoline-powered equipment shall be turned off when not in use for more than five (5) minutes.

**Mitigation Measure 3.3.H:** The construction contractor shall utilize electric or natural gas-powered equipment instead of gasoline or diesel-powered engines, where feasible.

**Mitigation Measure 3.3.I:** As much as possible, the construction contractor shall time the construction activities so as not to interfere with peak hour traffic. To minimize obstruction of through traffic lanes adjacent to the site, a flag person shall be retained to maintain safety adjacent to existing roadways, if necessary.

**Mitigation Measure 3.3.J:** The construction contractor shall support and encourage ridesharing and transit incentives for the construction crew.

**Mitigation Measure 3.3.K:** The construction contractor shall utilize, as much as possible, pre-coated/natural colored building materials. Water-based or low VOC coatings shall be used that comply with the most stringent SCAQMD Rule 1113 limits. Spray equipment with high transfer efficiency, such as the high volume-low pressure (HVLP) paint applicators with 50 percent efficiency, or manual coatings application such as paint brush hand roller, trowel, spatula, dauber, rag, or a sponge shall be used to reduce VOC emissions, where practical. Additionally, paint application shall use lower volatility paint not exceeding 100 grams of ROG per liter.

**Mitigation Measure 3.3.L:** If construction equipment powered by alternative fuel sources (LPG/CNG) is available at comparable cost, the developer shall specify that such equipment be used during all construction activities on the proposed Project site.

**Mitigation Measure 3.3.M:** The developer shall require the use of particulate filters on diesel construction equipment if use of such filters is demonstrated to be cost-competitive for use on this proposed Project.

***Cultural Resources***

The following mitigation measures would reduce potential impacts associated with unknown cultural resources on-site:

**Mitigation Measure 3.5.A:** Prior to the issuance of a grading permit, the applicant shall provide written evidence to the planning director that a qualified archaeologist has been retained to observe grading activities and conduct salvage excavation of archaeological resources as necessary. The archaeologist shall be present at the pre-grading conference, shall establish procedures for archaeological resources surveillance, and shall establish, in cooperation with the applicant, procedures for temporarily halting or redirecting work to permit the sampling, identification and evaluation of the artifacts as appropriate. If additional or unexpected archaeological features are discovered, the archaeologist shall report such findings to the applicant and to the Planning Department. If the archaeological resources are found to be significant, the archaeological observer shall determine appropriate actions, in cooperation with the applicant, for exploration and/or salvage. These actions, as well as final mitigation and disposition of the resources, shall be subject to the approval of the Planning Director.

**Mitigation Measure 3.5.B:** Prior to the issuance of a grading permit, the applicant shall provide written evidence to the planning director that a qualified paleontologist has been retained to observe grading activities and conduct salvage fossils as necessary. The paleontologist shall be present at the pre-grading conference, shall establish procedures for paleontological resource surveillance, and shall establish cooperation with the applicant, procedures for temporarily halting or redirecting work to permit the sampling, identification and evaluation of fossils. If major paleontological resources are discovered which require long term baiting or redirecting of grading, the paleontologist shall report such findings to the applicant and to the Planning Department. The paleontologist shall determine appropriate actions, in cooperation with the applicant, which ensure proper exploration and/or salvage. These actions, as well as final mitigation and disposition of the resources, shall be subject to the approval of the Planning Director.

**Mitigation Measure 3.5.C:** In accordance with Public Resources Code 5097.94, if human remains are found, the Orange County coroner must be notified within 24 hours of the discovery. If the coroner determines that the remains are not recent, the coroner will notify the Native American Heritage Commissions in Sacramento to determine the most likely descendent for the area. The designated Native American representative then determines in consultation with the property owner the disposition of the human remains.

### *Geology and Soils*

The following mitigation measures would reduce potential impacts associated with unsuitable on-site soils:

**Mitigation Measure 3.6.A**: In areas where compacted fill will be required to establish design grades and in design cut areas where the depth of the proposed cut does not exceed the thickness of the existing unsuitable surficial soils, on-site surficial soils shall be excavated and recompacted to create stable soil conditions and correct poor slope performance.

**Mitigation Measure 3.6.B**: During grading activities, where cut-to-fill transitions exist following remedial grading, they shall be eliminated by overexcavating the "cut" portions of the building pads and replacing the excavated material as properly compacted fill.

The generally recommended depth of over excavation is one-half the maximum thickness of fill beneath the pad area, to a minimum depth of 3 feet and a maximum depth of 15 feet below proposed pad grade. The horizontal limits of overexcavation should extend to within approximately 1 to 2 feet of property lines and/or the tops and toes of slopes. The actual lots that will require overexcavation and overexcavation depths will have to be determined during grading by the proposed Project geotechnical consultant based on actual conditions encountered.

**Mitigation Measure 3.6.C**: During remedial grading and construction of the proposed subterranean parking areas and associated improvements, temporary excavations with sidewalls varying up to approximately 13 feet in height may be necessary. Temporary excavation sidewalls will require sloping back at a ratio of approximately 12:1, horizontal to vertical. Should excessive caving be observed during grading, flatter inclinations may be required locally.

Depending on required depths of cut and remedial grading, it may not be possible to construct temporary excavations along the east side of Buildings I and II (i.e., adjacent to Santa Barbara Drive) and along the southeast side of Building I (adjacent to the existing Marriott tower and appurtenant improvements) at a safe and stable slope ratio without encroaching into the adjacent street right-of-way and/or causing the loss of lateral support of the existing hotel building, the associated buried utilities and other improvements. For this reason, temporary shoring may be required in these areas. Recommendations for design of temporary shoring will be provided in the comprehensive preliminary geotechnical report once grading plans for the site become available for review.

### *Noise*

The following mitigation measures are recommended to reduce construction noise impacts on adjacent noise sensitive land uses:

**Mitigation Measure 3.11A**: Construction activities shall be confined to the hours of 7:00 a.m. and 6:30 p.m. on weekdays and on Saturdays between the hours of 8:00 a.m. and 6:00 p.m.

**Mitigation Measure 3.11.B**: Equipment mufflers for construction equipment shall be used

at all times.

**Mitigation Measure 3.11.C**: Idling of construction vehicles and equipment shall be limited to the extent feasible. Construction vehicles and equipment shall be properly operated and maintained and shall be turned off when not in use.

***Public Services***

The following mitigation measure would reduce potential adverse impacts on school services:

**Mitigation Measure 3.13.A:** Prior to issuance of the first building permit, school impacts fees will be paid to the Newport-Mesa Unified School District to assist in funding school facility expansion and educational services to area residents.

***Transportation/Traffic***

The following mitigation measures would reduce any potential traffic and parking related impacts from the proposed Project:

**Mitigation Measure 3.15.A:** Sight distance at the proposed Project accesses should be reviewed with respect to City of Newport Beach standards in conjunction with the preparation of final grading, landscape, and street improvement plans.

**Mitigation Measure 3.15.B:** On-site traffic signing and striping should be implemented in conjunction with detailed construction plans for the proposed Project.

**Mitigation Measure 3.15.C:** The City of Newport Beach should periodically review traffic operations in the vicinity of the proposed Project once the proposed Project is constructed to assure that the traffic operations are satisfactory.

**Mitigation Measure 3.15.D:** The parking design shall meet all City requirements regarding parking stall width, parking stall depth, parking aisle grade, and parking aisle-turning radii.

**Mitigation Measure 3.15.E:** Each parking level should have large numbers on the pillars or walls designating on which floor level the user has parked. Letters can also be added to designate what area within a parking level the person has parked, such as 2B.

***Utilities and Service Systems***

While adequate water supplies would be available to serve the proposed Project site, the implementation of water conservation measures suggested by the City of Newport Beach, would reduce demand for groundwater, surface water and imported water supplies. These water conservation measures include:

**Mitigation Measure 3.16 A:** New landscaping shall incorporate drought-tolerant plant materials and drip irrigation systems, wherever possible.

**Mitigation Measure 3.16 B:** Water leaving the project site due to over-irrigation of landscape, shall be minimized. If an incident such as this is reported, a representative from the Code and Water Quality Enforcement Division of the City Manager's Office shall visit the location, investigate, inform resident if possible, leave a note and in some cases shut-off the water.

**Mitigation Measure 3.16 C:** Watering should be done during the early morning or evening hours to minimize evaporation (between 4:00 p.m. and 9:00 a.m., the following morning).

**Mitigation Measure 3.16 D:** All leaks shall be investigated by a representative from the Code and Water Quality Enforcement Division of the City Manager's Office and any the applicant shall complete all required repairs.

**Mitigation Measure 3.16 E:** Water should not be used to clean paved surfaces, such as sidewalks, driveways, parking areas, etc., except to alleviate immediate safety or sanitation hazards.

**Mitigation Measure 3.16 F:** Reclaimed water shall be used wherever available, assuming it is economically feasible.

**Mitigation Measure 3.16 G:** The project shall incorporate Ultra-Low Flush Toilets (ULFT) in all the residential units.

The City of Newport Beach has determined that the proposed Project would not have significant adverse impacts on the environment with the implementation of mitigation measures, and no additional environmental analysis is warranted. The City of Newport Beach would consider adoption of a Mitigated Negative Declaration for the proposed Santa Barbara Condominiums Project, with the incorporation of the recommended mitigation measures, as outlined above.

## 2.1 PROJECT LOCATION AND ENVIRONMENTAL SETTING

### 2.1.1 Regional Setting

***Orange County***

The County of Orange is located in the western section of the Southern California region, and consists of 34 incorporated cities and 29 unincorporated areas on over 798.3 square miles. Orange County is located south of Los Angeles County, east of Riverside County and north of San Diego County. Orange County also includes portions of the Cleveland National Forest, and Chino Hills State Park.

From 1970 to 1980, Orange County's resident population grew from 1,421,233 persons to 1,932,708 persons (or by 35 percent). From 1980 to 1990, the County's population grew to 2,398,400 residents or by 24 percent. From 1990 to 2000, population grew by approximately 16 percent, with the County having an estimated 2000 population of 2,846,289 people. Thus, an over twofold increase in population occurred in the County from 1970 to 2000. Currently, the County has an estimated 2004 population of 3,017,300 residents (an increase of 0.6 percent since 2000).

Housing growth has also been significant in the County, with a housing stock of 875,105 units in 1990 growing to 966,086 housing units by 2000 (or by 10 percent). Currently, the County has an estimated 1,003,929 housing units (an increase of 3.9 percent from 2000 to 2004). As of January 2004, the County had a housing vacancy rate of 3.57 percent and an average household size of 3.072 persons per household.

***City of Newport Beach***

As shown in Figure 2-1, *Regional Map*, the proposed Project site for the proposed development is located in the City of Newport Beach. The City of Newport Beach covers an approximately 50.5 square-mile area and is located in the western portion of Orange County along the Pacific Ocean.

To the east, the City of Newport Beach is bounded by the Cities of Irvine and Costa Mesa. The City of Huntington Beach borders the City to the north, and the City of Laguna Beach and Crystal Cove State Park/Laguna Coast Wilderness Park border the City to the south. The Pacific Ocean borders the City along the entire western edge. Pacific Coast Highway (SR-1) extends along the entire western border of the City in a north-south direction. The Costa Mesa Freeway (SR-55), located just north of the City, is the main freeway access to the area and traverses in an east-west direction. Additionally, State Route 73 Freeway (SR-73), in a north-south orientation, acts as the eastern border between Newport Beach and the City of Irvine.

The City of Newport Beach had a 2000 population of 70,032 persons, an incremental increase of approximately 4.7 percent from the 1990 population of 66,700. The City currently has an estimated 2004 resident population of approximately 80,800 persons, an increase of 13.3 percent from the 2000 population. Coupled with the recent population growth of the City is the increase in its housing stock. From 1990 to 2000, the number of housing units in Newport Beach rose from 30,860 units to 37,288 units by 2000, a 17.2 percent increase. The most recent (2004) housing stock is estimated at 41,851 dwelling units, and the vacancy rate is approximately 11.1 percent. The average household size is 2.089 persons per household.

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# Santa Barbara Condominiums Project
# Regional Map

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Figure 2-1

The City has an estimated labor force of 48,980 persons as of November 2004, of which 48,090 persons are employed. These persons are expected to be holding jobs within the Newport Beach area.

The City of Newport Beach is developed with a mix of land uses, although the majority of the land is developed with residential and recreational land uses. Approximately 92 acres of the City is designated for industrial uses, 1,224 acres for commercial uses, 483.36 acres for institutional uses, 4,553 acres for recreational uses and 6,349 acres for residential uses. The remaining 37 acres are considered "unclassified".

### 2.1.2 Project Area

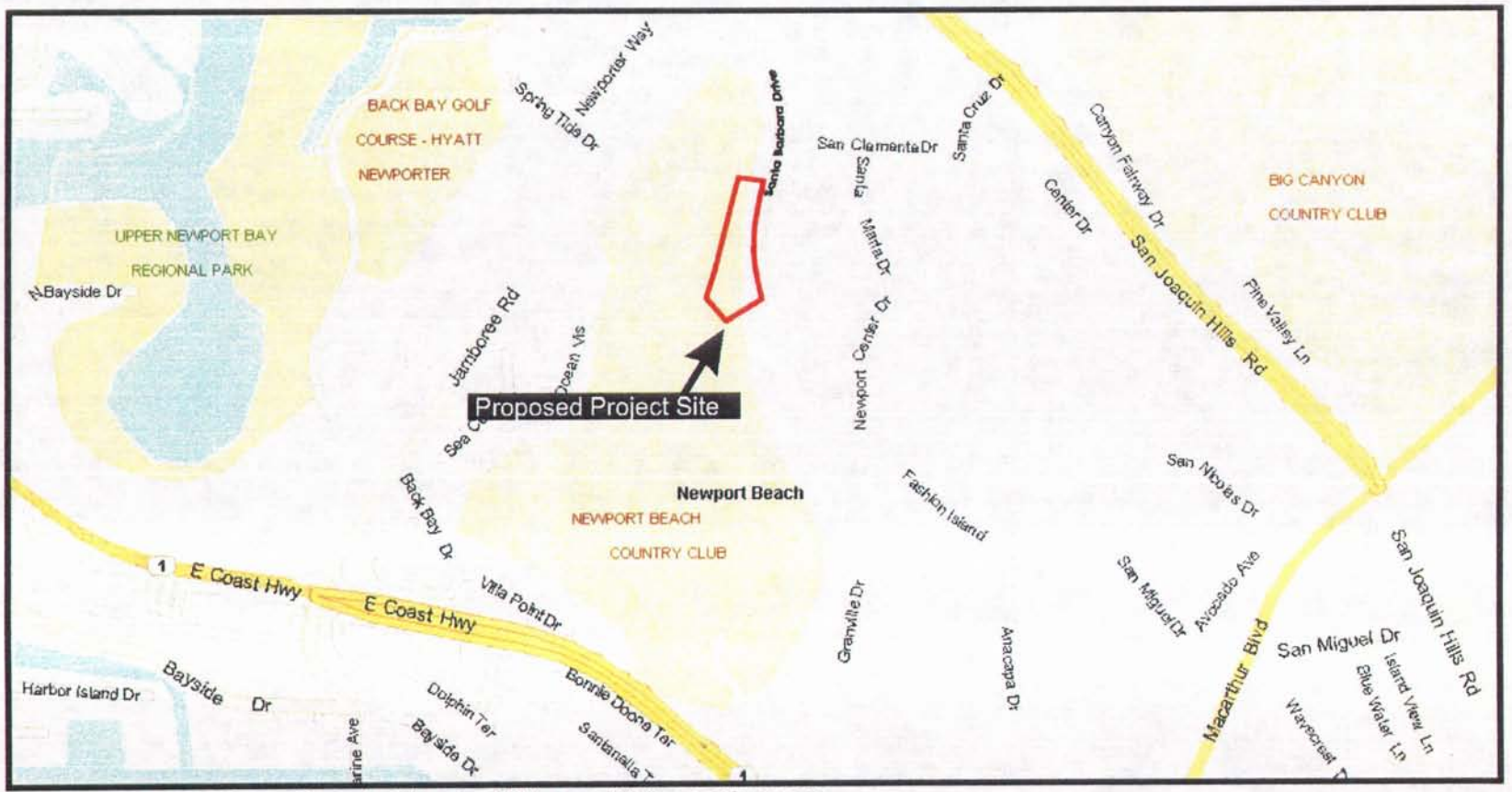
The proposed Project site is an approximately 4.25-acre site in the midsection of the City of Newport Beach. The proposed Project area is located within the Newport Center/Fashion Island area of the City, approximately 0.5 miles north of Pacific Coast Highway (SR-1) and 2.7 miles southeast of the Costa Mesa Freeway (SR-55) (see Figure 2-2, *Vicinity Map)*. The proposed Project would be located along Santa Barbara Drive, just west of the Fashion Island shopping/commercial area. Figure 2-2, *Vicinity Map*, shows the proposed Project site in relation to the surrounding area.

The site is surrounded by a variety of land uses including Recreational and Environmental Open Space (REOS), Administrative, Professional and Financial Commercial (APF), Multi-Family Residential (MFR), and Retail and Service Commercial (RSC). The site is bounded by Santa Barbara Drive to the east, the Newport Beach Country Club Golf Course to the north and west and the Newport Beach Marriott Hotel to the south. Across Santa Barbara Drive and Newport Center Drive to the east are the *Pacific Financial Plaza* and the Fashion Island shopping/commercial area, respectively.

The 4.25-acre site is currently improved with the Newport Marriott tennis complex which includes eight tennis courts, an associated club house and parking utilized by the Newport Beach Marriott Hotel. The clubhouse and parking area are located in the southern portion of the site and the tennis courts and associated landscaping cover the remainder of the site. The proposed Project site has a relatively flat terrain, and slopes down to the west. On-site elevations range from approximately 170 feet above mean sea level (amsl) at the southeast corner of the site to 150 feet amsl at the northwest corner of the site.

Vehicle and pedestrian access to the site is provided by a driveway on Santa Barbara Drive at the southeastern corner of the site. Regional access to the proposed Project site is provided by Pacific Coast Highway (SR-1) and the San Joaquin Hills Transportation Corridor (SR-73) via Jamboree Road or MacArthur Boulevard. The site is located approximately 0.5 mile north of SR-1 and two miles southwest of SR-73. The Costa Mesa Freeway SR-55, which is the main transportation corridor in Newport Beach is approximately 2.7 miles west of the proposed Project site.

The proposed Project site is designated as Administrative, Professional, Financial Commercial (APF) in the Newport Beach General Plan. According to the City of Newport Beach Zoning Code, the zoning designation for the proposed Project site is also APF. According to the Land Use Element of the City of Newport Beach General Plan, the Project site is within "Block 900 – Hotel Plaza" of the "Newport Center (Statistical Area L1)." This planning area is bounded by Newport Center Drive, the Balboa Bay Tennis Club, the Newport Beach Country Club, Jamboree Road and Santa Barbara Drive. This planning area is designated for Administrative, Professional, Financial Commercial (APF) and Multi-Family Residential (MFR) land uses.

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# Santa Barbara Condominiums Project
# Vicinity Map

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Figure
2-2

## 2.2 DESCRIPTION OF THE PROPOSED PROJECT

The proposed Project involves a General Plan Amendment to redesignate 4.25 acres of land from Administrative, Professional, Financial Commercial (APF) to Multi-Family Residential (MFR) to accommodate the proposed residential development. The proposed Project site would require a zone change from APF to MFR. The proposed Project consists of three residential buildings totaling 79 condominium units (see Figure 2-3, *Proposed Site Plan).*

### *Residential*

The three proposed residential structures (Buildings I, II and III) include a total of 79 condominium units totaling approximately 205,232 net square feet. Table 2-1, *Building Summary*, provided below, summarizes the proposed organization of the three building. All three buildings would be no greater than 65 feet in height. The project proposes eight different floor plan options ranging from 2,363 to 4,018 square feet in size. The architecture of the proposed Project is Mediterranean with bold colors and rich detailings. The proposed Project utilizes large expanses of glass, decks and balconies to take advantage of ocean views.

**TABLE 2-1**
**BUILDING SUMMARY**

| Building | Unit Count (du) | Percentage |
|---|---|---|
| Building I | 27 | 34.2% |
| Building II | 31 | 39.2% |
| Building III | 21 | 26.6% |
| **Total** | **79** | **100%** |

Source: Douglas Bender and Associates

### *Parking*

The proposed Project contains approximately 97,231 gross square feet of subterranean parking structures, which include 159 resident and 42 guest parking spaces, equaling a total of 201 parking spaces on-site. Parking for Building I, includes a total of 55 resident spaces and 15 guest parking spaces. Building II would be provided with 78 spaces, 16 of which would be guest spaces. Parking for Building III would include a total of 42 resident spaces and 11 guest spaces.

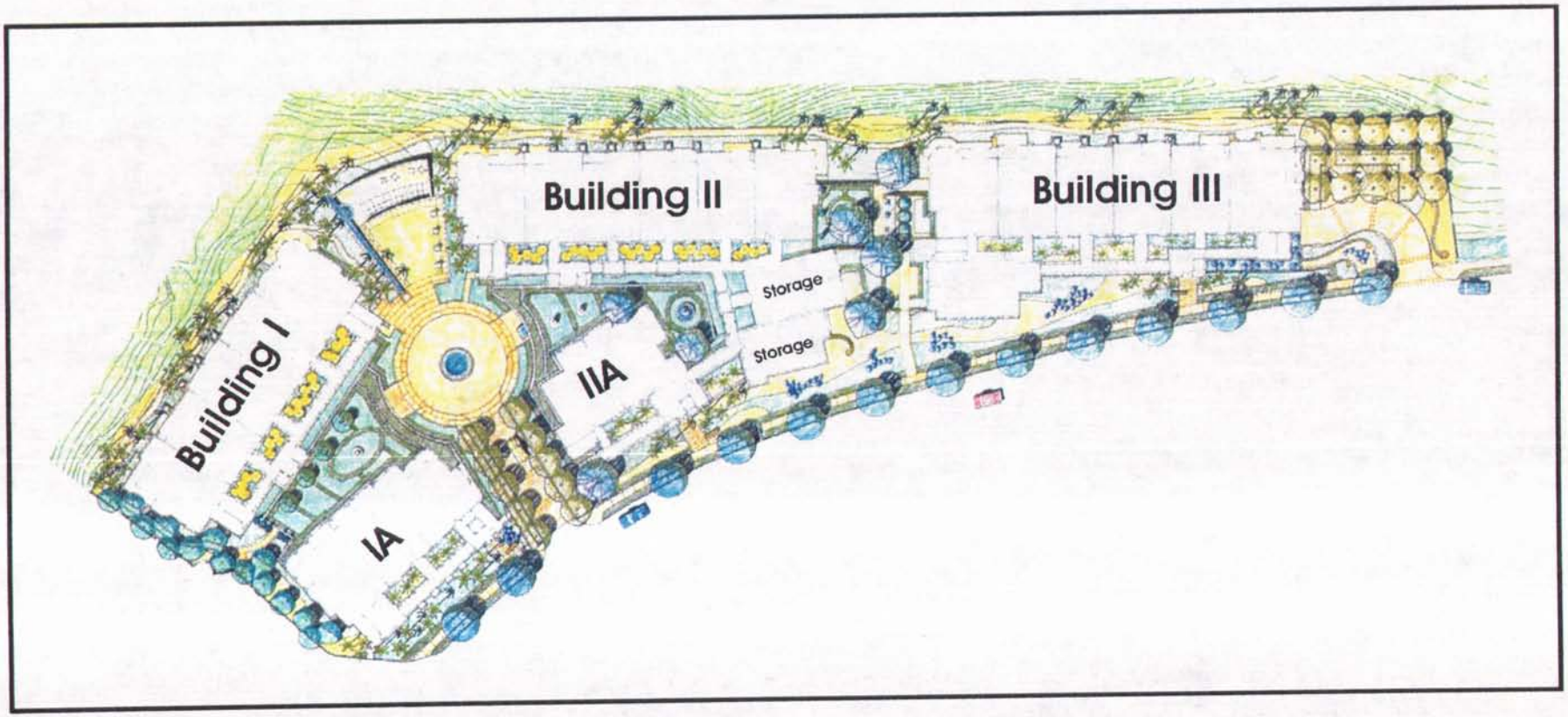
### *Open Space and Recreational*

The proposed Project would provide approximately 79,140 square feet of open space and approximately 21,300 square feet of recreational area for use by residents and guests on the site. The recreational area is intended for passive uses and may contain features such as a fountain, seating, and barbecues.

## 2.3 OBJECTIVES OF THE PROJECT

The proposed Santa Barbara Condominiums Project seeks to accomplish the following objectives:

- Approval of 79 high-end luxury for sale condominiums in Newport Center;
- Develop a site plan which concentrates proposed development within previously developed areas;




Santa Barbara Condominiums Project
Proposed Site Plan

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Figure 2-3

- Create a residential community which is compatible with the surrounding area and consistent with the data being collected through the City's General Plan Update process to provide additional residential units in Newport Center;

- Incorporate design elements to complement and reinforce the quality architecture Newport Center is known for – the architectural flavor will be reminiscent of old world Mediterranean hillside homes with bold colors and rich detailing with large expanses of glass, as well as generous decks and Juliet balconies, all to help facilitate dramatic views of the ocean and punctuate the notion of "coastal living"; and

- Maximize an opportunity for the development of a well-planned and designed project, which provides for the development of a unique residential product in Newport Center.

## 2.4 DISCRETIONARY ACTIONS

A discretionary action is a decision taken by a government agency that calls for the exercise of judgement in deciding whether to approve a project. For this proposed Project, the government agency with discretionary approval authority is the City of Newport Beach and the California Coastal Commission.

To accomplish development of the proposed Project discussed above, the following actions would be made by the City of Newport Beach:

- ***General Plan Amendment No. 2004-005*** – As discussed in Section 2, the proposed Project site is designated as Administrative, Professional, Financial Commercial (APF) in the Newport Beach General Plan. The proposed Project would require a General Plan Amendment to change the current land use designations for the site to Multi-Family Residential (MFR). This designation would allow for the development of the proposed 79 townhomes with minimum lot sizes of 5,000 square feet.

- ***LCP Land Use Plan Amendment No. 2005-001*** – To change the land use designation from APF to MFR.

- ***Code Amendment No. 2004-008*** - The proposed Project would also involve a rezoning of the property from the current zone of APF to MFR. The MFR zone would allow development of multi-family units with a minimum lot size of 5,000 square feet and a minimum site area per unit of 1,200 square feet.

- ***Parcel Map No. 2005-014*** – Resubdivision to Marriott's parcels for financing purposes – see drawings.

- ***Tentative Tract Map No. 2004-004 and 16774*** – Condominium development.

- ***Modification Permit No. 2005-019*** – Front yard setback encroachment.

To accomplish development of the proposed Project discussed above, the following actions would be made by the California Coastal Commission:

- ***Local Coastal Land Use Plan Amendment*** – To change the land use designation from APF to MFR.

- ***Coastal Development Permit*** – Since the site is located within the Coastal Zone boundaries in the City of Newport Beach and the California Coastal Commission regulates development in the Coastal Zone, the proposed Project applicant would need to obtain an approved Coastal Development Permit for the proposed Project.

This section of the Initial Study evaluates the potential environmental impacts of the proposed Project and provides explanations of the responses to the Environmental Checklist found in Appendix A of this document.

The Environmental Checklist is based on Appendix G of the CEQA Guidelines. Appendix G of the CEQA Guidelines provides a list of checklist questions that correspond directly to the legal standards for preparing Environmental Impact Reports (EIRs), Negative Declarations, and Mitigated Negative Declarations (MNDs). The environmental issues evaluated in this Initial Study include the following:

- Aesthetics
- Agriculture Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Geology and Soils
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Noise
- Population and Housing
- Public Services
- Recreation
- Transportation/ Traffic
- Utilities and Service Systems

The environmental analysis in this section is patterned after the questions in the Environmental Checklist. Under each issue area, a general discussion of the existing conditions is provided. The Environmental Checklist questions are then stated and an answer is provided according to the environmental analysis of the proposed Project's impacts. To each question, there are four possible responses:

- **No Impact.** The proposed Project will not have any measurable environmental impact on the environment.

- **Less Than Significant Impact.** The proposed Project will have the potential for impacting the environment, although this impact will be below thresholds that may be considered significant.

- **Less Than Significant Impact with Mitigation.** The proposed Project will have potentially significant adverse impacts which may exceed established thresholds, although mitigation measures or changes to the proposed Project's physical or operational characteristics will reduce these impacts to levels that are less than significant. Measures that may reduce this impact are identified.

- **Potentially Significant Impact.** The proposed Project will have impacts that are considered significant and additional analysis is required to identify mitigation measures that could reduce these impacts to insignificant levels. When an impact is determined to be potentially significant in the preliminary analysis, the environmental issue will be subject to detailed analysis in an environmental impact report (EIR).

The references and sources used for the analysis are also identified after each response.

## 3.1 AESTHETICS

The proposed Project site is located in an urban area that includes a mix of residential, office and other commercial land uses. The proposed Project site is a 4.25-acre area adjacent to Santa Barbara Drive and the *Pacific Financial Plaza* to the east, the Newport Beach Country Club Golf Course to the north and west and the *Newport Beach Marriott Hotel* to the south. The site is currently improved with the Newport Marriott tennis complex which includes eight lighted tennis courts, an associated club house and parking utilized by the Newport Beach Marriott Hotel. Use of the facility is limited to guests of the Marriott Hotel and the site is not open otherwise to the general public.

Santa Barbara Drive is developed as a four-lane roadway, with landscaped parkways, non-contiguous sidewalks and streetlights. The sidewalks along either side of Santa Barbara Drive are buffered from the street by a landscaped area with ornamental vegetation such as grass, small shrubs and trees. There are no overhead power lines crossing over the site or adjacent to the site along the roadways.

Public views of the site from Santa Barbara Drive are slightly blocked by tall trees lining the eastern edge of the site; however, partial views of the existing tennis courts, clubhouse and parking area exist. Further, the proposed Project site is slightly lower than Santa Barbara Drive, allowing for more distant views of the golf course bordering the site on the west. The site is not visible from Jamboree Road, due to its distance from the roadway and the vegetation planted on the adjacent golf course.

Views from the site include *Pacific Financial Plaza*. *Pacific Financial Plaza* includes an eight-story office building, a two story parking structure and a surface parking lot. Additionally, views from the site to the northeast are of *The Colony,* a multi-family residential area, with three four-story buildings lining Santa Barbara Drive. Views from the site looking to the north and west consist entirely of the Newport Beach Country Club Golf Course and associated facilities. The 15-16 story *Newport Beach Marriott Hotel* comprise views from the site looking to the south.

*(Sources: Site Survey and Aerial Photograph)*

### A. Would the Project have a substantial adverse effect on a scenic vista?

**Less than Significant Impact.** Within the City of Newport Beach, scenic vistas are comprised mainly of ocean views, scenic coastal views and bluff areas. Views of the ocean and scenic coastal views are available from many locations throughout the City but are limited from the proposed Project site due to existing surrounding developments. According to the City of Newport Beach, a 'bluff' is any landform having an average slope of 26.6 degrees (50 percent) or greater, with a vertical rise of 25 feet or greater. There are no existing bluff areas on or adjacent to the proposed Project site.

The proposed Project would result in changes to the existing use of the site from eight relatively flat tennis courts to development of 79 townhomes, and subterranean parking areas, open space and recreation area. The proposed Project includes construction of three 50 to 65-foot tall residential structures. The architecture of the proposed Project is Mediterranean with bold colors and rich detailing. The proposed Project would utilize large expanses of glass, decks and balconies to take advantage of ocean views. This style of architecture is common in southern California and would be compatible to the adjacent hotel use as well as the residential uses located across Santa Barbara Drive. The proposed structures may block existing views of the golf course from private land uses east of the proposed Project site; however, the City of Newport Beach does not have a

policy for protection of private views. Further, the golf course is not considered a scenic resource, and thus, this would not be considered a significant impact. Additionally, views from Santa Barbara Drive through the site to the golf course are not designated scenic vistas because no views of the ocean, coast or other scenic resources currently exist. Therefore, the 50 to 65 foot tall buildings would not block a scenic vista. Further, the proposed Project is in an area that allows high rise structures and has been designed to comply with City development standards, therefore, a less than significant impact on scenic vistas would result from the proposed Project.

The proposed Project site is located within the High Rise Height Limitation Zone. According to the Newport Beach Zoning Code Chapter 20.65.040 E (*High Rise Height Limitation Zone)*, the height limit for any structure shall not exceed 375 feet (see Figure 3-1, *City of Newport Beach Height Limitation Zones*). The three proposed residential structures would be approximately 50-60 feet in height and are far below the 375 feet height limitation set by the City of Newport Beach Zoning Code. Therefore, no impacts regarding building height would occur with proposed Project implementation.

*(Sources: Newport Beach General Plan, Municipal Code, Project Plans, and Site Survey)*

**B. Would the Project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?**

**No Impact.** There are no scenic resources on or near the proposed Project site. No rock outcroppings or historic buildings are found along or near the proposed Project site. None of the surrounding roadways are designated as scenic highways in California's Scenic Routes. There are a number of trees on-site that may need to be removed or relocated as part of the proposed Project during grading and construction activities. The majority, if not all, of the palm trees and Ficus rubiginosa on-site would be relocated and re-planted. In addition, the site currently has a Eucalyptus trees; however, due to current disease problems, the Eucalyptus trees on-site would need to be evaluated and certified as healthy in order for reuse. These trees are part of the existing ornamental landscaping on-site and are not considered part of a scenic resource. Therefore, no impact on scenic resources or scenic highways is expected to occur with proposed Project implementation.

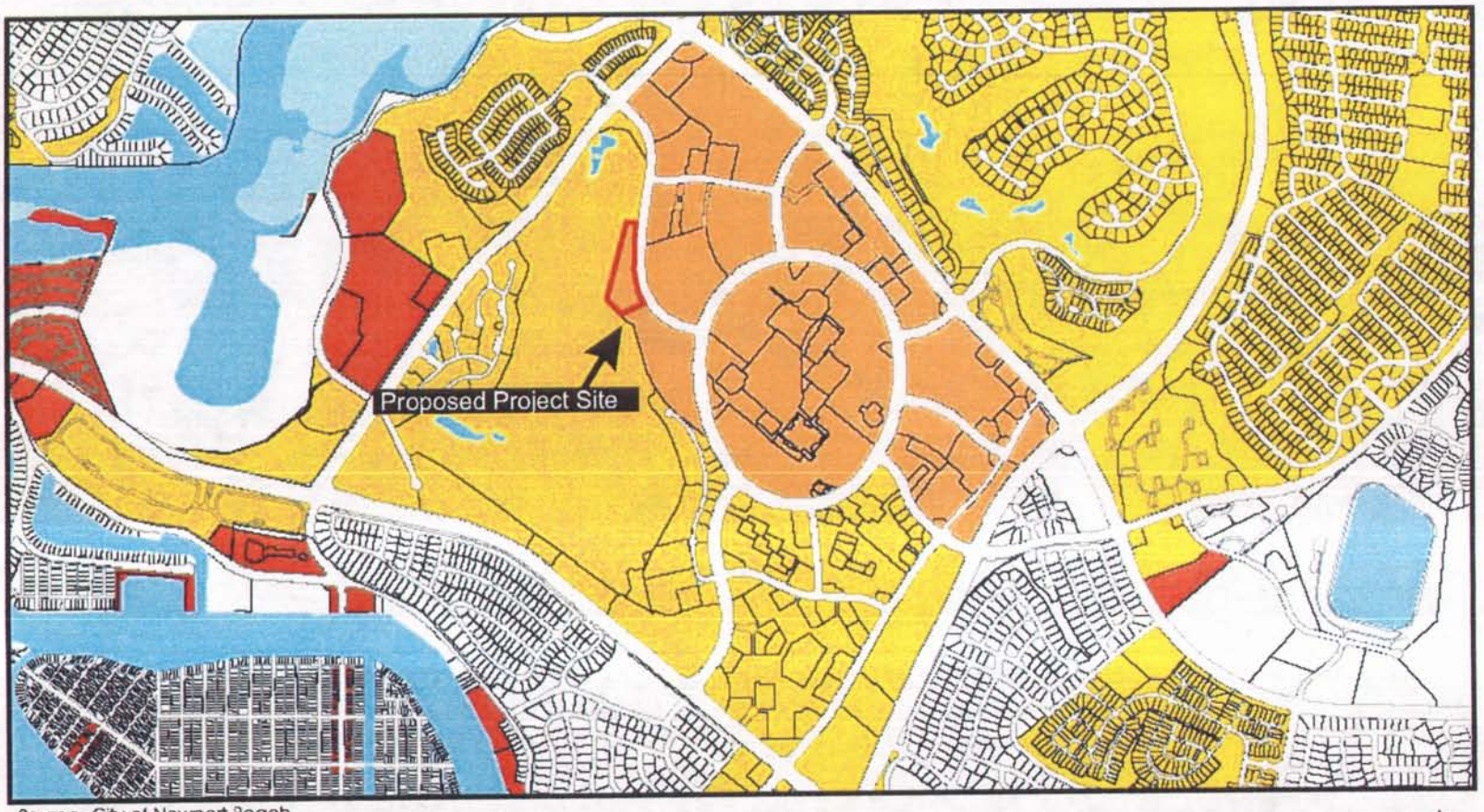
*(Sources: Newport Beach General Plan, Site Survey, Project Plans and California's Scenic Routes)*

**C. Would the Project substantially degrade the existing visual character or quality of the site and its surroundings?**

**Less than Significant Impact.** The proposed Project would change the visual quality of the proposed Project site through the development of residential condominiums in three 50 to 65 foot tall buildings, an approximately 79,140-square-feet of open space, and approximately 21,300 square-feet of hardscape for recreational use on the site.

On a short-term basis, during the construction period, the proposed Project site would be subject to construction activities. Views of disturbed areas with construction materials and equipment, and grading would be visible to passers-by. This change in the visual environment is short-term and is not considered significant. Additionally, because the Project would be similar to existing surrounding land uses, such as the residential area to the northeast, the proposed Project would not substantially degrade the existing visual character or quality of the site and its surroundings. A less than significant impact would occur.

*(Sources: Site Survey, Aerial photographs and Project Plans)*




Source: City of Newport Beach

HEIGHT ZONE
- 26/35 Feet
- 32/50 Feet
- Highrise 375 Feet

Note: All R-1, R-1.5, R-2, OS Districts: 24/28 ft.
MFR District: 28/32 ft.

N

## City of Newport Beach Height Limitation Zones

Figure 3-1

**D. Would the Project create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?**

**Less than Significant Impact.** Existing sources of light and glare on-site include tennis court lighting, security lighting in the parking lot, and streetlights and headlights from vehicles traveling along Santa Barbara Drive. Development on the proposed Project site would be accompanied by interior and exterior lighting from residential areas, security lighting, pedestrian pathway lighting and landscape lighting. Lighting on the proposed Project site would be visible from the surrounding areas. However, the proposed Project site is located in an urbanized area and would replace the existing tennis courts on-site, whose nighttime illumination is a significantly greater source of light and glare in the area. Proposed Project lighting would not increase the lighting levels of the site, in fact, on-site lighting levels are expected to be reduced with proposed Project implementation.

*(Sources: Site Survey and Project Plans)*

## 3.2 AGRICULTURE RESOURCES

The California Department of Conservation Farmland Mapping and Monitoring Program (FMMP) develops statistical data for analyzing impacts on California's agricultural resources, for use by decision makers in assessing the present status, reviewing trends, and planning for the future of California's agricultural land resources. According to the California Department of Conservation FMMP, there are no agricultural land resources within the City of Newport Beach and the proposed Project area is designated as Urban and Built-up Land.

*(Sources: Newport Beach General Plan, California Department of Conservation Farmland Mapping and Monitoring Program and Site Survey)*

**A. Would the Project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?**

**No Impact**. No Prime Farmland, Farmland of State or Local Importance, or Unique Farmland occurs within or near the proposed Project area. Since the proposed Project site is not used for agriculture and is not Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, the proposed Project would not result in converting farmlands to a non-agricultural use. The adjacent areas are not designated as Prime, Unique, or Statewide Important Farmland under the Farmland Mapping and Monitoring Program of the California Resources Agency or in the Newport Beach General Plan. Thus, no impact on important farmlands would occur with the proposed Project.

*(Sources: Newport Beach General Plan, California Department of Conservation Farmland Mapping and Monitoring Program, and Site Survey)*

**B. Would the Project conflict with existing zoning for agricultural use, or a Williamson Act contract?**

**No Impact.** According to the City's General Plan, the proposed Project site is currently designated as APF, which does not permit agricultural uses. According to the Newport Beach General Plan, there is no designated farmland within the proposed Project area. Adjacent areas are designated as APF, Multi-Family Residential, Retail and Service Commercial, and Recreational and Environmental Open Space in the City's General Land Use Plan map. There are no lands under a Williamson Act contract on or near the site. With the absence of agricultural areas

near the site, no conflict with existing zoning for agricultural use or contracts under the Williamson Act would occur. No impact on agricultural zones or resources in the City would result from the proposed Project.

*(Sources: General Land Use Plan of the Newport Beach General Plan, California Department of Conservation Farmland Mapping and Monitoring Program, Newport Beach Zoning Map, and Site Survey)*

**C. Would the Project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?**

**No Impact.** The site is not being used for any agricultural purposes and is not designated as agricultural land. Since the proposed Project site is not used for agriculture, the proposed Project would not result in converting farmland to a non-agricultural use. Also, no agricultural uses are found near the site that may convert to non-agricultural use. No impact would occur as a result of the proposed Project.

*(Sources: Newport Beach General Plan, California Department of Conservation Farmland Mapping and Monitoring Program, and Site Survey)*

## 3.3 AIR QUALITY

*An Air Quality Analysis for the proposed Project was prepared by Giroux and Associates in February 2005 to identify existing air quality conditions on and around the site, as well as analyze the proposed Project's potential impacts on air quality. The findings of the study are summarized below, and the complete Air Quality Analysis is provided in Appendix B at the end of this document.*

The climate of Orange County, as with all of Southern California, is governed largely by the strength and location of the semi-permanent high pressure center over the Pacific Ocean and the moderating effects of the nearby vast oceanic heat reservoir. Local climatic conditions in Newport Beach are characterized by a Mediterranean climate with average temperatures of 61 degrees annually, infrequent rainfall, and moderate daytime on-shore breezes. Nighttime breezes generally slow and reverse to become offshore breezes. Annual average temperatures in the South Coast Air Basin (SCAB) are 62 to 65 degrees Fahrenheit. The average annual rainfall is approximately 12 inches.

### Air Quality Standards

Air quality is measured by comparing contaminant levels in ambient air samples to national and state standards. These standards are set by the U.S. Environmental Protection Agency (EPA) and the California Air Resources Board at levels determined to be protective of public health and welfare with an adequate margin of safety. The federal Clean Air Act of 1970 first authorized national ambient air quality standards (NAAQS). California ambient air quality standards (CAAQS) were authorized by the State legislature in 1967.

Air quality is considered in "attainment" of NAAQS if pollutant levels are below or equal to the standards continuously and exceed them on average no more than once each year. California standards are generally more stringent than the national standards. Whereas, one violation of national standards averaged over three years is still considered as meeting NAAQS, the definition of CAAQS attainment is zero violations.

Because of unique air quality problems introduced by the restrictive dispersion meteorology in California, there is considerable difference between state and national clean air standards. Those National and California standards currently in effect are shown in Table 3-1, *Ambient Air Quality Standards*.

**TABLE 3-1**
**AMBIENT AIR QUALITY STANDARDS**

| Pollutant | Average Time | California Standards | | National Standards | | |
|---|---|---|---|---|---|---|
| | | Concentration | Method | Primary | Secondary | Method |
| Ozone | 1 hour | 0.09 ppm (180 µg/m$^3$) | Ultraviolet Photometry | 0.12 ppm (235 µg/m$^3$) | 0.12 ppm (235 µg/m$^3$) | Ethylene Chemiluminescence |
| | 8 hour | -- | | 0.08 ppm (157 µg/m$^3$) | 0.08 ppm (157 µg/m$^3$) | |
| Carbon Monoxide | 8 hours | 9.0 ppm (10 mg/m$^3$) | Non-Dispersive Infrared Spectroscopy (NDIR) | 9 ppm (10 mg/m$^3$) | None | Non-Dispersive Infrared Spectroscopy (NDIR) |
| | 1 hour | 20 ppm (23 mg/m$^3$) | | 35 ppm (40 mg/m$^3$) | | |
| Nitrogen Dioxide ($NO_2$) | Annual Average | -- | Gas Phase Chemiluminescence | 0.053 ppm (100 µg/m$^3$) | 0.053 ppm (100 µg/m$^3$) | Gas Phase Chemiluminescence |
| | 1 hour | 0.25 ppm (470 µg/m$^3$) | | -- | -- | |
| Sulfur Dioxide ($SO_2$) | Annual Average | -- | Ultraviolet Fluorescence | 0.03 ppm (80 µg/m$^3$) | -- | Pararosaniline |
| | 24 hours | 0.04 ppm (105 µg/m$^3$) | | 0.14 ppm (365 µg/m$^3$) | -- | |
| | 3 hours | -- | | -- | 0.5 ppm (1300 µg/m$^3$) | |
| | 1 hour | 0.25 ppm (655 µg/m$^3$) | | -- | -- | |
| Respirable Particulate Matter ($PM_{10}$) | 24 hours | 50 µg/m$^3$ | Gravimetric or Beta Attenuation | 150 µg/m$^3$ | 150 µg/m$^3$ | Inertial Separation and Gravimetric Analysis |
| | Annual Arithmetic Mean | 20 µg/m$^3$ | | 50 µg/m$^3$ | 50 µg/m$^3$ | |
| Fine Particulate Matter ($PM_{2.5}$) | Annual Arithmetic Mean | 12 µg/m$^3$ | Gravimetric or Beta Attenuation | 15 µg/m$^3$ | -- | Inertial Separation and Gravimetric Analysis |
| | 24 hours | -- | | 65 µg/m$^3$ | -- | |
| Sulfates | 24 hours | 25 µg/m$^3$ | Ion Chromatography | -- | -- | -- |
| Lead | 30-day Average | 1.5 µg/m$^3$ | Atomic Absorption | -- | -- | Atomic Absorption |
| | Calendar Quarter | -- | | 1.5 µg/m$^3$ | 1.5 µg/m$^3$ | |
| Hydrogen Sulfide Vinyl Chloride | 24 hours | 0.010 ppm (26 µg/m$^3$) | Gas Chromatography | -- | -- | -- |

Source: Air Quality Analysis

Air quality standards specify the upper limits of concentrations and duration in the ambient air consistent with the management goal of preventing specific harmful effects. There are national and state standards for ozone ($O_3$), carbon monoxide (CO), nitrogen dioxide ($NO_2$), airborne particulate matter with an aerodynamic diameter of less than 10 microns (PM-10), sulfur dioxide ($SO_2$), and lead (Pb). A federal standard for ultra-fine particulate matter (2.5 microns in diameter or less, or PM-2.5) was adopted in 1997. Since the California 24-hour PM-10 standard, which includes PM-2.5 as a sub-set, is more stringent than the federal PM-2.5 standard, compliance with the state PM-10 standard is presumed to assure compliance with the federal 24-hour PM-2.5 standard automatically. Also, a State standard for PM-2.5, which is more stringent than its federal counterpart, has been adopted.

**Local Air Quality**

The South Coast Air Quality Management District (SCAQMD) operates air monitoring stations in Orange County to monitor carbon monoxide, ozone, particulate matter$_{10}$ ($PM_{10}$), nitrogen dioxide, and other air pollutant levels. Existing and probable future levels of air quality in Newport Beach can be best inferred from ambient air quality measurements conducted by the SCAQMD at its Costa Mesa and El Toro monitoring stations. These stations measure both regional pollution levels such as dust (particulates) and smog, as well as levels of primary vehicular pollutants such as carbon monoxide. Table 3-2, *Project Area Air Quality Monitoring Summary*, summarizes the last three years of published monitoring data from the SCAQMD's Costa Mesa monitoring station (see below).

The data in Table 3-2 shows that carbon monoxide and nitrogen dioxide levels do not exceed state and federal clean air standards, although ozone and particulate levels occasionally exceed the standards. According to the *Conservation of Natural Resources Element* of the Newport Beach General Plan, mobile sources are the major cause of these air pollutants in Orange County. Particulate matter exceedances are also a result from grading and construction activities in the area. However, a trend towards better air quality can be seen, since the frequency of smog alerts due to high ozone levels, especially those considered unhealthy for all people, has dropped considerably since 1998.

*(Sources: Air Quality Analysis)*

**A. Would the Project conflict with or obstruct implementation of the applicable air quality plan?**

**No Impact.** The Air Quality Management Plan (AQMP) for the SCAB has been developed to address air pollution control in the air basin and to make air quality in the basin meet federal and state ambient air quality standards. The AQMP considered growth projections for the region and identified programs and measures needed to reduce pollutants anticipated from existing and future developments in the South Coast Air Basin.

The SCAQMD has developed significance thresholds based on the volume of pollution emitted rather than on actual ambient air quality because the direct air quality impact of a project is not quantifiable on a regional scale. The proposed Project would need to comply with applicable thresholds as they relate to fugitive dust control during grading activities, architectural coatings, building construction, and other air pollutant regulations. Any Projects in the SCAB with daily emissions that exceed any of the thresholds shown in Table 3-3, *SCAQMD Emissions Significance Thresholds*, are recommended by the SCAQMD to be considered individually and cumulatively significant.

**TABLE 3-2**
**PROJECT AREA AIR QUALITY MONITORING SUMMARY**

| Pollutant/Standard | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 |
|---|---|---|---|---|---|---|---|
| **Ozone** | | | | | | | |
| 1-Hour > 0.09 ppm | 1 | 5 | 1 | 1 | 1 | 0 | 4 |
| 1-Hour > 0.12 ppm | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8-Hour > 0.08 ppm | 1 | 4 | 0 | 1 | 0 | 0 | 1 |
| Max. 1-Hour Conc. (ppm) | 0.10 | 0.12 | 0.10 | 0.10 | 0.10 | 0.09 | 0.11 |
| **Carbon Monoxide** | | | | | | | |
| 1-Hour > 20. ppm | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8-Hour > 9. ppm | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Max. 1-Hour Conc. (ppm) | 7. | 9. | 8. | 8. | 6. | 5. | xx |
| Max. 8-Hour Conc. (ppm) | 5.8 | 7.0 | 6.4 | 6.3 | 4.6 | 4.3 | 5.9 |
| **Nitrogen Dioxide** | | | | | | | |
| 1-Hour > 0.25 ppm | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Max. 1-Hour Conc. (ppm) | 0.12 | 0.12 | 0.12 | 0.11 | 0.08 | 0.11 | 0.11 |
| **Inhalable Particulates (PM-10)** | | | | | | | |
| 24-Hour > 50 $\mu g/m^3$ | 4/56 | 6/59 | 6/60 | 2/60 | 3/57 | 5/60 | 2/xx |
| 24-Hour > 150 $\mu g/m^3$ | 0/56 | 0/59 | 0/60 | 0/60 | 0/57 | 0/60 | 0/xx |
| Max. 24-Hour Conc. ($\mu g/m^3$) | 86. | 70. | 111. | 98. | 60. | 80. | 64. |
| **Ultra-Fine Particulates (PM-2.5)** | | | | | | | |
| 24-Hour > 65 $\mu g/m^3$ | - | - | 0/65 | 1/119 | 0/102 | 0/119 | 0/xxx |
| Max. 24-Hour Conc. ($\mu g/m^3$) | - | - | 57. | 95. | 53. | 58. | 51. |

Source: SCAQMD

**TABLE 3-3**
**SCAQMD EMISSIONS SIGNIFICANCE THRESHOLDS**
**(POUNDS PER DAY)**

| Pollutant | Construction | Operations |
|---|---|---|
| ROG | 75 | 55 |
| NOx | 100 | 55 |
| CO | 550 | 550 |
| PM-10 | 150 | 150 |
| SOx | 150 | 150 |

Source: Air Quality Analysis

Compliance with the regulations of the SCAQMD would ensure that no conflict with the AQMP would occur and the proposed Project would not obstruct implementation of the AQMP. As shown in Table 3-4, *Estimated Project Emissions During Construction* and Table 3-5, *Average Daily Project Source Air Pollution Emissions* shown below, construction and operation of the proposed Project would not exceed established thresholds that have been adopted to ensure that goals specified in the AQMP can be met. Additionally, the proposed Project would incorporate measures to reduce short-term construction emissions, in accordance with SCAQMD regulations. The proposed Project would not obstruct or conflict with SCAQMD's AQMP.

*(Sources: Air Quality Analysis)*

**B. Would the Project violate any air quality standard or contribute substantially to an existing or projected air quality violation?**

**Less than Significant Impact with Mitigation.** The proposed Project would lead to temporary construction emissions that may affect regional air quality. Construction, occupancy, operation of the proposed Project would lead to increases in pollutant emissions in the area associated with development of the proposed Project site.

Temporary construction activity emissions will occur during proposed Project build-out. Such emissions include on-site generation of dust and equipment exhaust, and off-site emissions from construction employee commuting and/or trucks delivering building materials.

***Short-term/Construction Impacts***

The use of construction equipment for development of the proposed Project site would lead to emissions, which would add to local air pollution levels. Heavy-duty trucks, earth-movers, air compressors, and power generators would be used during the construction phase. Operation and application of these machines would temporarily increase air pollutant levels in the vicinity of the proposed Project. In addition, emissions from delivery and haul trucks, construction crew vehicles, concrete mixers, and other off-site vehicle trips would add to local pollutant levels. Construction emissions for CO, ROC, SOx, and PM-10 would generally be low from equipment use and truck trips. However, the use of diesel fuel in most of the equipment and trucks would lead to increased NOx levels, assuming construction equipment are used a full eight hours per day. Additionally, VOC emissions from architectural coatings (paints) would create ROG emissions during construction. Lastly, fugitive dust emissions on the site would be generated by ground disturbance during grading and excavation activities. These activities would generate a total of 40,000 cubic yards (cy) of cut materials to be exported off the site.

The California Air Resources Board (CARB) emissions computer model URBEMIS2002 was used to estimate daily emissions during grading and finish construction with the following results (pounds/day) shown in Table 3-4, *Estimated Project Emissions During Construction*, provided below:

**TABLE 3-4**
**ESTIMATED PROJECT EMISSIONS DURING CONSTRUCTION**

| Activity | ROG | NOx | CO | $SO_2$ | PM-10 Total | PM-10 Equipment Exhaust | PM-10 Dust |
|---|---|---|---|---|---|---|---|
| Grading | 7.0 | 48.7 | 57.1 | 0.0 | 12.1 | 2.1 | 10.0[b] |
| Finish Work | 143.1[a] | 30.8 | 35.7 | 0.0 | 1.4 | 1.3 | 0.1 |
| SCAQMD Threshold | 75. | 100. | 550. | 150. | 150. | 150 | 150 |

[a] Exceeds threshold due to application of paints and coatings.
[b] Maximum daily disturbance "footprint" during grading is 1.0 acre. Calculated PM-10 emissions have been calculated with the application of "standard" dust control, and with the application of enhanced dust control measures (see Air Quality Analysis for more details).

Source: Air Quality Analysis

As shown above, during finish work, application of paintings and coatings could create ROG emissions exceeding the SCAQMD threshold. Additionally, limiting the grading footprint area and/or use of best available control measures (BACMs) are not required to achieve a less-than-significant dust (PM-10) emission rate. However, the non-attainment status of the air basin for PM-10 dictates that all reasonably available control measures be implemented. Use of BACMs during construction is therefore recommended even if thresholds are not exceeded.

Mitigation measures that would reduce emissions associated with construction of the proposed Project include:

**Mitigation Measure 3.3.A:** During grading activities, any exposed soil areas shall be watered twice per day. On windy days or when fugitive dust can be observed leaving the proposed Project site, additional applications of water shall be applied to maintain a minimum 12 percent moisture content as defined by SCAQMD Rule 403. Under windy conditions where velocities are forecast to exceed 25 miles per hour (as ascertained by phone calls to the SCAQMD), all ground disturbing activities shall be halted until winds that are forecast to abate below this threshold.

**Mitigation Measure 3.3.B:** The proposed Project shall comply with regional rules such as SCAQMD Rules 402 and 403, which would assist in reducing short-term air pollutant emissions. Rule 403 requires that fugitive dust be controlled with best available control measures so that the presence of such dust does not remain visible in the atmosphere beyond the property line of the emission source. Rule 402 requires dust suppression techniques be implemented to prevent fugitive dust from creating a nuisance offsite. These dust suppression techniques are summarized as follows:

a. Portions of the construction site to remain inactive longer than a period of three months shall be seeded and watered until grass cover is grown or otherwise stabilized in a manner acceptable to the City.

b. All on-site roads shall be paved as soon as feasible or watered periodically or chemically stabilized.

c. All material transported offsite shall be either sufficiently watered or securely covered to prevent excessive amounts of dust.

d. The area disturbed by clearing, grading, earthmoving, or excavation operations shall be minimized at all times.

**Mitigation Measure 3.3.C:** All vehicles on the construction site shall travel at speeds less than 15 miles per hour.

**Mitigation Measure 3.3.D:** All material stockpiles subject to wind erosion during construction activities, that will not be utilized within three days, shall be covered with plastic, an alternative cover deemed equivalent to plastic, or sprayed with a nontoxic chemical stabilizer.

**Mitigation Measure 3.3.E:** Where vehicles leave the construction site and enter adjacent public streets, the streets shall be swept daily or washed down at the end of the work day to remove soil tracked onto the paved surface. Any visible track-out extending for more than fifty (50) feet from the access point shall be swept or washed within thirty (30) minutes of deposition.

**Mitigation Measure 3.3.F:** All diesel-powered vehicles and equipment shall be properly operated and maintained.

**Mitigation Measure 3.3.G:** All diesel-powered vehicles and gasoline-powered equipment shall be turned off when not in use for more than five (5) minutes.

**Mitigation Measure 3.3.H:** The construction contractor shall utilize electric or natural gas-powered equipment instead of gasoline or diesel-powered engines, where feasible.

**Mitigation Measure 3.3.I:** As much as possible, the construction contractor shall time the construction activities so as not to interfere with peak hour traffic. To minimize obstruction of through traffic lanes adjacent to the site, a flag person shall be retained to maintain safety adjacent to existing roadways, if necessary.

**Mitigation Measure 3.3.J:** The construction contractor shall support and encourage ridesharing and transit incentives for the construction crew.

**Mitigation Measure 3.3.K:** The construction contractor shall utilize, as much as possible, pre-coated/natural colored building materials. Water-based or low VOC coatings shall be used that comply with the most stringent SCAQMD Rule 1113 limits. Spray equipment with high transfer efficiency, such as the high volume-low pressure (HVLP) paint applicators with 50 percent efficiency, or manual coatings application such as paint brush hand roller, trowel, spatula, dauber, rag, or a sponge shall be used to reduce VOC emissions, where practical. Additionally, paint application shall use lower volatility paint not exceeding 100 grams of ROG per liter.

**Mitigation Measure 3.3.L:** If construction equipment powered by alternative fuel sources (LPG/CNG) is available at comparable cost, the developer shall specify that such equipment be used during all construction activities on the proposed Project site.

**Mitigation Measure 3.3.M:** The developer shall require the use of particulate filters on diesel construction equipment if use of such filters is demonstrated to be cost-competitive for use on this proposed Project.

Implementation of the mitigation measures outlined above would reduce emissions from construction activities to less than significant levels.

***Operational Impacts***

Emissions from vehicles travelling to and from the site would be the primary source of emissions resulting from use and occupancy of the proposed Project. Pollutants generated from proposed Project-related traffic would include carbon monoxide (CO), particulate matter ($PM_{10}$), and nitrogen oxides ($NO_X$). Due to the size of the proposed Project and the anticipated increased vehicle trips to and from the proposed Project site, emissions from these vehicles would add to the regional air pollution levels.

The proposed Project would generate approximately 330 new vehicle trips to area roadways. According to the Air Quality Analysis prepared for the proposed Project, the California ARB land use and air pollution emissions computer model URBEMIS2002 was run for a worst-case proposed Project build-out of year 2007. As shown in Table 3-5, *Average Daily Project Source Air Pollution Emissions*, the proposed Project-related mobile source emissions burden would not exceed designated thresholds and all pollutant emissions are below significance levels by a wide margin of safety. Operation of the proposed Project would not result in a significant impact to air quality.

**TABLE 3-5**
**AVERAGE DAILY PROJECT SOURCE AIR POLLUTION EMISSIONS**

| Condominium Residential Uses | ROG | NOx | CO | SOx | PM-10 Total |
|---|---|---|---|---|---|
| Area Source Emissions | 4.1 | 0.6 | 1.4 | 0.0 | 0.0 |
| Vehicle Source Emissions | 8.5 | 9.4 | 101.8 | 0.1 | 9.1 |
| **Total** | **12.6** | **10.0** | **103.2** | **0.1** | **9.1** |
| SCAQMD Threshold | 55 | 55 | 550 | 150 | 150 |
| Exceeds Threshold | No | No | No | No | No |
| Percent of Threshold | 23 | 18 | 19 | <1 | 6 |

Source: Air Quality Analysis

*(Sources: Newport Beach General Plan, SCAQMD CEQA Handbook, and Project Plans)*

**C. Would the Project result in a cumulatively considerable net increase of any criteria pollutant for which the region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions, which exceed quantitative thresholds for ozone precursors)?**

**Less than Significant Impact.** In the event direct impacts from a project are less than significant, a project may still have a cumulatively considerable impact on air quality if the emissions from the project, in combination with the emissions from other proposed, or reasonably foreseeable future projects are in excess of the designated threshold levels identified above, and the project's contribution accounts for more than an insignificant proportion of the cumulative total emissions.

As discussed above, construction and vehicle emissions associated with proposed Project would not exceed SCAQMD thresholds with implementation of the mitigation measures outlined above and would not be significant. Most mobile source pollutants create regional impacts after conversion of precursor emissions to their most unhealthful forms. Carbon monoxide (CO) is the one pollutant that is emitted in its already most unhealthful form. Congested intersections have often been found to be areas of highly localized violations of CO standards. These violations are called "hot spots".

According to the Air Quality Analysis prepared for the proposed Project, there are no "hot spot" CO impacts (individually or cumulatively) associated with implementation of the proposed Santa Barbara Condominium Project. Maximum background one-hour CO levels in Newport Beach are approximately 4 ppm. Upon buildout of the General Plan, the intersection of MacArthur Boulevard and Ford Road could create local CO levels that would exceed the one-hour CO standard by 0.1 ppm. However, the cumulative impact from the proposed Project is negligible for the following reasons:

- The proposed Project contribution is immeasurably small;
- The General Plan build-out condition would not be achieved until well into the future when cars are cleaner whereas the analysis was conducted assuming a 2005 traffic fleet; and
- Since General Plan build-out conditions are well into the future, they may not be achieved.

Therefore, there would be no cumulatively considerable net increase of any criteria pollutants and no significant impacts would result from development of the proposed Project.

*(Sources: Air Quality Analysis)*

**D. Would the Project expose sensitive receptors to substantial pollutant concentrations?**

**Less than Significant Impact.** Sensitive receptors located near the proposed Project site include a multi-family residential area and *The Colony*, located across Santa Barbara Drive to the northeast. Short-term and long-term emissions that would result from development of the proposed Project have the potential to affect these sensitive receptors. Potential impacts to the residents in the adjacent residential area would include fugitive dust during grading and excavation and emissions from on-site construction equipment. However, implementation of mitigation measures during construction would avoid adverse impacts on these sensitive receptors. Also, long-term vehicle emissions would occur along the regional transportation network and would not be concentrated on or near the site to affect adjacent homes.

*(Sources: SCAQMD CEQA Handbook, Newport Beach General Plan, USGS Laguna Beach Quadrangle, and Site Survey)*

**E. Would the Project create objectionable odors affecting a substantial number of people?**

**Less than Significant Impact.** The proposed residential development would not involve the handling of large quantities of solid waste materials, chemicals, food products, or other odorous materials, and has no potential to create objectionable odors. Vehicle use of the internal or adjacent roads is not expected to involve or generate odorous emissions, although vehicle idling may generate carbon monoxide and $NO_x$ fumes at local intersections. This impact is similar to

vehicle exhaust generation along any other major roadway in the City or in the region and is not considered significant.

During construction, there may be localized instances when the characteristic diesel exhaust odor is noticeable from construction equipment and asphalt paving, but such transitory exposure is a brief nuisance and would not threaten regional air quality standards. Thus, adverse impact in terms of objectionable odors during construction would be less than significant.

*(Sources: SCAQMD CEQA Handbook and Project Plans)*

## 3.4 BIOLOGICAL RESOURCES

The County of Orange has prepared a Natural Communities Conservation Plan (NCCP) for the Central-Coastal region of the County. As indicated in the NCCP, most of the preserved area is located within the unincorporated jurisdiction of the County, with significant portions within the Cities of Irvine, Laguna Beach, Laguna Niguel, and San Juan Capistrano with smaller portions located in Costa Mesa and Newport Beach. The NCCP is designed to connect various geographic components of the plan area into a contiguous system to allow animals to move throughout the area via a continuous system of reserve habitat and linkages. The proposed Project site is not located within the boundary area of the NCCP.

The City of Newport Beach contains a variety of natural resources including natural lands and wildlife areas that contain several types of flora and fauna habitat. These areas have been identified as Environmentally Sensitive Areas (ESA) in the Recreation and Open Space Element of the Newport Beach General Plan. ESA's are defined as "those passive open space areas possessing unique environmental value, which may warrant some form of protection or preservation." Specifically, the Element indicates that these areas may support species which are rare, endangered, of limited distribution or otherwise sensitive. Additionally, these areas may include, but are not limited to: riparian areas, freshwater marshes, saltwater marshes, intertidal areas, other wetlands, and unique or unusually diverse vegetative communities. The vast majority of natural resources within the City are located in the Upper Newport Bay area, coastal bluffs, and within the beaches and harbors areas of the city. Eleven listed wildlife species and three listed plant species occur or may potentially occur within the City of Newport Beach. The proposed Project site is not identified as an ESA area in the Newport Beach General Plan.

The proposed Project site is currently developed with tennis court and associated uses, with vegetation on the site limited to areas adjacent to the courts and the embankment adjacent to Santa Barbara Drive. This vegetation consists primarily of ornamental landscape species. Areas surrounding the site are highly developed with urban uses. Vegetation associated with these uses consists of ornamental species. As previously discussed, the Newport Beach Country Club Golf Course is adjacent to the proposed Project site. Vegetation associated with this use consists primarily of maintained grass with shrubs and trees. A number of trees are present on-site, along the existing rights-of-way, as well as adjacent to the roadways.

Fauna associated with the proposed Project site would be consistent with urban environments. Species that may be anticipated in and around the site would likely consist of a variety of species commonly found in urban/developed areas.

*(Sources: Newport Beach General Plan, Aerial Photographs, and Site Survey, Central-Coastal Orange County NCCP)*

**A. Would the Project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?**

**Less than Significant Impact.** The proposed Project area is located within an urbanized area of Newport Beach. The proposed Project area is heavily disturbed and does not support rare, candidate, sensitive, or special status species. The proposed Project site is currently developed with eight tennis courts, an associated clubhouse and parking area and does not contain any valuable biological resources. Sensitive plant species, such as Diegan Coastal sage scrub, that are known to be present within the City do not occur on the site due prior development and disturbance of the area. The nearest area with Diegan Coastal sage scrub is located approximately 0.27 miles to the east. Therefore, no impacts to sensitive plant species are expected.

Because of the highly disturbed nature of the area and the lack of sensitive biological resources, no adverse impacts to sensitive biological resources are expected with the proposed Project.

(Sources: *Newport Beach General Plan and Site Survey*)

**B. Would the Project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?**

**No Impact.** The proposed Project site is currently developed and does not support riparian habitat. All on-site vegetation, including trees, shrubs and grasses, is due to prior landscaping of the site during previous development. There are no water channels or evidence of water flows in or near the proposed Project site. The USGS Laguna Beach Quadrangle does not show any blue line stream in or near the proposed Project area. Consequently, the proposed Project would not affect riparian habitats or other sensitive natural communities, as identified by the California Department of Fish and Game or the U.S. Fish and Wildlife Service.

*(Sources: Newport Beach General Plan, USGS Laguna Beach Quadrangle, and Site Survey)*

**C. Would the Project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?**

**No Impact.** The proposed Project site does not support wetland habitat, as defined by Section 404 of the Clean Water Act and does not contain any designated blue line streams. No channels or evidence of flow occur in or around the proposed Project site and no permits from the California Department of Fish and Game or the U.S. Army Corps of Engineers would be required. The nearest watercourse is Newport Bay, which is located approximately 0.6 miles to the west of the site as well as 1.3 miles to the south of the site. Therefore, no impacts to wetlands are expected to occur as a result of the proposed Project.

*(Sources: Newport Beach General Plan, Thomas Guide for Los Angeles and Orange Counties and Site Survey)*

**D. Would the Project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?**

**No Impact.** The proposed Project site is highly disturbed and vegetation on the site consists of non-native grasses and landscaped plants and trees. Due to the presence of urban development on all sides of the site, and its location in an urban setting, the proposed Project site is not expected to be used as a wildlife corridor for any migratory species. The proposed Project site is not designated as an established wildlife corridor and is not used as a nursery site by wildlife species. Species on-site include a variety of common bird, insect and reptile species commonly found in an urban setting, none of whose migration would be inhibited by development of the proposed Project. The proposed Project would not interfere with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.

*(Sources: Newport Beach General Plan, Project Plans, Site Survey, and Aerial Photograph)*

**E. Would the Project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?**

**No Impact**. Existing tree species present on the proposed Project site include palm trees (Mexican Fan Palms), street trees (Rusty leaf Fig) and mature Eucalyptus trees. The majority of the existing street and palm trees on-site would be relocated and replanted on the proposed Project site. However, due to current disease problems with Eucalyptus species, the existing trees would need to be evaluated and certified as healthy before replanting. None of these tree species are protected under a tree preservation policy or ordinance. Therefore, the proposed Project would not conflict with local policies or ordinances protecting trees categorized as Special, Landmark, Dedicated, or Neighborhood trees. Further, approximately 240 trees and additional landscaping would be planted on-site as part of the proposed Project. Thus, no conflict with the City's tree preservation ordinance and policies would occur with proposed Project implementation.

*(Sources: Newport Beach General Plan, Newport Beach City Code, Project Plans, and Site Survey)*

**F. Would the Project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?**

**No Impact.** The Coastal/Central Orange County NCCP approved in July 1996, includes areas previously protected through traditional land-use practices such as exactions, dedications, and purchases, as well as areas with at-risk habitat or species. The resulting preserve encompasses 37,380 acres containing 12 major habitats and 39 threatened or endangered plant and animal species. As discussed above the proposed site is not located within the NCCP and would, therefore, not conflict with the implementation of that plan.

A Draft Local Coastal Program (LCP) Land Use Plan for the City, in coordination with the California Coastal Commission, has been created and is in the process of being approved. Once adopted the LCP would indicate land use intensity and location, the applicable resource protection and development policies, and, where necessary, a listing of implementing actions. This plan does not identify the site for resource protection and no conflict with this future LCP is expected with the proposed Project. Thus, the proposed Project would have no impact on local or regional habitat conservation plans.

*(Sources: Newport Beach General Plan and Site Survey, Coastal/Central Orange County NCCP)*

## 3.5 CULTURAL RESOURCES

The City's first inhabitants were the Shoshone Indians who lived along the Pacific coast thousands of years ago. Decades later in the 1800's, land holdings of the Capistrano Mission were divided out as Spanish and Mexican land grants to war heroes and aristocratic families. American entrepreneurs by the names of Flint, Bixby, Irvine and McFadden later bought most of the land area known as Newport Beach's upper bay and lower bay.

Later, the City of Newport Beach was incorporated in 1906. By 1936, the present day contour of Newport Beach was established and community members dedicated the City's main harbor, named Newport Harbor. World War II brought about an influx of new military operations and personnel working and living in the area. The Santa Ana Freeway (I-5), built in the 1950's, brought even more people to the City. By the 1970's, rapid growth led to the building of shopping centers, hotels, restaurants, and many new homes.

The City of Newport Beach has not been extensively studied or excavated. However, many archaeological sites have been discovered throughout the City, more specifically, adjacent to the "Upper Bay" area. Because the City has not been widely surveyed, the majority of the known or unknown archaeological sites have already been destroyed due to development in the area. Additionally, known unique paleontological resources have been discovered along the bluffs on the east shore of the bay and the adjoining foothills and in the North Bluffs area.

There are three sites within the City currently listed on the Federal Register of Historic Places. Two sites within the City were previously designated as California Historical Landmarks; however, nothing more remains of these sites but a memorial plaque. None of the sites are located along the proposed Project area.

*(Sources: Site Survey, National Register of Historic Places, California State Historical Landmarks, Newport Beach City Code, and Conservation of Natural Resources Element of the Newport Beach General Plan)*

**A. Would the Project cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?**

**No Impact.** The proposed Project is not expected to create a direct impact on historical resources. The site is not identified as having historical resources nor any historic sites identified on the adjacent areas surrounding the site. The proposed Project would have no impacts on historical resources.

*(Sources: Site Survey and Conservation of Natural Resources Element of the Newport Beach General Plan)*

**B. Would the Project cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?**

**Less than Significant Impact With Mitigation.** The proposed Project is not expected to create a direct impact on archaeological resources. There is no evidence of archaeological resources on or adjacent to the proposed Project site. The area of archaeological interest identified in the City is adjacent to the "Upper Bay" area. The proposed Project site is not adjacent to this area and would not affect potential archaeological resources at that location. Additionally, as previously discussed the site and surrounding area has been developed. Any resources that may have been

present have likely been destroyed through this past development or have been collected. Based on past development at the site and areas known within the City to have a higher potential for archaeological resources, no impacts are expected to occur with development of the proposed Project.

The mitigation measure that would reduce potential impacts associated with unknown archaeological resources on-site is as follows:

> **Mitigation Measure 3.5.A:** Prior to the issuance of a grading permit, the applicant shall provide written evidence to the planning director that a qualified archaeologist has been retained to observe grading activities and conduct salvage excavation of archaeological resources as necessary. The archaeologist shall be present at the pre-grading conference, shall establish procedures for archaeological resources surveillance, and shall establish, in cooperation with the applicant, procedures for temporarily halting or redirecting work to permit the sampling, identification and evaluation of the artifacts as appropriate. If additional or unexpected archaeological features are discovered, the archaeologist shall report such findings to the applicant and to the Planning Department. If the archaeological resources are found to be significant, the archaeological observer shall determine appropriate actions, in cooperation with the applicant, for exploration and/or salvage. These actions, as well as final mitigation and disposition of the resources, shall be subject to the approval of the Planning Director.

*(Sources: Site Survey and Conservation of Natural Resources Element of the Newport Beach General Plan)*

**C. Would the Project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?**

**Less than Significant Impact With Mitigation.** Proposed Project actions are not expected to create a direct impact on paleontological resources. According to the Newport Beach General Plan, the proposed Project site is not located in an area known to have evidence of paleontological resources. The proposed Project site is flat and does not contain bluffs or other unique geologic features. Consequently, no impact to unique paleontological resources or unique geologic features is expected to occur with implementation of the proposed Project.

The mitigation measure that would reduce potential impacts associated with unknown paleontological resources on-site is as follows:

> **Mitigation Measure 3.5.B:** Prior to the issuance of a grading permit, the applicant shall provide written evidence to the planning director that a qualified paleontologist has been retained to observe grading activities and conduct salvage fossils as necessary. The paleontologist shall be present at the pre-grading conference, shall establish procedures for paleontological resource surveillance, and shall establish cooperation with the applicant, procedures for temporarily halting or redirecting work to permit the sampling, identification and evaluation of fossils. If major paleontological resources are discovered which require long term baiting or redirecting of grading, the paleontologist shall report such findings to the applicant and to the Planning Department. The paleontologist shall determine appropriate actions, in cooperation with the applicant, which ensure proper exploration and/or salvage. These actions, as well as final mitigation and disposition of the resources, shall be subject to the approval of the Planning Director.

*(Sources: Site Survey, USGS Laguna Beach Quadrangle, and Conservation of Natural Resources Element of the Newport Beach General Plan)*

**D. Would the Project disturb any human remains, including those interred outside of formal cemeteries?**

**Less than Significant Impact with Mitigation.** The proposed Project site and adjacent areas are highly disturbed due to previous urban developments. There is no evidence of human remains or a previous cemetery on or adjacent to the proposed Project site. Thus, development of the site as proposed by the Project would have no impact on human remains.

The mitigation measure that would reduce potential impacts associated with unknown human remains on-site is as follows:

> **Mitigation Measure 3.5.C:** In accordance with Public Resources Code 5097.94, if human remains are found, the Orange County coroner must be notified within 24 hours of the discovery. If the coroner determines that the remains are not recent, the coroner will notify the Native American Heritage Commissions in Sacramento to determine the most likely descendent for the area. The designated Native American representative then determines in consultation with the property owner the disposition of the human remains.

*(Sources: Site Survey and Conservation of Natural Resources Element of the Newport Beach General Plan)*

## 3.6 GEOLOGY AND SOILS

A *Preliminary Geotechnical Evaluation* for the proposed Project was prepared by Petra Geotechnical, Inc. in November 2003. The report provides an evaluation of the subsurface soil conditions in order to make geotechnical recommendations pertaining to the proposed Project. The following discussion summarizes the results of this report. The full report can be found in Appendix C at the end of this document.

### *Topography*

In general, Orange County is characterized by a variety of landforms including coastal shorelines, flatlands, hills, mountains, and canyons. The Pacific shorelines are characterized by broad sandy beaches, coastal bluffs, uplifted marine terraces, and tidal marshes. The nearest major ridgelines to the area occur in the Santa Ana Mountains, Lomas de Santiago, and the San Joaquin Hills. The entire County consists of a series of northwest-trending mountain ranges and valleys and similarly oriented earthquake faults. The proposed Project site is located in the midsection of the City of Newport Beach, 1.14 miles inland from Newport Bay. The proposed Project site has a relatively flat terrain with the highest on-site elevation at 170 feet above mean sea level (amsl) at the southeast corner of the site gently sloping westward to 150 feet amsl at the northwest corner of the site. Additionally, the Public Safety Element of the Newport Beach General Plan designates the site as having 25 percent slopes.

### *Soils*

The Preliminary Geotechnical Evaluation prepared for the proposed Project identifies four soil types on-site which include artificial fill, alluvial soils, marine terrace deposits and sedimentary bedrock of the Monterey Formation. The artificial fill, observed in the north-central portion of the site, was placed during the original grading and development of the Newport Marriott Tennis Complex. The fill material ranges in depth from approximately two to 16 feet and consists mainly of moist, loose to dense clayey sand and soft to stiff sandy clay. Naturally occurring alluvial soils

were observed in an approximately three foot layer beneath the artificial fill material. Alluvial soils on-site consist of moist, medium dense, moderately to highly compressible clayey sand. Marine terrace deposits found on-site vary in thickness from approximately six to 24 feet, and are generally composed of moist, dense clayey sand with moist dense poorly graded sand. The entire site is underlain by Sedimentary Bedrock of the Monterey Formation that exists beneath the fill, alluvial and marine terrace soils, except for in the extreme northwestern portion of the site, where it was encountered within two feet of the surface. This bedrock material consists of moist, hard, moderately weathered interbedded silty claystone, friable sandstone and cherty shale.

***Seismicity***

Southern California is a seismically active area that includes several types of fault systems including strike-slip, oblique, thrust, and blind thrust faults. The region is subject to seismic hazards of varying degrees, depending on the proximity and earthquake magnitude potential of nearby active faults, and the local geologic and topographic conditions. Seismic hazards include primary hazards from surface rupturing of rock and soil materials along active fault traces, and secondary hazards resulting from strong ground shaking. An active earthquake fault is defined as a fault that has had surface displacement within Holocene time (about the last 11,000 years).

The City of Newport Beach is located in a seismically active region and has experienced several large earthquakes within the last 100 years. There are no known active earthquake faults Projecting towards or extending across the proposed Project site. However, several regional faults are located in the vicinity of the proposed Project site. Fault systems that could produce ground shaking within the City include the San Andreas Fault, Newport-Inglewood Fault Zone, Elsinore Fault, Palos Verdes Fault, Norwalk Fault, Raymond Fault Zone, San Jacinto Fault and San Fernando Fault Zone. The Newport-Inglewood Fault is the only active fault within or in the immediate vicinity of Newport Beach; however, while not located within the city, the San Andreas Fault has an active seismic history and the potential to affect land uses within the City of Newport Beach as well as most cities in California.

The Newport-Inglewood Fault extends for approximately 46.5 miles from the southern edge of the Santa Monica Mountains southeast to just offshore from the City of Newport Beach. The Newport-Inglewood Fault is capable of producing a 7.0 or greater magnitude earthquake. Capable of producing a maximum credible earthquake of Magnitude 8.0 or greater, the San Andreas Fault is recognized as the longest and most active earthquake fault California. The San Andreas Fault is 625 miles long and runs from Cape Mendocino in Northern California to an area near the Mexican border.

The Newport Beach General Plan identifies potential seismic and soil hazard areas and areas susceptible to slope instability within the City. The proposed Project site is located in a potential seismic hazard area designated as "Category 2" (stronger shaking potential) which is considered a low to moderate risk area. Within Newport Beach, areas of slope instability include areas in the San Joaquin hills and in the bluff areas located throughout the City. The proposed Project site is not located within a bluff area and while a portion of the site contains slopes of 25 percent or greater, the proposed Project site is not designated as an area susceptible to liquefaction or slope failure.

*(Sources: USGS Laguna Beach Quadrangle, Newport Beach General Plan, Southern California Earthquake Data Center, Preliminary Geotechnical Evaluation, and Site Survey)*

**A. Would the Project expose people or structures to potential substantial adverse effect, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?**

**Less than Significant Impact.** There are no known local or regional active earthquake faults Projecting towards or extending across the proposed Project site. Additionally, the site is not located in a designated Alquist-Priolo Earthquake Fault Zone. The active and potentially active fault systems that may create significant earthquake hazards to the site include the Newport-Inglewood and San Andreas Fault zones. The Newport-Inglewood Fault is located approximately three miles southwest of the site and the San Andreas Fault occurs at a distance of more than 50 miles inland from the proposed Project site. Since no earthquake faults cross through or extend onto the site, development on the site would not be exposed to fault ground rupture hazards. Thus, the proposed Project would not expose people or structures to substantial hazards associated with fault rupture.

*(Sources: USGS Laguna Beach Quadrangle, Project Plans, and Newport Beach General Plan Safety Element)*

**B. Would the Project be subject to strong seismic groundshaking?**

**Less than Significant Impact.** There are no earthquake faults crossing through or extending onto the site. However, the proposed Project site is located in a seismically active region, and would be subject to groundshaking associated with earthquakes on nearby faults. Future development and infrastructure would be subject to groundshaking hazards, which could lead to damage of structures, roads, utility lines, and other structural hazards that could cause property damage and personal injuries. Residents, construction workers, and visitors on the site would be exposed to groundshaking hazards during an earthquake event. This hazard is no different than groundshaking hazards elsewhere in the City of Newport Beach or the region, but would present public safety hazards associated with structural damage, falling objects, utility line damage and resulting fires, and other property damage and public safety concerns.

Compliance with applicable standards in the Uniform Building Code for Seismic Zone 4, including those associated with the design and engineering of buildings to minimize the effects of seismic activity and pertinent building standards of the City of Newport Beach would reduce groundshaking hazards to acceptable levels. Some pavement cracking and utility line damage may occur at the proposed Project site as a result of nearby earthquakes, but these are not expected to create major threats to life and property since the proposed structures would be constructed to withstand seismic forces. Thus, the impact of strong seismic ground shaking would be less than significant.

*(Sources: USGS Laguna Beach Quadrangle, Greenbook, and Newport Beach General Plan Public Safety Element)*

**C. Would the Project be subject to seismic-related ground failure, including liquefaction?**

**Less than Significant Impact with Mitigation.** Liquefaction is characterized by saturated soils that behave like liquid during groundshaking, associated with perched water conditions and loose soils. The site is not located within a designated liquefaction or seismically-induced landslide hazard zone as determined by the California Geological Survey. Furthermore, the site is not located within a designated Earthquake Alquist-Priolo Fault Zone, and no surface faults cross through or extend toward the site. However, on-site soils include loose artificial fill and alluvial soil material which are susceptible to liquefaction hazards. These materials are considered unsuitable for support of new structures, including the proposed development. Due to the potential for liquefaction from these materials, this is considered a significant impact. The other soil types on-site (native terrace deposits and bedrock material) are more dense and are not susceptible to liquefaction hazards.

Design and construction of the proposed buildings would use applicable building codes, such as the Uniform Building Code to reduce potential impacts associated with expansive soils. However, mitigation measures would need to be incorporated to further reduce liquefaction hazards associated with loose surficial soils.

***Mitigation***

The following measures would reduce potential impacts associated with unsuitable on-site soils:

> **Mitigation Measure 3.6.A**: In areas where compacted fill will be required to establish design grades and in design cut areas where the depth of the proposed cut does not exceed the thickness of the existing unsuitable surficial soils, on-site surficial soils shall be excavated and recompacted to create stable soil conditions and correct poor slope performance.
>
> **Mitigation Measure 3.6.B**: During grading activities, where cut-to-fill transitions exist following remedial grading, they shall be eliminated by overexcavating the "cut" portions of the building pads and replacing the excavated material as properly compacted fill.
>
> The generally recommended depth of over excavation is one-half the maximum thickness of fill beneath the pad area, to a minimum depth of 3 feet and a maximum depth of 15 feet below proposed pad grade. The horizontal limits of overexcavation should extend to within approximately 1 to 2 feet of property lines and/or the tops and toes of slopes. The actual lots that will require overexcavation and overexcavation depths will have to be determined during grading by the proposed Project geotechnical consultant based on actual conditions encountered.
>
> **Mitigation Measure 3.6.C**: During remedial grading and construction of the proposed subterranean parking areas and associated improvements, temporary excavations with sidewalls varying up to approximately 13 feet in height may be necessary. Temporary excavation sidewalls will require sloping back at a ratio of approximately 12:1, horizontal to vertical. Should excessive caving be observed during grading, flatter inclinations may be required locally.
>
> Depending on required depths of cut and remedial grading, it may not be possible to construct temporary excavations along the east side of Buildings I and II (i.e., adjacent to Santa Barbara Drive) and along the southeast side of Building I (adjacent to the existing Marriott tower and appurtenant improvements) at a safe and stable slope ratio without encroaching into the adjacent street right-of-way and/or causing the loss of lateral support

of the existing hotel building, the associated buried utilities and other improvements. For this reason, temporary shoring may be required in these areas. Recommendations for design of temporary shoring will be provided in the comprehensive preliminary geotechnical report that will be prepared for the proposed Project.

*(Sources: California Geological Survey and Newport Beach General Plan Public Safety Element)*

**D. Would the Project be subject to landslides?**

**No Impact**. The proposed Project site has a relatively flat terrain with a gentle east-west slope. On-site elevations range from 170 feet amsl at the southeastern corner of the site and gently descend to approximately 150 feet amsl at the northwestern corner of the site.

The Newport Beach General Plan identifies areas with slope instability in the City, and while the site is designated as having 25 percent slopes, it is not within the area known to have unstable slope conditions. Additionally, proposed Project construction, grading and fill activities would decrease existing onsite slopes. Consequently, no impact associated with landslides would occur with the proposed Project.

*(Sources: USGS Laguna Beach Quadrangle, Site Survey, Project plans and Newport Beach General Plan Public Safety Element)*

**E. Would the Project result in substantial soil erosion or the loss of topsoil?**

**Less than Significant Impact.** The soils on the proposed Project site are somewhat subject to wind erosion and soil blowing impacts. Due to exposed soil during construction, grading and excavation activities for the proposed Project, these potential erosion and soil blowing impacts would be temporarily increased; however, would be confined to the excavation areas and would cease once the excavation/construction activities are completed. These impacts would be less than significant when standard dust and erosion control methods are implemented. Dust control measures outlined in Section 4.5, *Air Quality*, would reduce impacts associated with soil blowing and wind erosion. These measures include daily watering, stop work during high winds, use of soil binders, perimeter silt fences and sandbags, and prompt re-vegetation. With implementation of the control measures, impacts would be less than significant.

*(Sources: USGS Laguna Beach Quadrangle, Preliminary Geotechnical Evaluation, Newport Beach General Plan Public Safety Element and Newport Beach Municipal Code)*

**F. Would the Project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the Project, and potentially result in on or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?**

**Less than Significant Impact with Mitigation.** The proposed Project site is not known to be located on an unstable geologic unit. Subsidence has not occurred along the proposed Project site. There is no known incidence of landslide, lateral spreading, subsidence, liquefaction, or collapse on-site or near the site, however, existing soils on-site are considered unsuitable to support the proposed development. Implementation of mitigation measures 3.6.A through 3.6.C outlined above, would reduce potential impacts to less than significant levels. Thus, the proposed Project is not expected to be exposed to or create on or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse hazards.

*(Sources: USGS Laguna Beach Quadrangle, Preliminary Geotechnical Evaluation, Site Survey and Newport Beach General Plan Public Safety Element)*

**G. Would the Project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?**

**Less Than Significant Impact with Mitigation.** The Public Safety Element of the Newport Beach General Plan designates the proposed Project area as a "Category 2" expansive and collapsible soil hazard area. A Category 2 listing is defined as having a moderate to high possibility for expansive soil hazard. On-site soils include artificial fill and alluvial soil material, which are considered unsuitable for support of new structures, including the proposed development. Therefore, design and construction of the proposed buildings would use applicable building codes, such as the Uniform Building Code to reduce potential impacts associated with expansive soils. In addition, implementation of mitigation measures 3.6.A though 3.6.C outlined above, would reduce potential impacts associated with expansive soils to less than significant levels.

*(Sources: Site Survey, Preliminary Geotechnical Evaluation, Uniform Building Code, and Newport Beach General Plan Public Safety Element)*

**H. Would the Project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?**

**No Impact.** The proposed development would be connected to the public sewer system through sewer lines in the surrounding streets. Use of existing sewer lines would prevent a need for septic tanks or other types of alternative wastewater disposal systems that could be limited by soil characteristics at the proposed Project site. Since sewers would be available for sewage generated by the proposed Project, septic tanks would not be affected by soils at the proposed Project site. Thus, no impacts to soils which are unsuitable for on-site sewage disposal systems would occur as a result of the proposed Project.

*(Sources: Newport Beach General Plan Public Safety Element, Preliminary Geotechnical Evaluation, Site Survey and Project Plans)*

## 3.7 HAZARDS AND HAZARDOUS MATERIALS

A hazardous material is defined as any substance that may be hazardous to humans, animals, or plants, and may include pesticides, herbicides, toxic metals and chemicals, volatile chemicals, explosives, and even nuclear fuels or low-level radioactive wastes. The City of Newport Beach has a wide variety of industries and land uses, which generate, use, or handle hazardous materials. Most of these sites are associated with industrial and commercial uses located throughout the City.

The proposed Project site is currently developed with eight tennis courts, an associated clubhouse and parking area and no hazardous materials are visible on-site. Additionally, the proposed Project site is not listed in the Environmental Protection Agency (EPA) Envirofacts Database as a location for a hazardous material user or handler. Land uses in the surrounding area that are reported by EPA to handle hazardous materials include Pacific Mutual 0.27 miles northwest of the site at the intersection of Santa Cruz Drive and Newport Center Drive; Land Rover Newport Beach approximately 0.5 miles north of the site at 1540 Jamboree Road; Newport Center Cleaners located approximately 0.45 miles east of the site at 521 Newport Center Drive; Raymond E Berg MD and J Caillouette MD located approximately 0.54 miles southeast of the site at 400 Newport Center Drive; and Irvine Company Towers 1, 2 and 6 at 550, 610 and 620 Newport Center Drive, respectively. Additionally, there are two gas stations located at the intersection of Jamboree Road

and San Joaquin Hills Road, approximately 0.27 miles north of the site. Other hazardous material users are located further away from the site and are unlikely to affect the proposed Project site.

The proposed Project site is not located near an airport or airstrip, where hazards from aircraft operations are present. The nearest airport is John Wayne Airport located approximately 4.5 miles to the north of the site. The site is not located within a "potential fire hazard area" or in a "potential flood hazard area" as identified in the Newport Beach General Plan. Hazards associated with earthquakes and soil/erosion etc. are discussed above in Section 3.6, *Geology and Soils*. No other hazards are known to be present on-site or near the site.

*(Sources: Newport Beach General Plan, EPA Envirofacts Database and Site Survey)*

**A. Would the Project create a significant hazard to the public, or the environment through the routine transport, use, or disposal of hazardous materials?**

**Less than Significant Impact.** The proposed Project site is not listed as a hazardous materials site. Nearby hazardous material handlers are not expected to pose hazards to on-site land uses. Development of the proposed Project site with residential units, subterranean parking areas, open space, and a recreational area would not create a significant hazard to the residents, employees, and visitors of the site.

Hazardous material deliveries or transport to and from nearby hazardous materials handlers would utilize Newport Center Drive and other surrounding roadways that would be used by on-site vehicles. There is adequate capacity in the existing and planned street system to handle vehicle traffic volumes and no roadway hazards would be created which may lead to hazards associated with these hazardous material transports. Thus, no significant adverse impacts are expected from these nearby land uses.

Construction activities associated with the proposed Project would involve the use of hazardous materials such as oil, gas, tar, and cleaning solvents. These hazardous materials could pose risks to construction workers or lead to soil and groundwater contamination, if not properly stored or used. Compliance with existing hazardous material regulations would prevent undue hazards. This impact is expected to be less than significant, since hazardous material use and disposal would be made in accordance with existing regulations.

Residential development on the site could use household quantities of hazardous materials, such as cleaning solvents, paint, fertilizers, pesticides, etc. This usage would be limited and is not expected to create human health hazards or public safety hazards. Residents shall be informed of the two hazardous material disposal sites, Huntington Beach Regional Collection Center and Irvine Regional Collection Center, to encourage proper disposal of household hazardous wastes. This information is provided on the City's General Services Department website and through other public information programs. Impacts associated with residential use of hazardous materials would be less than significant.

*(Source: Site Survey, City of Newport Beach, Newport Beach General Plan and Project Plans)*

**B. Would the Project create a significant hazard to the public or the environment through reasonable foreseeable upset and accident conditions involving the release of hazardous materials into the environment?**

**Less than Significant Impact.** Activities associated with the proposed Project construction may involve some hazardous materials use, such as paints, thinners, cleaning solvents, oil, grease, etc. Transport of these hazardous materials to and from the site during construction activities would add hazards to the surrounding roadways and freeways. The public and environment could be subject to release of hazardous materials into the environment through accidents that could occur as hazardous materials are en route to or from the proposed Project site. Such accidents could include vehicle or rail accidents or mistakes made during handling of materials. Hazardous materials uses would be subject to federal, state, and local regulations regarding the use, handling, storage, transport, and disposal of hazardous materials to reduce the risk of such accidents. The regulations include established measures for proper storage, use, and disposal, and a risk management and prevention plan for accidents. Truck oil change, equipment maintenance or other activities that may release hazardous materials during construction would be conducted in accordance with existing regulations, such as the National Pollutant Discharge Elimination System (NPDES), to prevent soil and water contamination and accidents. Compliance with relevant regulations would prevent spills and accident conditions that could release hazardous materials into the environment. Further, traffic safety signs and controls would be provided to create safe driving conditions and prevent vehicle accidents. Thus, hazardous material accidents are expected to be less than significant.

*(Source: Site Survey and Project Plans)*

**C. Would the Project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?**

**Less than Significant Impact.** The proposed Project would not routinely utilize or generate hazardous materials or wastes. Construction activities associated with development of proposed Project would involve the short-term use of hazardous materials for construction. The schools located closest to the proposed Project site are shown in Table 3-6, *Schools in the Project Area.*

**TABLE 3-6**
**SCHOOLS IN THE PROJECT AREA**

| School Name | Address | Distance from Project Site |
|---|---|---|
| Corona Del Mar High School | 2101 Eastbluff Drive | 1.2 miles north |
| Lincoln Elementary School | 3101 Pacific View Lane | 1.5 miles east |
| Harbor View Elementary School | 900 Goldenrod Avenue | 1.5 miles southeast |

Source: David Evans & Associates, Inc.

The three school sites, listed in the table above, are at a far enough distance away from the site so that potential emissions from vehicle and stationary equipment during construction activities would not reach school students and faculty at those schools. Construction of the proposed Project would comply with existing hazardous material regulations to prevent undue hazards to nearby school users. Less than significant impacts on the adjacent schools are expected with the proposed Project.

*(Sources: Newport-Mesa Unified School District, Site Survey, and Project Plans)*

**D. Would the Project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?**

**No Impact.** The U.S. EPA Envirofacts Toxics Release Inventory (TRI) show that the proposed Project site is not on the list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. Therefore, implementation of the proposed Project would not result in a risk to the public or the environment. As discussed above, the nearest hazardous material users are the two gas stations at the intersection of Jamboree Road and San Joaquin Hills Road, Pacific Mutual, Land Rover Newport Beach, Newport Center Cleaners, Raymond E. Berg MD. and J. Caillouette MD., and Irvine Company Towers 1, 2, and 6. No impacts on these hazardous material users would occur with the proposed Project.

*(Sources: EPA Envirofacts Database, and Site Survey)*

**E. For a Project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project result in a safety hazard for people residing or working in the Project area?**

**No Impact.** The proposed Project site is not located near a public airport or airstrip, where hazards from aircraft operations are present. The nearest airports are the John Wayne Airport (approximately 4.5 miles to the north) and the Los Alamitos Army Airfield in the City of Los Alamitos (approximately 16 miles to the northwest). The proposed Project would not be exposed to airport hazards; would not affect aircraft operations; and would not create an airport safety hazard for people utilizing the roadway or residing and working in the proposed Project area. No impact is expected.

*(Sources: Thomas Guide for Los Angeles and Orange Counties, Site Survey, and Newport Beach General Plan)*

**F. For a Project within the vicinity of a private airstrip, would the Project result in a safety hazard for people residing or working in the Project area?**

**No Impact.** There are no private airstrips located immediately adjacent to or near the proposed Project site. Therefore, the proposed Project would not expose people in the area to air traffic hazards, during or after construction.

*(Sources: Project Plans, Thomas Guide for Los Angeles and Orange Counties and Site Survey)*

**G. Would the Project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?**

**Less than Significant Impact.** The site is not used for emergency evacuation. According to the Newport Beach General Plan, Santa Barbara Drive is not designated as a major evacuation route; however, two major roadways near the site, Jamboree Road and MacArthur Boulevard, are. Development of the site would not affect evacuation along these surrounding roadways. Therefore, the proposed Project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

Potential traffic congestion during construction along Santa Barbara Drive may impede emergency response, although this impact would be short-term and would not be significant. Access to all areas

located adjacent to the site would be available at all times, so as not to preclude fire protection and emergency services. Access to individual lots would be maintained throughout the construction period and impacts to emergency evacuation are expected to be less than significant.

*(Sources: Newport Beach General Plan, Project Plans, and Site Survey)*

**H. Would the Project expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?**

**No Impact.** The proposed Project site is currently developed with eight tennis courts, an associated clubhouse and parking area. The proposed development of the site includes construction of three residential buildings, subterranean parking areas, and open space and recreation areas. Proposed landscaping would use ornamental and specimen plants, which would be regularly irrigated. Additionally, according to the Newport Beach General Plan, the proposed Project site is not located in an area designated as a "Potential Fire Hazard Area." Construction of the proposed Project would not create brush fire hazards. Therefore, no risk of loss, injury, or death involving wildland fires is expected from the proposed Project.

*(Sources: Site Survey, Newport Beach General Plan, and Project Plans)*

## 3.8 HYDROLOGY AND WATER QUALITY

The majority of the County of Orange as well as the entire City of Newport Beach are located in the Santa Ana River Basin. The Santa Ana River system provides the primary drainage functions for the Santa Ana River Basin and is managed by the Santa Ana Regional Water Quality Control Board (RWQCB). The basin includes the upper and lower Santa Ana River watersheds, the San Jacinto River watershed, and several other small drainage areas. More specifically, the proposed Project is located within Reach 1 of the Lower Santa Ana River watershed. Reach 1 extends from what is referred to as the Tidal Basin on the coast to 17$^{th}$ Street in the City of Santa Ana. There are no major surface water resources in the vicinity of the proposed Project.

According to the Santa Ana River Basin Plan, groundwater resources in the vicinity of the proposed Project include Irvine Forebay I and II and the Irvine Pressure sub-basins. Based on the information contained in the geotechnical report prepared for the site, moderate seepage was encountered at approximately 14 feet below the surface in one of the ten borings taken at the proposed Project site, no groundwater was encountered in any of the other borings done at the site.

According to the Newport Beach General Plan, the proposed Project area is located outside of designated flood hazard zones. In addition, according to FEMA FIRM for Orange County, the nearest 100-year flood hazard area is located approximately 500 feet northwest of the proposed Project area adjacent to Newport Upper Bay. The proposed Project area is located in "Zone X" which indicates that it is within an area determined to be outside the 0.2% annual change floodplain. The entire area around Newport bay is considered to be within the 100-year flood plain.

*(Sources: Newport Beach General Plan, and USGS Laguna Beach Quadrangle, Santa Ana River Basin Plan)*

**A. Would the Project violate any water quality standards or waste discharge requirements?**

**Less than Significant Impact .** The proposed Project would not directly generate any stormwater or wastewater. However, construction, excavation and construction activities have the potential to generate pollutants that may enter the stormwater runoff. These include loose soils and organic matter, demolition wastes and construction materials, construction equipment fluids, and cleaning and maintenance solvents. This would degrade stormwater quality at downstream locations, including Newport Bay.

Development of the site would have to comply with the National Pollutant Discharge Elimination System (NPDES) General Permit for Construction Activity, which requires the developer to file a Notice of Intent with the Regional Water Quality Control Board (RWQCB) and to prepare and implement a Stormwater Pollution Prevention Plan (SWPPP) for construction activities on one acre or more. The SWPPP would identify erosion, sedimentation and stormwater pollution control measures that would be implemented during construction activities, and seek to minimize the discharge of pollutants into the stormwater and existing drainage channels to the maximum extent practicable. Such best management practices BMPs include use of sandbags, gravel bags, check dams, silt fences, soil binders, erosion control blankets, fiber rolls, riprap pads, and practices that prevent debris and pollutants (loose soils, hazardous materials, oil, grease and solvents, other construction materials) from entering the storm drain system. Additionally, the City of Newport Beach requires that a Water Quality Management Plan (WQMP) be prepared for the proposed Project. The WQMP identifies specific design elements and BMPs that would be utilized by the proposed Project to ensure that stormwater runoff is minimized to the maximum extent possible.

Through implementation of BMPs and compliance with NDPES regulations, stormwater pollution would be reduced and adverse impacts to stormwater quality would be prevented. Thus, the proposed Project would not violate any water quality standards or waste discharge requirements.

*(Sources: Site Survey, Newport Beach General Plan, and Project Plans)*

**B. Would the Project substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?**

**No Impact.** The proposed residential development would lead to the demand for water, however, the Orange County Water District and the Municipal Water District of Orange County have indicated that there are adequate water resources to serve existing and future demands for the City, which includes the proposed development on the proposed Project site. Water service and demand is discussed in Section 3.16, *Utilities*.

There are no existing groundwater wells on the site and no wells are proposed as part of the proposed Project. Excavation and grading activities are not expected to occur at depths that would affect groundwater resources. While preliminary borings did result in one site encountering moderate seepage at approximately 14 feet below ground level, no groundwater aquifers were encountered and no other borings resulted in any seepage. Seepage at the proposed Project site would not affect groundwater aquifers, however, could result in liquefaction at the proposed Project site. Potential impacts resulting from liquefaction and saturated soils are discussed in

Section 3.6, Geology and Soils above. Mitigation measures included to address this impact have been included and would reduce impacts to less than significant levels.

The proposed development would not reduce groundwater recharge in the proposed Project area. The majority of the site is currently developed with impermeable surfaces in the form of tennis courts, an associated clubhouse and parking area. However, the entire site would not be paved over after the site is developed. The proposed Project includes approximately 79,140 square feet of open space on-site and landscaped areas would surround each residential building. Therefore, the proposed Project would increase the amount of permeable surfaces on-site over that which currently exists. The proposed development is not expected to significantly effect groundwater recharge in the area.

*(Sources: Site Survey, Project Plans, and Newport Beach General Plan, Preliminary Geotechnical Evaluation)*

**C. Would the Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?**

**Less than Significant Impact.** The proposed residential development would not alter the course of a stream or river, as no streams or rivers exist on the proposed Project site. Runoff from the site would be directed into curbs and gutters and into the storm drain system along Santa Barbara Drive. The proposed Project would not alter the existing drainage pattern of the site or area in a manner which would result in substantial erosion or siltation on- or off-site. Impacts would be less than significant.

*(Sources: USGS Laguna Beach Quadrangle, Site Survey, and Newport Beach General Plan)*

**D. Would the Project substantially alter the existing drainage pattern of the site, or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?**

**Less than Significant Impact.** The proposed Project would change the existing hydrology of the proposed Project site through the addition of impervious surface (buildings, roads, driveways, parking areas, pathways, etc.) and the addition of open space and recreational areas. However, the majority of the site is currently covered by impermeable surfaces due to previous site development. Similar to the existing conditions, the proposed Project would result in the site being covered with permeable and impermeable surfaces, and therefore is not expected to significantly alter the existing drainage patterns of the site.

Runoff from the site would continue to be conveyed along curbs and gutters, and directed into the existing storm drain in Santa Barbara Drive and to the adjacent golf course. In addition, drainage from the open space/landscaped areas would be collected in area drains proposed on-site. Changes in drainage patterns would be internal to the site and would not affect the regional hydrology, or the drainage flows in the surrounding area. The runoff from the site is not expected to create flood hazards. No changes to flows within rivers, streams, or channels are expected.

In addition, the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) for the City of Newport Beach and the proposed Project area show that the site is not

currently in an area which is subject to flooding or flood hazards. No adverse impacts associated with flooding on- or off- site are expected.

*(Sources: Site Survey, FEMA, Newport Beach General Plan and Project Plans)*

**E. Would the Project create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?**

**Less than Significant Impact.** The proposed residential development would have the potential for generating stormwater, which may contain pollutants that could impact the groundwater or surface water resources in the area. Pollutant sources could include runoff over parking areas, landscaped irrigation overflows, waste and debris in the runoff path, vehicle washdowns, and other activities that could potentially result in pollutants affecting stormwater quality.

Construction activities associated with development on the site could lead to pollutants entering the storm drainage system. These may include demolition and construction debris, construction equipment fuels, oil and grease, construction materials and solvents, loose soils, organic waste materials, etc. Conveyance of these materials into the storm drain system would lead to pollutants which could degrade stormwater quality.

The proposed Project would comply with the NPDES General Permit for Construction Activity, which requires projects on one acre or more to notify the RWQCB and implement a Stormwater Pollution Prevention Plan (SWPPP) for construction activities. Development would also comply with the NPDES regarding the implementation of on-site stormwater pollution mitigation and treatment and other best management practices for urban stormwater pollutant prevention.

Street sweeping of public streets is provided to remove and prevent debris from entering the storm drain system. The City requires catch basin stenciling to discourage waste disposal into the storm drain system. Continued implementation of these citywide programs would further reduce potential stormwater pollution from development. Implementation of these existing programs and compliance with NPDES mandates would prevent significant adverse impacts relating to stormwater runoff quality from occurring with development of the site.

*(Sources: Site Survey, Newport Beach Municipal Code, and Newport Beach General Plan)*

**F. Would the Project otherwise substantially degrade water quality?**

**Less than Significant Impact.** The proposed Project is not expected to adversely change the existing hydrology of the site or lead to significant adverse impacts on groundwater or surface water resources. However, development of the site would result in the construction of structures and impervious pavements that could alter runoff volumes and increase the potential for stormwater pollution.

The proposed Project would comply with the NPDES General Permit for Construction Activity, which requires projects on one acre or more to notify the RWQCB and implement a Stormwater Pollution Prevention Plan (SWPPP) for construction activities. Development would also comply with the NPDES regarding the implementation of post-construction structural or operational stormwater pollution mitigation and treatment and other best management practices to reduce and prevent urban stormwater pollution.

The proposed Project's potential to impact water quality through runoff is discussed in detail in 3.8.E, and the proposed Project is not expected to substantially degrade water quality.

*(Sources: Site Survey, Newport Beach General Plan, and Project Plans)*

**G. Would the Project place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary of a Flood Insurance Rate Map or other flood hazard delineation map?**

**No Impact.** According to the FEMA's FIRM the proposed Project site is not within a 100-year flood hazard area or in an area which is subject to flooding or flood hazards. Therefore, the proposed Project would not place housing within a 100-year flood hazard as mapped on a federal Flood Hazard Boundary of a Flood Insurance Rate Map or other flood hazard delineation map. No adverse impacts associated with flooding are expected.

*(Sources: Site Survey, FEMA, Project Plans and Newport Beach General Plan Safety Element)*

**H. Would the Project place within a 100-year flood hazard area structures, which would impede or redirect flood flows?**

**No Impact.** The site is not located within the 100-year or 500-year floodplain, as defined in FEMA's FIRM. Thus, the proposed Project would not place structures within a 100-year or 500-year floodplain. The proposed Project development would not affect flows within 100-year flood hazard areas. No impacts are expected.

*(Sources: Site Survey, FEMA, Project Plans and Newport Beach General Plan Safety Element)*

**I. Would the Project expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?**

**No Impact.** The proposed Project area is not located downstream of a dam or levee, which may lead to inundation hazards. Therefore, residents and visitors of the proposed Project site would not be at risk of significant loss, injury, or death involving flooding, as a result of the failure of a levee or dam or as a result of the proposed Project.

*(Sources: Site Survey, USGS Laguna Beach Quadrangle, Newport Beach General Plan Safety Element, and Project Plans)*

**J. Would the Project expose people or structures to a significant risk of loss, injury or death involving inundation by seiche, tsunami, or mudflow?**

**Less than Significant Impact.** Due to its close proximity to the Pacific Ocean, the proposed Project site may be subject to inundation, tsunami and/or mudflow hazards associated with seismic activity effects to large water bodies. However, this hazard is no different than areas elsewhere in the City of Newport Beach or other developments located within coastal areas, but would present public safety concerns and potential property damage.

Additionally, due to the low frequency of these events, the proposed Project would not expose the residents to increased hazards associated with inundation, tsunami or mudflow above what currently exists. Therefore, no significant impacts would occur with proposed Project implementation.

*(Sources: Site Survey, Thomas Guide for Los Angeles and Orange Counties, USGS Laguna Beach Quadrangle, and Newport Beach General Plan Safety Element.*

**K. Would the Project result in significant alteration of receiving water quality during or following construction?**

**Less Than Significant Impact.** As discussed in item 3.8 E above, the proposed Project has the potential for generating polluted stormwater. However, as discussed above, compliance with the NPDES General Permit for Construction Activity, implementation of a SWPPP for construction activities, and compliance with NPDES requirements for on-site stormwater pollution mitigation and treatment would ensure that less than significant impacts would result from the proposed Project.

**L. Would the Project result in a potential for discharge of stormwater pollutants from areas of material storage, vehicle or equipment fueling, vehicle or equipment maintenance (including washing), waste handling, hazardous materials handling or storage, delivery areas, loading docks or other outdoor work areas?**

**No Impact.** The proposed Project would not result in the use, storage or handling of any hazardous materials or vehicle fueling or maintenance areas. No delivery areas would be necessary with the development of the proposed Project. As such, no impact would result from the operation of the proposed Project.

As discussed above, construction activities could result in the potential for stormwater pollutants. However, compliance with construction related permits (NPDES) and required prevention plans (SWPPP) would ensure that no significant impacts would result.

**M. Would the Project result in the potential for discharge of stormwater to affect the beneficial uses of the receiving waters?**

**Less Than Significant Impact.** Compliance with the NPDES General Permit for Construction activities, preparation of a SWPPP as well as compliance with NPDES requirements for on-site stormwater pollution mitigation and treatment would ensure that stormwater discharge created by the proposed Project would not affect the beneficial uses of any receiving bodies of water and that less than significant impacts would result from development of the proposed Project.

**N. Create the potential for significant changes in the flow velocity or volume of stormwater runoff to cause environmental harm?**

**Less Than Significant Impact.** As discussed in item 3.8 D above, the proposed Project is not anticipated to significantly alter the existing drainage patterns of the site (including velocity and volume of stormwater runoff). The existing site is currently developed with tennis courts, rendering the majority of the site covered with impervious surfaces. The proposed Project would similarly cover the majority of the site with impervious surfaces.

Runoff from the site would continue to be conveyed along curbs and gutters, and directed into the existing storm drain in Santa Barbara Drive and to the adjacent golf course. In addition, drainage from the open space/landscaped areas would be collected in area drains proposed on-site. Changes in drainage patterns would be internal to the site and would not affect the regional hydrology, or the drainage flows in the surrounding area. No significant changes to flows or velocity are anticipated with proposed Project development and, therefore, no significant impacts would result.

**O. Create significant increases in erosion of the Project site or surrounding areas?**

**Less Than Significant Impact.** As discussed in item 3.8 C above, the proposed Project is not anticipated to significantly alter the drainage pattern of the site and would therefore, not create a significant increase in the erosion rates of the site or surrounding area. Runoff from the site would be directed into curbs and gutters and into the storm drain system along Santa Barbara Drive. The proposed Project would not alter the existing drainage pattern of the site or area in a manner which would result in substantial erosion or siltation on- or off-site. Impacts would be less than significant.

## 3.9 LAND USE AND PLANNING

Residential development within the City of Newport Beach includes lower density single-family residential areas, as well as more intensely developed beachfront residential areas. Commercial areas within the City range from master planned employment centers to marine industrial and visitor commercial areas.

The General Plan identifies groupings of small communities or "villages" within Newport Beach. Additionally, the Land Use Plan is divided into "Statistical Areas" (Statistical Division A through N) which specify the permitted uses and building intensity for each division. Many of the newer developments within the City are based on a "planned community" concept.

The proposed Project site is within the "Newport Center (Statistical Area L1)" planning area. This planning area is bounded by East Coast Highway, Jamboree Road, San Joaquin Hills Road and MacArthur Boulevard. This area includes Administrative, Professional, Financial Commercial (APF), Retail and Service Commercial (RSC), Recreational and Environmental Open Space (REOS), Multi-Family Residential (MFR) and Government, Educational and Institutional Facilities (GEIF) land use designations. Additionally, as shown in Figure 3-2, *Newport Center Statistical Area Map*, the proposed Project site is located within the Newport Center – Block 900: Hotel Plaza (Statistical Area L1). This area is designated for APF and MFR land uses. The allowed APF development is 611 hotel rooms with ancillary hotel support facilities and 19,630 square feet of office development, and the MFR area is allocated 67 dwelling units.

The proposed Project site is currently developed with eight tennis courts, an associated clubhouse and parking area. Existing land uses on the site and near the site include residential, commercial, institutional/open space. As shown in Figure 3-3, *Land Use Policy Map*, the proposed Project site is designated as Administrative, Professional, Financial Commercial (APF) in the Newport Beach General Plan. According to the City of Newport Beach Zoning Code, the zoning designation for the proposed Project site also APF.

Multi-family residences within *The Colony* development are present at the intersection of Santa Barbara Drive and San Clemente Drive northeast of the site. The additional MFR area is located south of the Newport Beach Marriott Hotel. The area designated as APF located east of the site consists of the Pacific Financial Plaza and associated parking facilities. The RSC area located further to the east across Newport Center Drive contains multiple retail areas as well as restaurants and above ground parking facilities within Fashion Island, a regional mall.

The City of Newport Beach has an existing Local Coastal Program, Land Use Plan (LCP/LUP) for its coastal zone that was certified by the California Coastal Commission on January 9, 1990, and is in the process of updating the current LCP/LUP. Within the existing LCP/LUP, the subject property has

a zoning designation of APF and the proposed LCP would designate the site as Commercial/Visitor Serving (CV) to better reflect the existing land use (Hotel). The proposed Project would require an amendment to the existing LCP/LUP to change the current land use designation from APF to MFR or an amendment to the proposed LCP to change the proposed land use designation from CV to MFR, should that plan be certified by the California Coastal Commission.

*(Sources: Newport Beach General Plan, Aerial Photograph, Newport Beach LCP, Newport Beach Draft LCP, and Site Survey)*

**A. Would the Project physically divide an established community?**

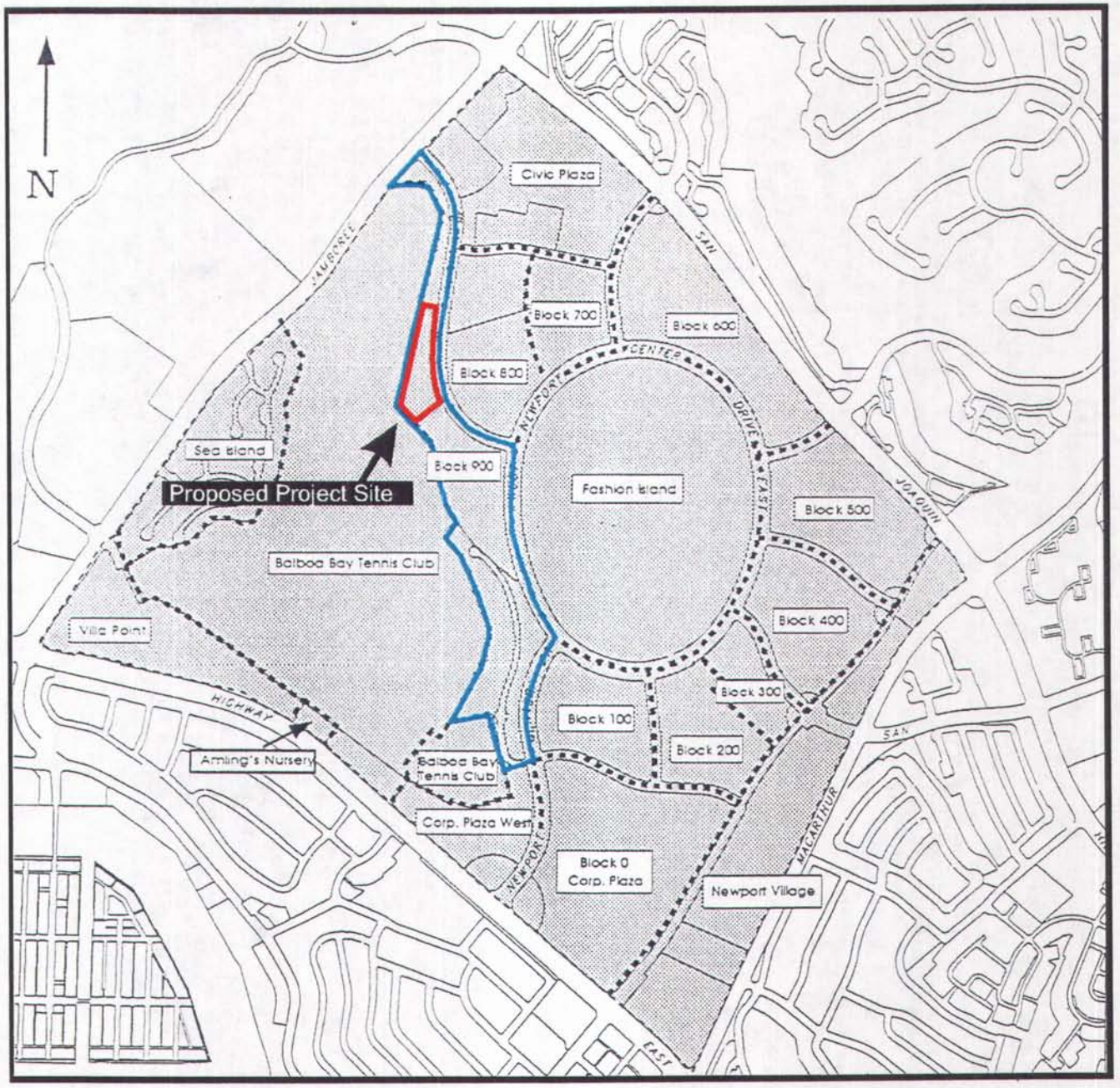
**No Impact.** The proposed Project site encompasses approximately 4.25 acres located along Santa Barbara Drive currently developed as tennis courts. The proposed Project involves development of a multi-family residential area with open space and recreational areas. Currently there is a multi-family residential development located northeast of the site across Santa Barbara Drive. The proposed Project would not extend into or through this development. Additionally, the other surrounding land uses, including commercial uses, would not be affected or divided by the proposed residential development. The proposed Project would not divide an established community.

*(Sources: Newport Beach General Plan, Project Plans, and Site Survey)*

**B. Would the Project conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the Project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?**

**Less than Significant Impact.** The proposed Project would involve a general plan amendment, LCP and zone change to alter the land use allowed on the proposed Project site. The current General Plan land use designation on the proposed Project site is Administrative, Professional, Financial (APF). The general plan amendment would change it to Multi-Family Residential (MFR). According to the Land Use Element of the General Plan, this land use category has been applied where multiple dwelling units are allowed on a single subdivided lot. Smaller condominiums and other individually owned attached housing projects are also given this designation. Further, this category allows for either single ownership or condominium development.

The change in land use designation from APF to MFR to accommodate the proposed development would not be in conflict with the Newport Beach General Plan because the site would be developed in accordance with the Development Policies of the Land Use Element of the General Plan. The proposed Project would be consistent with Policy A, as it encourages a diversity of land uses so that schools, employment, recreation areas, public facilities, churches, and neighborhood shopping centers are in close proximity to each resident of the community. Additionally, the proposed Project would be consistent with Policy D as it doesn't block public views and with Policy I as it is not located within a flood hazard area. The proposed residential development within the Newport Center area serves to implement these policies.

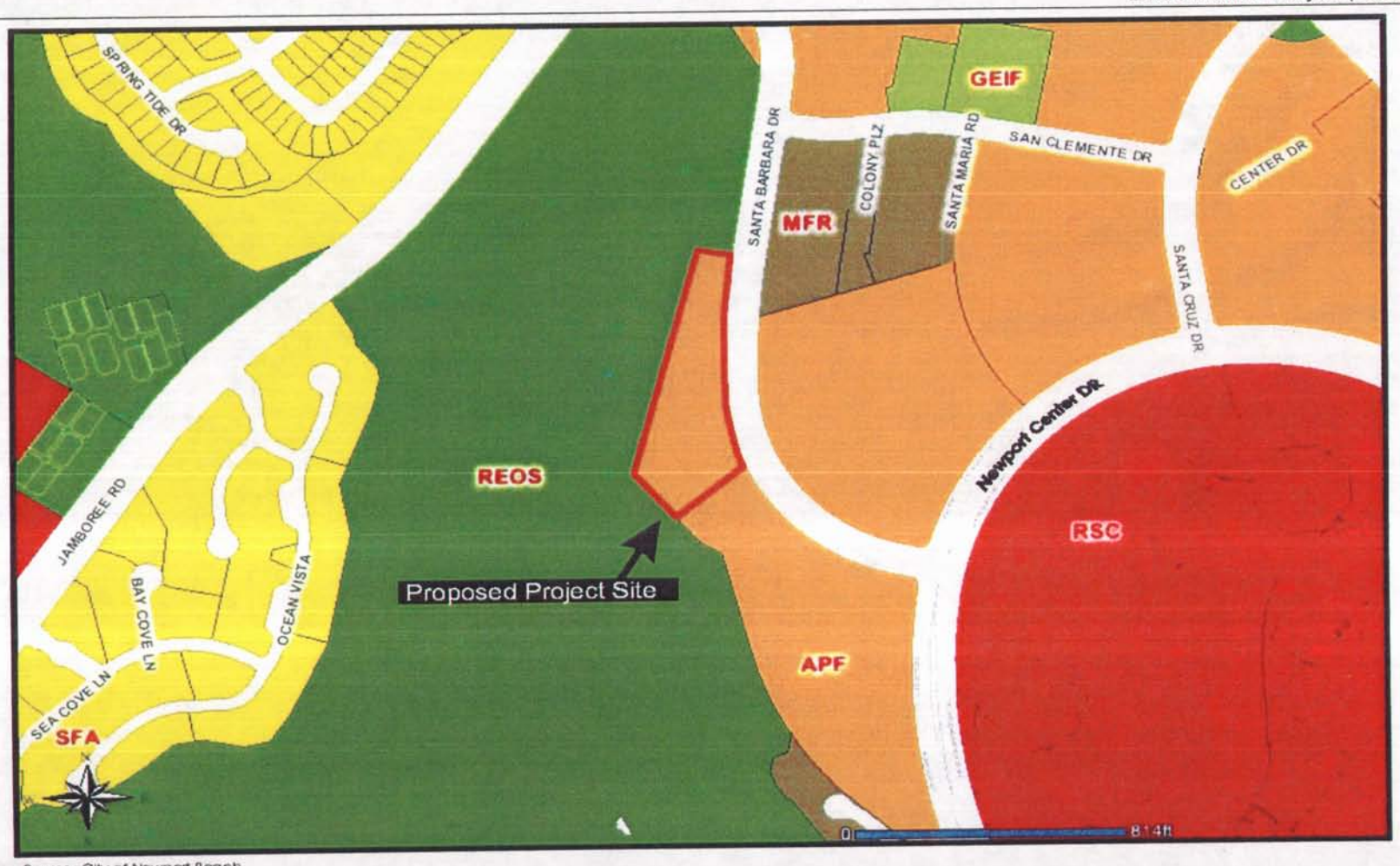



Source: City of Newport Beach

Project Site
Block 900

# Santa Barbara Condominiums Project
# Newport Center Statistical Area Map

Figure 3-2




Source: City of Newport Beach

# Santa Barbara Condominiums Project
# Land Use Policy Map

Figure 3-3

Additionally, the proposed Project would be compatible with other nearby residential land uses. A less than significant impact to the Newport Beach General Plan is anticipated with development of the proposed Project.

The proposed Project would also require a zone change from APF to MFR in order to be consistent with the proposed General Plan designation. However, as discussed above, the proposed Project would help promote Policy A of the City's General Plan and would be compatible with the residential zones to the south and northeast of the site. A less than significant impact to the zoning code is anticipated with development of the proposed Project.

The proposed Project site is within the designated coastal zone, which requires a Coastal Development Permit (CDP). As previously discussed, within the existing LCP/LUP, the subject property has a zoning designation of APF and the proposed LCP would designate the site as Commercial/Visitor Serving (CV). The proposed Project would require an amendment to the existing LCP/LUP to change the current land use designation from APF to MFR and an amendment to the proposed LCP to change the proposed land use designation from CV to MFR. This change in land use designation would lead to the loss of 4.25-acres of land available for office or visitor serving commercial uses . With regard to CV and uses, the Block 900 - Hotel Plaza in the General Plan Land Use Element is allocated the development of 611 hotel rooms. The existing Marriott Hotel currently has 532 rooms (79 rooms below the total 611 room allocation). The hotel could conceivably construct the remaining 79 rooms in the future on the adjacent hotel site, or potentially transfer the entitlement of the remaining 79 rooms (with City approval) within the Newport Center area. Thus, the loss of CV acreage would not eliminate the ability to develop additional visitor serving commercial uses.

Similarly, the change in land use would result in a 4.25-acre reduction in land available to be potentially used for office uses consistent with the APF designation. Within Statistical Area L-1 (Newport Center), there is approximately 200 acres designated APF and the 2% reduction proposed by the Project is not a significant reduction, and therefore, a less than significant impact would result.

As the proposed Project would not affect environmentally sensitive habitat areas, shore-line access given the location of the site, water or marine resources, or coastal visitor-serving facilities, it is not anticipated that the requested zone change to the existing LCP/LUP or the proposed LCP would create significant impacts to this land use plan. Additionally, the proposed Project would be compatible with the residential zones to the south and northeast of the site.

Setback requirements for the proposed Project area are governed by the City's Municipal Code. The requirements for the site are outlined in Table 3-7, *Project Setback Requirements*, below.

**TABLE 3-7**
**PROJECT SETBACK REQUIREMENTS**

| Newport Beach Municipal Code | Front Setback (ft.) | Side Setback (ft.) | Rear Setback (ft.) |
|---|---|---|---|
| Multi-Family Residential | 20 | 4 | 10 |
| **Santa Barbara Condos** | | | |
| Residential Development | 15 | 5 | 10 |

Source: City of Newport Beach Municipal Code and Santa Barbara Condominiums Site Plan

Based on these requirements, the proposed Project would not meet the required setback for front yards. The proposed Project would require a Modification Permit to deviate from this setback requirement. The majority of the proposed Project would exceed the front setback requirement;

however, several portions of the buildings are approximately 17 feet from property lines. Those portions encroaching within the 20-foot setback requirements include either architectural features or balconies/patios that are not habitable/living spaces. The reduced front setbacks, therefore, would not result in significant environmental impacts.

As previously stated, the Block 900 – Hotel Plaza area is permitted to have 67 residential units. The proposed Project would add an additional 79 units to this area. The proposed MFR designation allows up to 36 dwelling units per acre. Based on the acreage of the proposed Project site (4.25 acres) the maximum allowed number of dwelling units would be 153. However, the Project is proposing a total of 79 dwelling units or 15.3 dwelling units per acre, well below the maximum allowable density under the MFR land use designation. Therefore no significant impact would result from the proposed Project. As the proposed Project site is located in Statistical Area L1, the number of residential units would be increased from 67 to 146 (67 + 79).

*(Sources: Newport Beach General Plan, Project Plans, and Newport Beach City Zoning Code)*

**C. Would the Project conflict with any applicable habitat conservation plan or natural community conservation plan?**

**No Impact.** As discussed in Section 3.4, Biological Resources above, the County of Orange has prepared the Central-Coastal Orange County NCCP. However, the proposed Project site is not included within the boundaries of this plan and would, therefore, not conflict with this plan. No impacts to a habitat conservation plan of natural community conservation plan would occur.

*(Sources: Site Survey, and Newport Beach General Plan, Central-Coastal Orange County NCCP)*

## 3.10 MINERAL RESOURCES

According to the Conservation of Natural Resources Element of the City of Newport General Plan, oil deposits represent the only significant extractable mineral resources in the Newport Beach planning area. Oil companies are currently operating oil extraction wells in the unincorporated "County Island", located in the West Newport area. Since the State Shell-Cunningham Act of 1955 prohibits oil extraction on all State tide and submerged lands from the northerly City limits of Newport Beach to the Mexican Border, the County Island is the only location in the area where oil extraction activities are allowed. There are no mining activities within the City or on the proposed Project site. No oil fields or oil wells are present in or near the proposed Project area and the proposed Project site and adjacent areas are not subject to oil, gas, or mining operations.

*(Sources: Newport Beach General Plan, USGS Laguna Beach Quadrangle and Site Survey)*

**A. Would the Project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?**

**No Impact.** The proposed Project site is not located in an area where known mineral resources are present. Future development on the site would not affect regionally significant mineral resources since there are no known resources on the site. The proposed Project site is also not identified in the Newport Beach General Plan as a mineral resource area.

*(Sources: Newport Beach General Plan and USGS Laguna Beach Quadrangle)*

**B. Would the Project result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?**

**No Impact.** The proposed Project site is not identified in the Newport Beach General Plan as a significant mineral resource area. There are no locally important mineral resources on the site, therefore there would not be a loss of availability of mineral resources in the area. The sand, gravel, and other construction materials that would be needed for construction of the proposed Project are not expected to represent a significant amount of local resources, when compared to available resources and the cumulative demand for these resources by construction activities in the region. Thus, the demand for sand and gravel resources, as needed for construction, would be considered less than significant.

*(Sources: USGS Laguna Beach Quadrangle, Site Survey and Newport Beach General Plan)*

## 3.11 NOISE

The Noise Element of the Newport Beach General Plan states that the main source of noise within the City is from transportation, which includes noise from traffic on freeways and roadways, water vehicles in the bay area, and aircraft flights from John Wayne Airport in the City of Santa Ana and the Los Alamitos Army Airfield in the City of Los Alamitos. Other non-transportation noise sources within the City consist of stationary sources such as bar/restaurant noise, recreational facilities and residential and other common sources in urban environments.

The proposed Project site is located adjacent to Santa Barbara Drive. Nearby uses include commercial/office developments, a large hotel, a golf course and residential developments. The golf course and the residential area to the northwest are considered sensitive receptors. Noise sources in the proposed Project area generally consist of vehicular traffic noise along Santa Barbara Drive, landscape maintenance, exterior mechanical equipment, and on-site vehicular traffic.

The Noise Element of the Newport Beach General Plan specifically addresses noise sensitive land uses such as schools, churches, libraries and residential land uses. According to the noise standards given in the General Plan, exterior noise levels near sensitive land uses and residential areas should be 65 CNEL or less and interior noise levels 45 CNEL or less (see Table 3-8, *City of Newport Beach Interior and Exterior Noise Standards*, below). Otherwise, noise control measures need to be incorporated into the design and construction of these uses.

Additionally, the City of Newport Beach has adopted a Noise Ordinance, Section 10.28.040 of the City's Municipal Code, which limits construction or demolition work to be conducted between the hours of 7:00 a.m. and 6:30 p.m. on weekdays and on Saturdays between the hours of 8:00 a.m. and 6:00 p.m. Construction activities are not permitted on Sundays and holidays within the City.

**TABLE 3-8**
**CITY OF NEWPORT BEACH INTERIOR AND EXTERIOR NOISE STANDARDS**

| Land Use Categories | | Energy Average CNEL | |
|---|---|---|---|
| **Categories** | **Uses** | **Interior[1]** | **Exterior[2]** |
| Residential | Single Family, Two Family, Multiple Family | 45[3] 55[4] | 65 |
| | Mobile Home | --- | 65[5] |
| Commercial Industrial Institutional | Hotel, Motel, Transient Lodging | 45 | 65[6] |
| | Commercial Retail, Bank, Restaurant | 55 | --- |
| | Office Building, Research and Development, Professional Offices, City Office Building | 50 | --- |
| | Amphitheater, Concert Hall, Auditorium, Meeting Hall | 45 | --- |
| | Gymnasium (Multipurpose) | 50 | --- |
| | Sports Club | 55 | --- |
| | Manufacturing, Warehousing, Wholesale, Utilities | 65 | --- |
| | Movie Theaters | 45 | --- |
| Institutional | Hospital, Schools' Classroom | 45 | 65 |
| | Church, Library | 45 | --- |
| Open Space | Parks | --- | 65 |

Interpretation
1. Indoor environment excluding: Bathrooms, toilets, closets, corridors.
2. Outdoor environment limited to: Private yard of single family, multi-family private patio or balcony which is served by a means of exit from inside, mobile home park, hospital patio, park's picnic area, school's playground, hotel and motel recreation area.
3. Noise level requirement with closed windows. Mechanical ventilating system or other means of natural ventilation shall be provided as of Chapter 12, Section 1205 of UBC.
4. Noise level requirements with open windows, if they are used to meet natural ventilation requirement.
5. Exterior noise level should be such that interior noise level will not exceed 45 CNEL.
6. Except those areas around the airport within the 65 CNEL contour.

Source: City of Newport Beach

*(Sources: Site Survey, Newport Beach Noise Ordinance, and Newport Beach General Plan)*

**A. Would the Project result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?**

**Less than Significant Impact with Mitigation.** Implementation of the proposed Project would result in short-term construction-related noise increases. Additionally, long-term increased noise levels could result from the introduction of residential uses and associated vehicle traffic along the adjacent roadways.

*Construction Noise*

During construction, temporary noise impacts would occur from grading, equipment operations, and other construction activities. Temporary construction noise impacts would vary in noise level according to the type of construction equipment and its activity level. Noise from scrapers, jackhammers, pavers, and other types of construction equipment may range from 75 to 100 dBA at 50 feet from the source. Typical operating cycles may involve one to two minutes of full power operation followed by three or four minutes at a lower power. Construction noise would occur on a short-term and temporary basis during the construction phase. In compliance with the City's noise ordinance, the proposed Project would follow the mitigation measure discussed below to reduce

potential construction noise impacts. Thus, noise from the construction activities on the site would be confined to the daytime hours, when noise sensitivity is less.

***Mitigation***

The following measure is recommended to reduce construction noise impacts:

> **Mitigation Measure 3.11.A:** Construction activities shall be confined to the hours of 7:00 a.m. and 6:30 p.m. on weekdays and on Saturdays between the hours of 8:00 a.m. and 6:00 p.m.

*Traffic Noise*

The proposed Project would lead to a slight increase in vehicle traffic noise sources at the subject site and along surrounding roadways. The increase in vehicles to and from the site is not expected to lead to a significant increase in the noise levels in the proposed Project area.

A change in the noise environment that differs by less than 3.0 dB between the existing and post-project exposure may not be distinguished by many people. Exceeding a 3.0-dB threshold from automobile traffic typically requires a doubling of traffic volumes on any individual roadway link. Few projects in already developed areas cause traffic volumes to double. As previously stated, Santa Barbara Drive is designated as a Secondary Roadway. According to the City of Newport Beach General Plan Transportation Element, Secondary roadways have a capacity to carry approximately 20,000 to 23,000 average daily trips (ADT). Assuming the existing number of ADT on Santa Barbara Drive is approximately one half its designated capacity (10,000 trips), the proposed Project would have to generate 10,000 trips to double ADT on the roadway, which in turn would cause a noise increase in excess of 3.0-dB. According to the Traffic Impact Analysis prepared for the proposed Project, the proposed Project site would add approximately 330 daily vehicle trips. Therefore, the trips generated by the proposed Project would not be sufficient to increase traffic noise levels by more than 3.0-dB. Thus, the proposed Project's traffic related noise impacts are considered less than significant.

*Stationary Noise*

The proposed Project includes the development of 79 new townhomes, an open space area and a recreational area. Associated residential activities would not generate noise levels that would exceed the 65 dBA CNEL standard designated by the City of Newport beach for exterior noise in residential areas. Outdoor activities in the proposed open space and recreational areas could potentially create an outdoor noise source; however, noise levels are expected to be similar to the noise currently created from use of the eight existing tennis courts on-site. Sensitive receptors in the vicinity of proposed Project site would not be exposed to noise levels in excess of the City's standards. No significant adverse noise impacts would occur with the proposed Project.

*(Sources: Newport Beach General Plan, Site Survey, Newport Beach Municipal Code and Project Plans)*

**B. Would the Project result in the exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?**

**Less than Significant Impact with Mitigation.** Temporary noise sources would be generated as a result of the construction activities for the residential development. Temporary construction activities

would create noises from construction equipment and vibration from excavation and grading activities. Temporary construction noise impacts would vary in noise level according to the type of construction equipment and its activity level. Short-term construction noise impacts tend to occur in separate phases, with large, earth-moving equipment generating greater noise and finish construction activities and equipment generating less noise. Noise levels from construction equipment range from 75 to 100 dBA at 50 feet from the noise source.

As discussed above, construction activities would have to comply with the construction time limits (7 AM to 6:30 PM on weekdays and 8 AM to 6 PM on Saturday) set by the City's Noise Ordinance. Thus, noise impacts on the residential area to the northeast would be limited to the daytime hours when residents are typically away from their homes.

***Mitigation***

The following measures are recommended to reduce construction noise impacts on adjacent noise sensitive land uses:

> **Mitigation Measure 3.11.B:** Equipment mufflers for construction equipment shall be used at all times.
>
> **Mitigation Measure 3.11.C:** Idling of construction vehicles and equipment shall be limited to the extent feasible. Construction vehicles and equipment shall be properly operated and maintained and shall be turned off when not in use.

Compliance with the City's Noise Ordinance and implementation of the mitigation measures outlined above would reduce potential noise impacts on sensitive noise receptors to less than significant levels.

*(Sources: Site Survey, Newport Beach General Plan, Project Plans, and Newport Beach Municipal Code)*

**C. Would the Project result in a substantial permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project?**

**Less than Significant Impact with Mitigation.** Increased long-term noise levels would result from the proposed development and resulting traffic volumes along the adjacent roadways.

During construction, noise impacts would occur from grading, equipment operations, and other construction activities. Noise from scrapers, jackhammers, pavers, and other types of construction equipment may range from 75 to 100 dBA at 50 feet from the source. Typical operating cycles may involve one to two minutes of full power operation followed by three or four minutes at a lower power. Construction noise would occur on a short-term and temporary basis, when development is under construction. As discussed in Mitigation Measure 3.11.A, construction activities would be confined to the designated daytime hours, 7 AM to 6:30 PM on weekdays and 8 AM to 6 PM on Saturday, and would comply with the noise regulations of the City of Newport Beach. Thus, noise from the construction activities on the site would be confined to the daytime hours, when noise sensitivity is less. Inclusion of this mitigation measure would be reduced to less than significant levels.

Buildout of the proposed Project site would add approximately 165 residents who would perceive noise at the site. Future traffic volume increases along adjacent roadways would result in higher

noise levels at the proposed Project site and in the adjacent area. However, the proposed Project is not expected to generate significant noise increases (+3.0 dB) from increased traffic volumes. Sensitive receptors adjacent to the proposed Project site would not be exposed to noise levels in excess of the City's standards.

*(Sources: Site Survey, Project Plans, and Newport Beach General Plan)*

**D. Would the Project result in a substantial temporary or periodic increase in ambient noise levels in the Project vicinity above levels existing without the Project?**

**Less than Significant Impact.** The proposed residential development would lead to a permanent increase in ambient noise levels in the vicinity of the proposed Project area. Sources of noise introduced by the proposed Project would include vehicles along the surrounding roadways, residents of the residential development, and noise from recreation activities. Stationary noise generated by on-site residential and related recreational activities would be intermittent and are not expected to exceed the noise thresholds established by the City of Newport Beach. Therefore, the proposed Project is not expected to result in a substantial temporary or periodic increase in ambient noise levels in the proposed Project vicinity above levels existing without the proposed Project

Noise impacts associated with construction activities at the proposed Project site could result in adverse impacts to adjacent residents and noise sensitive land uses, as discussed above. Compliance with existing noise regulations of the City of Newport Beach and the mitigation measures outlined above would ensure that construction noise impacts would not adversely affect adjacent sensitive receptors.

*(Sources: Project Plans, Newport Beach Municipal Code, and Site Survey)*

**E. For a Project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project expose people residing or working in the Project area to excessive noise levels?**

**No Impact.** There are no airports located near the proposed Project area and there are no public airports, which generate aircraft noise, located within two miles of the proposed Project site. The nearest public airport is John Wayne Airport in the City of Santa Ana, approximately 4.5 miles to the north of the site. The noise contours of the John Wayne Airport do not extend into the proposed Project site. The proposed Project would not lead to or increase the exposure of people in the area to noise levels associated with aircraft and airport operations

*Sources: Site Survey, Newport Beach General Plan, and Thomas Guide for Los Angeles and Orange Counties)*

**F. For a Project within the vicinity of a private airstrip, would the Project expose people residing or working in the Project area to excessive noise levels?**

**No Impact.** There are no private airports, which generate aircraft noise, located within the vicinity of the proposed Project site. The nearest private airport is the Los Alamitos Army Airfield in the City of Los Alamitos (approximately 16 miles to the northwest). The noise contours of the Los Alamitos Army Airfield do not extend into the City or the proposed Project site. The proposed Project would not lead to or increase the exposure of people in the area to noise levels associated with aircraft and airport operations

*(Sources: Site Survey and Thomas Guide for Los Angeles and Orange Counties)*

## 3.12 POPULATION AND HOUSING

The City of Newport Beach had a January 2004 population of approximately 80,800 residents. The City's population growth can be attributed to a trend of multi-family residential development, which has added housing stock and residents to the City. The California Department of Finance population estimates for the County of Orange and the City of Newport Beach are provided in Table 3-9, *Population Growth.*

**TABLE 3-9**
**POPULATION GROWTH**

| Year | City of Newport Beach | Annual Growth | Orange County | Annual Growth |
|---|---|---|---|---|
| 1980 | 62,556 | 26% | 1,932,709 | 26.5% |
| 1990 | 66,643 | 6.5% | 2,410,556 | 6.5% |
| 2000 | 70,032 | 5.0% | 2,846,289 | 15.2% |
| 2003 | 79,900 | 14% | 2,975,400 | 4.5% |
| 2004 | 80,800 | 1.1% | 3,017,300 | 1.4% |

Source: California Department of Finance

### *Housing*

Coupled with the population growth of the City is the increase in its housing stock. From 1990 to 2000, the City's housing stock increased from 30,860 units to a total of 37,288 units, a 17.2 percent increase from 1990. The City's 2004 housing stock is estimated at 41,851 units, and the vacancy rate is approximately 11.1 percent.

### *Projections*

SCAG has developed regional projections for growth by city in the region. These projections are provided in Table 3-10, *Regional Projections.* As shown, the City of Newport Beach is expected to have 92,365 residents, 41,345 housing units, and 77,698 jobs by the year 2020.

**TABLE 3-10**
**REGIONAL PROJECTIONS**

| Year | Newport Beach | | | Orange County | | |
|---|---|---|---|---|---|---|
| | Population | Households | Employment | Population | Households | Employment |
| 2005 | 82,409 | 37,015 | 72,684 | 3,103,377 | 978,423 | 1,580,855 |
| 2010 | 89,527 | 39,443 | 75,386 | 3,291,628 | 1,034,027 | 1,749,985 |
| 2015 | 91,147 | 40,196 | 76,588 | 3,369,745 | 1,046,473 | 1,801,602 |
| 2020 | 92,365 | 41,345 | 77,698 | 3,433,609 | 1,063,976 | 1,848,135 |

Source: SCAG

### *Affordable Housing Provisions*

The City of Newport Beach, in an effort to encourage the housing development industry to respond to affordable housing needs and to achieve the Regional Housing Needs Assessment construction goals within five years, has implemented a housing program for affordable housing provisions. In order to reach the City's goal of an average of 20% of all new housing units to be affordable to very low- and low-income households, the City requires a proportion of affordable housing in all new residential developments or levy an in-lieu fee depending on the following criteria for project size:

1. Projects where ten or fewer housing units are proposed shall be required to pay in-lieu fees;
2. Projects where the proposal is for more than ten housing units, but fewer than fifty, shall have the option of providing the units or paying the in-lieu fee; or
3. Projects where more than fifty units are proposed shall be required to provide the units on-site unless an off-site location is approved by the City.

Thus, according to the housing program, because 79 units are proposed, the proposed Project would be required to provide 20% (or 16 units) of affordable housing units on-site unless the City approves an off-site location. In either case, 16 units of affordable to low or moderate income households are required per the Housing Element of the General Plan.

*(Sources: U. S. Census, SCAG, California Department of Finance Estimates and Newport Beach General Plan Housing Element)*

**A. Would the Project induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?**

**Less than Significant Impact.** The Project proposes a development of 79 residential units, with open space and recreational areas, resulting in an increase of residential population in the immediate area. Based on an estimated ratio of 2.089 persons per household, a population increase of approximately 165 residents could be anticipated with the proposed Project. Residents already living in Newport Beach or the surrounding area, as well as new residents moving to the City would occupy the housing units. The on-site population would represent 0.37 percent of the City's 2004 population and 0.34 percent of the City's projected 2020 population. While any increase in population at the site would exceed the regional growth projections for the City, the increase would not represent a substantial growth in the area. No major infrastructure is needed to serve the proposed Project. Therefore, the population growth resulting from the proposed Project is not expected to result in a significant impact.

*(Sources: Newport Beach General Plan, California Department of Finance and Site Survey)*

**B. Would the Project displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?**

**No Impact.** The proposed Project would not result in the displacement of any existing housing. The proposed development would consist of 79 residential units, subterranean parking areas, and open space and recreational areas. Existing on-site development includes eight tennis courts, a parking area and associated clubhouse. No housing units presently occur on the site. Therefore, no displacement of existing housing would occur with proposed Project implementation.

*(Sources: Project Plans, Newport Beach General Plan, and Site Survey)*

**C. Would the Project displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?**

**No Impact.** The proposed Project would not result in the displacement of people. Existing on-site development includes eight tennis courts, a parking area and an associated clubhouse. No households are currently present on the site, and no persons would be displaced by the proposed Project.

*(Sources: Project Plans, Newport Beach General Plan, and Site Survey)*

## 3.13 PUBLIC SERVICES

Fire protection services in the City of Newport Beach are provided by the Newport Beach Fire Department (NBFD). The nearest fire station to the proposed Project area is Fire Station 3, located at 868 Santa Barbara Drive, adjacent to the Newport Beach Police Department Headquarters, approximately 0.1 miles north of the Project site. Newport Beach currently has eight fire stations staffed with 102 firefighters and paramedics, with three paramedic ambulances, eight fire engines and 2 ladder trucks. Additionally, a new fire station is proposed in the Santa Ana Heights area and is currently in the preliminary design phase of development. Response time in the City average approximately five minutes or less.

The Newport Beach Police Department provides Law enforcement services for the City of Newport Beach. The Police Department headquarters is located at 870 Santa Barbara Drive, at the intersection of Santa Barbara Drive and Jamboree Road, approximately 0.1 miles north of the proposed Project site. The Newport Beach Police Department currently has 280 full-time employees, of which 140 are full-time police officers; however this number fluctuates regularly (148 officer are budgeted). The City has adopted a service standard of two sworn police officers per thousand residents. Emergency response times in the City average approximately five minutes from the time the call is placed.

The proposed Project area is located within the service boundaries of the Newport-Mesa Unified School District. The District covers 58.83 square miles and includes the cities of Newport Beach and Costa Mesa as well as other unincorporated areas. The Newport-Mesa Unified School District currently serves 22,477 students and has twenty-two elementary schools, two intermediate schools, four high schools (one of these high schools includes middle school grades), one alternative education center, and one adult education center within the City of Newport Beach.

Library service is provided by the Newport Beach Public Library system. The Newport Beach Public Library system consists four libraries in the City of Newport Beach which include the Central Library, the Balboa Branch, the Mariners Branch and the Corona del Mar Branch. The Central Library would serve residents of the proposed Project and is located at 1000 Avocado Avenue, approximately one mile south of the proposed Project site.

*(Sources: Newport-Mesa Unified School District, the Newport Beach Fire Department, Newport Beach Police Department, Site Survey, Thomas Guide for Los Angeles and Orange Counties, and Newport Beach General Plan).*

***Fire***

**A. Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives in terms of fire protection?**

**Less than Significant Impact.** The proposed development of residential uses on the proposed Project site would result in increases in the on-site population and the introduction of new structures in the area, generating a demand for fire protection services.

A Fire Master Plan has been developed for the proposed Project to ensure proposed Project compliance with the requirements set forth by the Uniform Fire Code (UFC) and the Uniform

Building Code (UBC). The Fire Master Plan includes the addition of four fire hydrants, two on-site and two along Santa Barbara Drive, in addition to the two existing fire hydrants along Santa Barbara Drive. All other required fire safety measures are incorporated as part of the Fire Master Plan to reduce fire hazards in the proposed development.

Building and site plan review of the proposed Project plans would be conducted by the NBFD in order to review the proposed Project's compliance with fire safety and emergency access standards. The Fire Department would also identify additional development features, which could reduce demand for fire services, prevent the creation of fire hazards, and facilitate emergency response to the proposed Project site. These would include provision of adequate fire access, fire lanes, fire alarm systems, sprinkler systems, adequate fire flows at nearby fire hydrants, and construction of structures to withstand fire standards, etc. Compliance with building standards relating to fire prevention, emergency access, fire safety, and emergency response standards would prevent any adverse impacts on fire protection services from the proposed developments on the site. Additionally, the close proximity of the site to Fire Station 3, would ensure that response times are not affected.

*(Sources: Site Survey and Project Plans)*

***Police***

**B. Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives in terms of police protection?**

**Less than Significant Impact.** The proposed development of residential uses on the proposed Project site would result in increases in the on-site population, structures, and vehicle trips in the area, generating a demand for law enforcement and police protection services. Increases in vehicle trips would result in greater potential for vehicular accidents and the resulting demand for police services. Future residents would create a demand for police services, associated with the incidence of property crimes and personal crimes on the site. The need for police protection would be dependent on complex variables such as presence of crime elements, attraction of development to criminals, security measures, perceived public safety, service demand in other areas of the City, and other factors.

The Newport Beach Police Department currently has a ratio of 2 sworn personnel per thousand population. The 165 persons expected with the 79 condominium units on the site would create a demand for 0.33 police personnel in the City. Given the proximity to the police facility (0.1 miles north) response times would not be impacted. Therefore the proposed Project would not require an increase in police officers to serve the area. The proposed Project is not expected to result in significant adverse impacts on police protection services.

*(Sources: Newport Beach Police Department, City of Newport Beach, Site Survey and Project Plans)*

### *Schools*

**C. Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives in terms of school services?**

**Less than Significant Impact with Mitigation.** Newport-Mesa Unified School District schools that would serve students generated by the proposed Project include Lincoln Elementary School (1st grade through 6th grade), and Corona Del Mar High School (7th grade through 12th grade). Using the School District's student generation factors, existing and projected student generation resulting from residential development on the proposed Project site is provided in Table 3-11, *Student Generation*.

**TABLE 3-11**
**STUDENT GENERATION**

| School | Student Generation Factor | Existing Development | Future Residential Development (79 units) |
|---|---|---|---|
| Elementary School | 0.17 student/unit | 0 | 13 |
| Middle School | 0.01 student/unit | 0 | 1 |
| High School | 0.02 student/unit | 0 | 2 |
| **Total** | | **0** | **16** |

Source: NMUSD

As shown in the table above, approximately 16 new students would be generated from the 79 proposed condominium units. These 16 students would require school services from the Newport-Mesa Unified School District, resulting in an incremental increase in the need for additional classroom space and supporting facilities in existing schools in the area. Lincoln Elementary School has the capacity to serve 644 students and Corona Del Mar High School has the capacity for 2,460 students. The current enrollments at these schools are 593 students and 2,221 students, respectively. Therefore, the existing school facilities would be able to accommodate the potential 13 elementary school students, one middle and two high school students created by the proposed Project. No impact to school services is expected with proposed Project implementation.

The District imposes a school impact fee of $1.84 per square foot of new residential development. Based on a total residential square footage of 205,679 square feet, the proposed Project would be required to pay school impact fees of $378,449. Development on the proposed Project site would require payment of these fees prior to issuance of building permits. Payment of fees is expected to reduce potential impacts on school services to less than significant levels.

### *Mitigation*

The following mitigation measure would reduce potential adverse impacts on school services:

> **Mitigation Measure 3.13.A:** Prior to issuance of the first building permit, school impacts fees would be paid to the Newport-Mesa Unified School District to assist in funding school facility expansion and educational services to area residents.

*(Sources: Newport Beach General Plan, Newport-Mesa Unified School District, Project Plans, and Site Survey)*

***Parks***

**D. Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives in terms of parks?**

**Less than Significant Impact.** Future residents of the proposed Project would utilize parks and recreational facilities in nearby areas, as well as on-site facilities that would be provided as part of the proposed Project. The Newport Beach General Plan establishes a parkland ratio of five acres per thousand residents. The residential development could result in approximately 165 residents, based on the City's 2004 average household size of 2.089 persons per household. Based on the General Plan requirement of five acres per thousand population, the proposed Project would require 0.825 acres of parkland. The proposed Project includes the construction of approximately 2.28 acres of open space and recreational areas on-site; however, these areas would not be designated as City parkland within the General Plan Recreation and Open Space Element.

Based on Title 19 Subdivision Code, Section 19.52.050, *Determination of Land or Fee*, when a condominium project exceeds 50 dwelling units and does not designate City parkland in the General Plan Recreation and Open Space Element within the proposed site, the payment of in-lieu fees equal to the amount of $6,894.37 per dwelling unit is required. Thus the proposed Project would be required to contribute a total of $544,655.23 in City parkland in-lieu fees unless credit can be given for private recreational amenities provided on-site. No significant adverse impacts on existing and future parks and recreational facilities are expected with compliance with City regulations for park provision and payment of park development fees.

*(Sources: Project Plans, Site Survey, Newport Beach Municipal Code and Newport Beach General Plan)*

***Other Public Facilities***

**E. Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives in terms of other public facilities?**

**Less than Significant Impact.** Development on the proposed Project site would result in increases in the on-site population, creating a demand for medical and emergency services. Hoag Memorial Hospital is located approximately 4.3 miles west of the proposed Project site and could serve the emergency medical needs of the proposed development on-site. There are other medical services and hospitals in the area to serve the medical needs of the on-site population. Since medical services are generally provided based on demand, no adverse impacts on medical services are expected.

The residential development would result in an increase in a demand for library services. The City is in the development stages for a new library, the Donna and John Crean Mariners Branch Library, to serve Newport Beach residents. The new library will replace the existing Mariners Branch library which is located in a 900 square foot portable trailer. The new Library will be over 15,000 square feet - this is approximately two-thirds larger than the existing Mariners Library

facility. Construction and operation of this library would provide adequate library services for the existing and future population of the City (completion of the proposed library is anticipated by 2006). The residential development would not be completed until April of 2008. The proposed Project would not result in significant adverse impacts on library services.

*(Sources: Project Plans, Newport Beach Public Library, Newport Beach General Plan, and Site Survey)*

## 3.14 RECREATION

The City of Newport Beach provides recreational services through beach and harbor facilities, city parks, trails, sports facilities, community pool facilities, recreational programs, and organized activities. In 1998, the Recreation and Open Space Element of the Newport Beach General Plan designated a total of 219 acres, of parks and recreational facilities within the City, which includes numerous park facilities, select beach/coastal areas, community centers, sports fields and gymnasiums. In addition, approximately 4,553 acres (35.7 percent of the City) are designated open space within the City including the Upper Newport Bay Ecological Preserve, beaches, the bay/harbor, canyons and bluff areas (plus an undetermined area of ocean water open space).

The nearest parks to the proposed Project site are Big Canyon Park, located along Jamboree Road and approximately 0.5 miles north of the proposed Project site and Irvine Terrace Park, located on Seadrift Drive, approximately 0.6 miles south of the proposed Project site. Other nearby parks include Bonita Canyon Sports Park, Harbor View Nature Park, Upper Bayview Landing, Buffalo Hills Park, San Joaquin Hills Park and Lincoln Athletic Center. Additionally, the Newport Beach Country Club Golf Course is located adjacent to the site to the west and north, however is a privately owned course and is not regulated by the City of Newport Beach.

*(Sources: Site Survey, Thomas Guide for Los Angeles and Orange Counties, and Newport Beach General Plan)*

**A. Would the Project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?**

**Less than Significant Impact.** The residential development would have a direct demand for parks or recreational facilities. The residents would use beach and harbor facilities, parks and recreational facilities in nearby areas, as well as the on-site open space and recreational areas available on their property.

As previously discussed, the Newport Beach General Plan establishes a parkland ratio of five acres per thousand residents. Based on the 5-acre standard, the City's has adopted a regulation for payment of a fee or dedication of land for park and recreation facilities in accordance with the Quimby Act. The regulation requires residential developers to dedicate land for parkland development or pay the fee equivalent to the calculated cost of land acquisition and park development associated with the demand created by the proposed Project. Fees are used by the City to develop park facilities in the area to serve the recreational needs of the residents of the development.

The proposed Project includes the construction of approximately 2.28 acres of open space and recreational areas on-site; however, these areas would not be designated as City parkland. Per the discussion in Section 3.13, *Public Services*, above, the proposed Project would be required to contribute a total of $544,655.23 in City parkland in-lieu fees. No significant adverse impacts on

existing and future parks and recreational facilities are expected with compliance with City regulations for park provision and payment of park development fees.

*(Sources: Site Survey, City of Newport Beach Recreation and Senior Services Department and Newport Beach General Plan)*

**B. Does the Project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?**

**No Impact.** The proposed Project provides open space and recreational areas throughout the development. The proposed Project would provide approximately 79,140 square feet of open space and approximately 21,300 square feet of recreational area for use by residents and guests on the site. The recreational area is intended for passive uses and could contain features such as a fountain, seating, and barbecues. The open space and recreational areas would be centrally-located and easily accessible to residents of the proposed Project, and would therefore have no adverse physical effect on the environment.

*(Sources: Site Survey, Project Plans, and Newport Beach General Plan)*

## 3.15 TRANSPORTATION/TRAFFIC

A Traffic Impact Analysis has been prepared for the proposed Project to identify existing traffic flow on and around the site, as well as analyze the proposed Project's potential impacts on traffic and circulation. The traffic analysis concluded that the proposed Project site did not cause a significant impact at the study area intersections; therefore, no improvements are recommended at the study area intersections. The findings of the study are summarized below, and the complete traffic study is provided in Appendix D of this Initial Study.

The proposed Project site is located along the western side of Santa Barbara Drive between Jamboree Road and Newport Center Drive. Santa Barbara Drive is classified as a Secondary roadway that provides three travel lanes near the proposed Project site (one north and two south) and access from Fashion Island to Jamboree Road.

Jamboree Road and Newport Center Drive are currently designated as Major Roads in the City of Newport Beach General Plan Circulation Element. Jamboree Road provides four to six travel lanes in the proposed Project vicinity and throughout the City. The intersection at Santa Barbara Drive and Jamboree Road is controlled by an existing traffic signal. Newport Center Drive provides two travel lanes in a circular orientation around the Fashion Island shopping area and other commercial and business areas.

Nine intersections were analyzed as part of the traffic study to determine proposed Project related impacts. The study intersections are listed below.

1. Jamboree Road (NS) at Eastbluff/Ford Road (EW);
2. Jamboree Road (NS) at Santa Barbara Drive (EW);
3. Santa Cruz Road (NS) at San Joaquin Hills Road (EW);
4. Santa Cruz Road (NS) at San Clemente Drive (EW);
5. Newport Center Drive (NS) at Santa Barbara Drive (EW);
6. Newport Center Drive (NS) at Coast Highway (EW);
7. Santa Rosa Drive/Big Canyon Drive (NS) at San Joaquin Hills Road (EW);

8. MacArthur Boulevard (NS) at Ford Road (EW); and
9. MacArthur Boulevard (NS) at San Joaquin Hills Road.

The City of Newport Beach's Traffic Phasing Ordinance (TPO) accounts for expected traffic volumes from other projects in the City that have been approved but are not fully completed. More information on the TPO can be found in the Traffic Impact Analysis prepared for the proposed Project (see Appendix C). There are 14 of these approved projects in the proposed Project area, these include:

- Fashion Island Expansion
- Temple Bat Yahm Expansion
- Ford Redevelopment
- Cannery Lofts Village
- Hoag Hospital Phase II
- Ciosa – Irvine Project
- Newport Dunes
- 1401 Dove Street
- Newport Auto Center Expansion
- Olsen Townhome Project
- Bayview Landing Senior Housing
- Birch Bayview Plaza II
- 494/496 Old Newport Boulevard
- 401 Old Newport Boulevard

Therefore, the "existing conditions" analysis for the proposed Project includes existing traffic volumes plus expected traffic volumes from these 14 approved projects.

Level of Service (LOS) is a quantitative measure used to describe the operational conditions within a traffic stream and a motorist's and/or passenger's perception of the roadway's performance. LOS is designated a letter from A to F, with LOS A representing the best traffic conditions, free flow, and LOS F representing the worst conditions, forced flow or failing/jammed conditions. Generally, LOS D or better is considered acceptable in urban areas such as the study area for the proposed Project. Mitigation is required for any intersection where proposed Project traffic causes the intersection to deteriorate from LOS D to LOS F.

In order to determine LOS, the volume of traffic on a roadway is divided by its capacity (V/C). The V/C ratio on a roadway with LOS D ranges from 0.81 to 0.90 and on a roadway with LOS E ranges from 0.91 to 1.00. Any increase of .01 is considered an impact when existing levels are above 0.91 (LOS E).

The Traffic Impact Analysis indicated that intersections in the proposed Project area are currently operating at LOS D or better, in accordance with City standards.

*(Sources: Newport Beach General Plan Circulation Element and Traffic Impact Analysis)*

**A. Would the Project cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?**

**Less than Significant Impact:** The proposed Project would result in an incremental increase in the number of vehicle trips to and from the proposed Project site. Existing on-site uses currently generate trips to and from the proposed Project site, the traffic analysis takes these existing trips into account and provides a "net increase" in trips. Trip generation forecasts for the existing uses and the proposed Project are provided in Table 3-12, *Project Traffic Generation.*

**TABLE 3-12**
**PROJECT TRAFFIC GENERATION**

| Land Use | Quantity[1] | AM Peak Hour | | | PM Peak Hour | | | Daily |
|---|---|---|---|---|---|---|---|---|
| | | In | Out | Total | In | Out | Total | |
| **Generation Rates** | | | | | | | | |
| Tennis Club[2] | Per CT | 0.66 | 0.66 | 1.32 | 1.68 | 1.68 | 3.36 | 38.70 |
| Single Family Attached[3] | Per DU | 0.17 | 0.49 | 0.66 | 0.47 | 0.36 | 0.83 | 8.10 |
| **Trip Generation** | | | | | | | | |
| Existing: Tennis Club | 8 CT | 5 | 5 | 10 | 13 | 13 | 26 | 310 |
| Proposed: Single-Family Attached | 79 DU | 13 | 39 | 52 | 37 | 28 | 65 | 640 |
| **Difference** | | **8** | **34** | **42** | **24** | **15** | **39** | **330** |

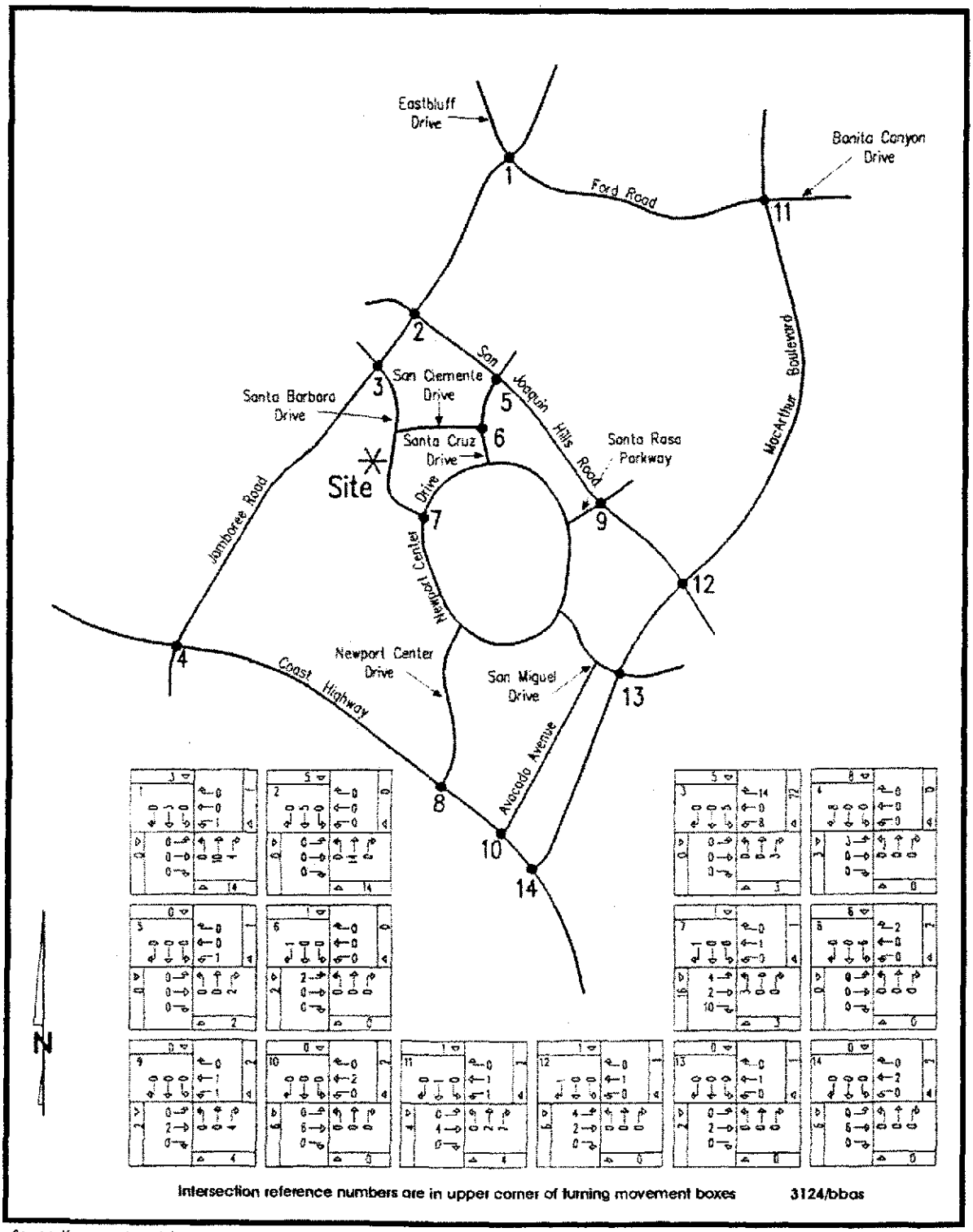
1 (CT = Courts, DU = Dwelling Units)
2 (Source: NBTAM Trip Generation Rates)
3 (Source: Institute of Transportation Engineers (ITE), Trip Generation 7th Edition, 2003m Land Use Category 490)

Source: Traffic Impact Analysis

As shown, a total of 330 trips would be added to the surrounding roadway network as a result of the proposed Project. The proposed development is projected to generate a net increase of 42 vehicle trips during the morning (AM) peak hour and 39 vehicle trips during the afternoon (PM) peak hour.

The traffic impact analysis for the proposed Project identifies intersection traffic volumes during the AM and PM peak hours, as shown in Figure 3-4, Project Morning Peak Hour Intersection Turning Movements and Figure 3-5, Project Evening Peak Hour Intersection Turning Movements. The technique used to assess the operation of a signalized intersection is known as Intersection Capacity Utilization (ICU). To calculate an ICU value the volume of traffic using the intersection is compared with the capacity of the intersection.

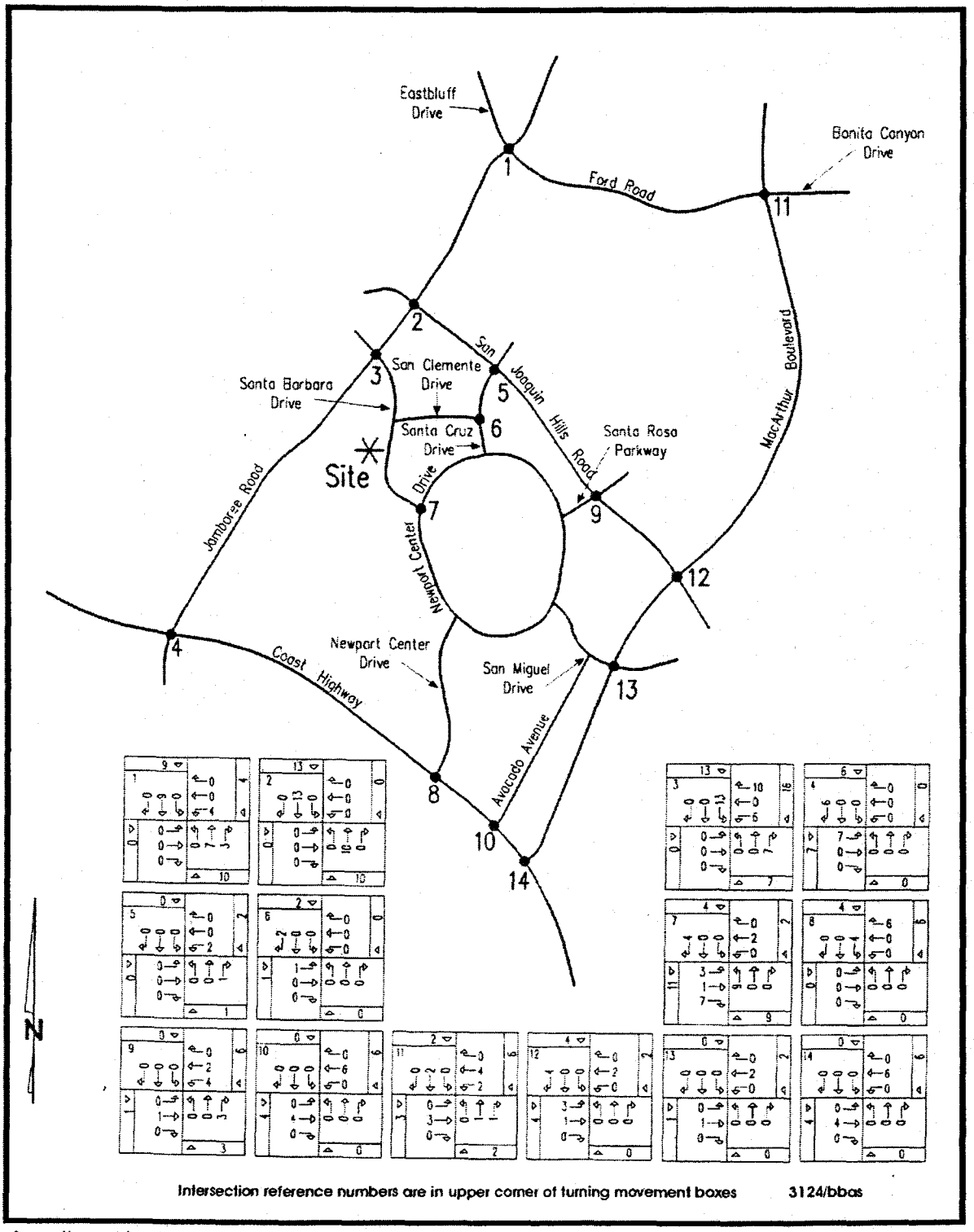
The decimal represents the portion of the hour required to provide sufficient capacity to accommodate all intersection traffic if all approaches operate at capacity. As shown in Table 3-13, Intersection ICU and LOS Analysis, intersections in the vicinity of the proposed Project site would continue to operate at a LOS D or better during peak hours with proposed Project implementation. No impact would result from proposed Project development.




Source: Kunzman Associates

# Project Morning Peak Hour Intersection Turning Movements

Figure 3-4




Source: Kunzman Associates

# Project Evening Peak Hour Intersection Turning Movements

Figure 3-5

**TABLE 3-13**
**INTERSECTION ICU AND LOS ANALYSIS**

| Intersection | Peak Hour ICU-LOS | | | |
|---|---|---|---|---|
| | Existing | | Existing + Project | |
| | AM | PM | AM | PM |
| **Jamboree Road (NS) at:** | | | | |
| Eastbluff/Ford Road (EW) | 0.78-C | 0.67-B | 0.78-C | 0.67-B |
| Santa Barbara Drive (EW) | 0.57-A | 0.55-A | 0.57-A | 0.55-A |
| **Santa Cruz Road (NS) at:** | | | | |
| San Joaquin Hills Road (EW) | 0.34-A | 0.41-A | 0.34-A | 0.41-A |
| San Clemente Drive (EW) | 0.16-A | 0.19-A | 0.16-A | 0.19-A |
| **Newport Center Drive (NS) at:** | | | | |
| Santa Barbara Drive (EW) | 0.12-A | 0.21-A | 0.13-A | 0.22-A |
| Coast Highway (EW) | 0.37-A | 0.58-A | 0.37-A | 0.58-A |
| **Santa Rosa Drive/Big Canyon Drive (NS) at:** | | | | |
| San Joaquin Hills Road (EW) | 0.33-A | 0.48-A | 0.33-A | 0.49-A |
| **MacArthur Boulevard (NS) at:** | | | | |
| Ford Road (EW) | 0.75-C | 0.69-B | 0.75-C | 0.69-B |
| San Joaquin Hills Road | 0.63-B | 0.81-D | 0.63-B | 0.81-D |

Source: Traffic Impact Analysis

*(Source: Traffic Impact Analysis)*

**B. Would the Project exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?**

**Less than Significant Impact.** Intersections adjacent to the proposed Project site are currently operating at LOS C or better (except for the intersection of MacArthur and San Joaquin Hills Road operating at a LOS D). The proposed Project would add to the existing roadway system approximately 42 trips in the AM peak hour and 39 trips in the PM peak hour but would not create significant traffic impacts on surrounding roadways or degrade the LOS of the study intersections, as shown in Table 3-13, *Intersection ICU and LOS Analysis.*

Cumulative projects within the proposed Project study area include South Coast Shipyard, Morman Temple, Saint Mark Prespyterian, Our Lady Queen of Angels, St. Andrews Church, Mariners Church, Exodus Community Center, Newport Coast – TAZ 1 through TAZ 4, Newport Ridge – TAZ 1 through TAZ 3, and Bonita Canyon – Residential. According to the Traffic Impact Analysis, the proposed Project would not individually or cumulatively exceed the City's LOS standards of area roads or intersections near the proposed Project site.

Per City Ordinance 94-19, in order to fund needed circulation facility improvements identified by the Circulation Element, the proposed Project would be required to pay a "Fair Share Fee" of $1,346 per unit. Based on the 79 units proposed, the proposed Project would be required to contribute a total of $106,334 in Fair Share fees.

Additionally, according to the San Joaquin Hills Transportation Corridor Agency, the proposed Project is located within the San Joaquin Hills Transportation Corridor Zone B and is therefore subject to their Major Thoroughfare and Bridge Fee Program. The proposed residential development, under this program, would be required to pay $1,748 per unit. Thus the proposed Project would be required to contribute a total of $138,092 (79 x 1,748). No significant adverse

impacts are expected with compliance with City regulations for payment of Fair Share and Major Thoroughfare and Bridge Fee Program fees.

*(Source: Traffic Impact Analysis and City of Newport Beach Municipal Code)*

**C. Would the Project result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?**

**No Impact.** There are no airports near the proposed Project site. The proposed Project would not affect traffic at the nearest airport, as John Wayne Airport is located approximately 4.5 miles to the north of the proposed Project site. No direct demand for air transportation would be generated by the proposed Project. Thus, no impact on air traffic patterns would occur with the proposed Project

*(Sources: Thomas Guide for Los Angeles and Orange Counties and Newport Beach General Plan)*

**D. Would the Project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?**

**Less than Significant Impact with Mitigation.** The proposed Project site currently has access to Santa Barbara Drive from an existing southerly driveway and a new northerly driveway. The overall site circulation has been reviewed and approved by the City's Traffic Engineer. Thus, no traffic related hazards or incompatible uses would be introduced by the proposed Project. To ensure that no traffic related hazards would occur from the proposed Project or during the short-term construction traffic period, the following improvements are recommended from the Traffic Impact Analysis.

***Mitigation***

**Mitigation Measure 3.15.A:** Sight distance at the proposed Project accesses should be reviewed with respect to City of Newport Beach standards in conjunction with the preparation of final grading, landscape, and street improvement plans.

**Mitigation Measure 3.15.B:** On-site traffic signing and striping should be implemented in conjunction with detailed construction plans for the proposed Project.

**Mitigation Measure 3.15.C:** The City of Newport Beach should periodically review traffic operations in the vicinity of the proposed Project once the proposed Project is constructed to assure that the traffic operations are satisfactory.

The implementation of the recommended improvements outlined above would allow roadways and intersections to operate and maintain at an acceptable LOS and would further reduce potential proposed Project related traffic impacts to less than significant levels.

*(Sources: Project Plans and site survey)*

**E. Would the Project result in inadequate emergency access?**

**No Impact.** Adequate emergency vehicle access would continue to be provided by Santa Barbara Drive for land uses on and near the site. During construction, Santa Barbara Drive would remain open and unimpeded to all vehicles, including emergency vehicles. Thus, construction of the proposed facility would not affect emergency access to the area. Upon completion of construction, operational access and emergency access to the site would continue to be available through the proposed Project driveways along Santa Barbara Drive. Implementation of the proposed Project is not expected to result in inadequate emergency access.

*(Sources: Project Plans and Site Survey)*

**F. Would the Project result in inadequate parking capacity?**

**Less than Significant Impact with Mitigation.** The proposed Project provides a total of 201 on-site parking spaces (159 resident and 42 guest). The City of Newport Beach requires a total of 198 spaces for the residential development (two parking spaces per unit, plus 0.5 spaces per unit for guest parking on developments with four or more units). The proposed Project complies with the on-site parking requirements and therefore would not result in parking deficiency. To ensure that all City requirements for parking areas on-site are met, the following improvements are recommended from the Traffic Impact Analysis.

***Mitigation***

**Mitigation Measure 3.15.D:** The parking design shall meet all City requirements regarding parking stall width, parking stall depth, parking aisle grade, and parking aisle-turning radii.

**Mitigation Measure 3.15.E:** Each parking level should have large numbers on the pillars or walls designating on which floor level the user has parked. Letters can also be added to designate what area within a parking level the person has parked, such as 2B.

*(Sources: Traffic Impact Analysis, Project Plans and City of Newport Beach Municipal Code Chapter 20.66 Off-Street Parking and Loading Regulations)*

**G. Would the Project conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?**

**No Impact.** The proposed Project may lead to an increase in the use of public transportation services to and from the site by residents and guests of the site. Buses currently run along Jamboree Road and Santa Barbara Drive and can be utilized to reach the site. The potential for increased bus ridership would result in better utilization of public transportation and would not adversely affect those services. Implementation of the proposed Project would not conflict with adopted policies, plans, or programs supporting alternative transportation.

*(Sources: Site Survey)*

## 3.16 UTILITIES AND SERVICE SYSTEMS

### *Water Service*

Water services to the City of Newport Beach, including the proposed Project area, are provided by the City of Newport Beach Utility Department. Groundwater from the Orange County Groundwater basin, operated by the Orange County Water District (OCWD), is the primary water supply source for the area, supplying approximately 66% of the City's water demand. The remaining 34% is purchased from the Municipal Water District of Orange County (MWDOC), a sub-agency of the Metropolitan Water District (MWD). According to the City of Newport Beach Public Works Department 2000 Urban Water Management Plan, two well sites are currently located in Fountain Valley. The groundwater then travels over 6 miles of 30" transmission mains, through the cities of Fountain Valley, Huntington Beach, Costa Mesa and into Newport Beach.

### *Solid Waste*

The City of Newport Beach does not provide solid waste disposal services within the City. However, the City of Newport Beach General Services Department provides a list of solid waste haulers which are licensed and franchised with the City. Collected solid wastes from the City are brought to one of the five Material Recovery Facilities (MRF) within the County, where the refuse is collected and sent to a landfill.

Orange County's Integrated Waste Management Division owns and operates the three active landfills, (Bowerman Landfill, Olinda Alpha Landfill, and Prima Deschecha Landfill) as well as four household hazardous waste collection centers (HHWCC) within Orange County. Solid waste from all Orange County cities, including the City of Newport Beach, is taken to one of the three landfills. Orange County's three existing landfills have permitted capacity through 2035. The landfill that serves the City and the proposed Project site is Bowerman Landfill, located at 11002 Bee Canyon Access Road in the City of Irvine. The Bowerman Landfill is a Class III landfill and is permitted to receive a daily maximum of no more than 8,500 tons per day. Class III landfills do not accept hazardous or liquid waste. Hazardous waste is taken to the local HHWCC. The Bowerman landfill opened in 1990 and is scheduled to close in approximately 2022. The Integrated Waste Management Department is currently conducting a study that may extend the life and disposal capacity of the landfill.

### *Sewer Service*

Sewage generated within the majority of the City of Newport Beach is collected and conveyed the City's local sewer lines and the regional sewer trunks of the Orange County Sanitation District (OCSD) for treatment, reclamation, and disposal. The District owns and operates two treatment plants, Treatment Plan No. 1 in Fountain Valley and Treatment Plan No. 2 located in Huntington Beach. While the treatment levels at these plants meet all current State and Federal requirements, the District is currently planing to upgrade both of the treatment plants to meet treatment standards for projected 2020 effluent flow. The plan includes the rehabilitation and upgrade of the existing facilities. The City, including the proposed Project site, is served by the Huntington Beach treatment plant. The Huntington Beach plant currently has an operating capacity of 340 million gallons per day.

***Electrical Power and Gas Service***

The City of Newport Beach is served by Southern California Gas Company for natural gas services and by the Southern California Edison Company for electrical power services. There are no overhead utility lines adjacent to the proposed Project site or in the surrounding area.

*(Sources: Newport Beach General Plan, City of Newport Beach, City of Newport Beach 2000 Urban Water Management Plan, Orange County Integrated Waste Management Division, Project Plans and Site Survey)*

**A. Would the Project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?**

**Less Than Significant Impact.** Wastewater generated by the proposed development would be disposed into the sewer system and would not exceed wastewater treatment standards of the Regional Water Quality Control Board. As discussed above, effluent would be treated at Treatment Plan Nos. 1 and 2. These facilities meet RWQCB standards for sewage treatment. Wastewater from residential uses is not expected to violate the standards of the RWQCB. Less than significant impacts are expected.

*(Sources: Site Survey and Project Plans)*

**B. Would the Project require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?**

**Less than Significant Impact.** Water demand is estimated at 390 gallons per day per dwelling unit or a total of 23,700 gallons per day for the proposed residential development. Sewage generation is estimated at 250 gallons per day per dwelling unit or a total of 19,750 gallons per day for the entire proposed Project.

To provide water and sewer services to the site, the proposed Project would connect to existing infrastructure located in Santa Barbara Drive and in the vicinity of the site. The existing infrastructure for water service includes an 18.5-inch water main that runs along Santa Barbara Drive and connects to a 12.0-inch main in Newport Center Drive. The proposed Project would utilize an existing 8.0-inch water line within a 10.0-inch easement, located toward the southeast corner of the site, which connects the site to the water main in Santa Barbara Drive.

To provide sewer services to the site, the proposed Project would also utilize existing infrastructure in Santa Barbara Drive. An existing 8.0-inch sewer line runs along Santa Barbara Drive and connects to a 10.0-inch sewer line in Newport Center Drive to the southeast, as well as to a 16 inch line in Jamboree Road, located to the north of the site. There is no existing easement connecting the site to the sewer main in Santa Barbara Drive, therefore, in coordination with the City of Newport Beach Utilities Department, the proposed Project would include the required connection to the sewer line.

The existing infrastructure would provide adequate water and sewer services to serve the proposed Project. Connection and service fees would also be paid by development to obtain sewer and water services. No significant adverse impacts in terms of water and wastewater services are expected.

*(Sources: Project Plans, City of Newport Beach Utilities Department)*

**C. Would the Project require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?**

**Less than Significant Impact.** Implementation of the proposed Project includes the addition of impervious surfaces, such as structures, roadways, driveways and pathways that would change runoff patterns on-site. Runoff from the site would continue to be conveyed along curbs and gutters, and directed into the existing storm drain system in Santa Barbara Drive and to the adjacent golf course. In addition, drainage from the open space/landscaped areas would be collected in area drains proposed on-site. Changes in drainage patterns would be internal to the site and would not affect drainage flows in the surrounding area or impact existing facilities.

Existing storm drainage facilities would be able to accommodate the proposed development and are expected to adequately handle runoff from the subject site without the creation of flood hazards. Additionally, proposed Project design features including curbs, gutters and on-site grades would direct flows to the existing facilities. No impact associated with the construction of new storm water drainage facilities or expansion of existing facilities would occur.

*(Sources: Project Plans, USGS Laguna Beach Quadrangle, and Site Survey)*

**D. Would the Project have sufficient water supplies available from existing entitlements and resources, or are new or expanded entitlements needed?**

**Less than Significant Impact with Mitigation.** The proposed Project would require additional water supplies provided by groundwater from the Orange County groundwater basin and purchased water from the MWDOC water supply.

The current and future water supply projections for the City of Newport Beach through 2020 are shown in Table 3-14, *Current and Projected Water Supplies*. The future supply projection assumes that the city will continue to produce groundwater and purchase local water.

**Table 3-14**
**Current and Projected Water Supplies (AFY)**

| ***Water Supply Sources*** | **2000** | **2005** | **2010** | **2015** | **2020** |
|---|---|---|---|---|---|
| Purchased from MWDOC | 4690 | 5250 | 5275 | 5300 | 5325 |
| Ground Water | 14125 | 15800 | 15850 | 15900 | 15950 |
| Recycled | 420 | 350 | 350 | 350 | 350 |
| **Supply Total** | **19235** | **21400** | **21475** | **21550** | **21625** |
| **Demand Total** | **19235** | **21400** | **21475** | **21550** | **21625** |

Source: City of Newport Beach Utilities Department

Future water demand for the City of Newport Beach would continue to be supplied by the Orange County groundwater basin as well as purchased from the MWDOC water supply through the year 2010 and is expected to meet any future water demands in the City including the proposed Project site. No impacts to water supply would occur with implementation of the proposed Project.

The City of Newport Beach purchases recycled water from the MWDOC through a program called the *Green Acres Project*. The City annually purchases between 300-800 acre-feet a year. Recycled water in the City is mainly used by golf courses, such as the Newport Beach Country Club golf course located adjacent to the site, and other landscape areas. The *Green Acres Project* has the capability to deliver up to 1,000 acre-feet per year.

***Mitigation***

While adequate water supplies would be available to serve the proposed Project site, the implementation of water conservation measures suggested by the City of Newport Beach, would reduce demand for groundwater, surface water and imported water supplies. These water conservation measures include:

**Mitigation Measure 3.16 A:** New landscaping shall incorporate drought-tolerant plant materials and drip irrigation systems, wherever possible.

**Mitigation Measure 3.16 B:** Water leaving the project site due to over-irrigation of landscape, shall be minimized. If an incident such as this is reported, a representative from the Code and Water Quality Enforcement Division of the City Manager's Office shall visit the location, investigate, inform resident if possible, leave a note and in some cases shut-off the water.

**Mitigation Measure 3.16 C:** Watering should be done during the early morning or evening hours to minimize evaporation (between 4:00 p.m. and 9:00 a.m., the following morning).

**Mitigation Measure 3.16 D:** All leaks shall be investigated by a representative from the Code and Water Quality Enforcement Division of the City Manager's Office and any the applicant shall complete all required repairs.

**Mitigation Measure 3.16 E:** Water should not be used to clean paved surfaces, such as sidewalks, driveways, parking areas, etc., except to alleviate immediate safety or sanitation hazards.

**Mitigation Measure 3.16 F:** Reclaimed water shall be used wherever available, assuming it is economically feasible.

**Mitigation Measure 3.16 G:** Installation of Ultra-Low Flush Toilets (ULFT) in the residential units.

While the proposed Project would create an increased demand for water resources in the City, local and regional water supplies have adequate capacities to serve the proposed development on-site. With implementation of the suggested water conservation measures to further reduce water use on-site, no significant adverse impact on the existing water system would occur with proposed Project implementation and no adverse impacts on available water supply are expected.

*(Sources: Site Survey, Project Plans, and City of Newport Beach Utilities Department)*

**E. Would the Project result in a determination by the wastewater treatment provider which serves or may serve the Project that it has adequate capacity to serve the Project's projected demand in addition to the provider's existing commitments?**

**Less than Significant Impact.** Sewer service would be required to serve the proposed development. The proposed Project site would be served by Treatment Plan No. 2 located in the City of Huntington Beach. Assuming that wastewater generation is 80 percent of water use, the proposed Project is expected to generate approximately 19,750 gallons of wastewater per day. The treatment plant has a design capacity of 340 million gallons per day (mgd) and currently operates at 240 mgd. Therefore, this increase in the amount of wastewater created from the proposed Project is not

expected to result in adverse impacts to existing sewer treatment capacity Treatment Plant No. 2. The projected wastewater treatment demand of the proposed Project is not expected to result in a significant impact to the provider and would not significantly impact available capacity.

*(Sources: Project Plans and Newport Beach General Plan)*

**F. Would the Project be served by a landfill with sufficient permitted capacity to accommodate the Project's solid waste disposal needs?**

**Less than Significant Impact.** According to the Orange County Integrated Waste Management Division, residential developments generate approximately 7.0 pounds of solid waste per resident per day. Thus, the proposed residential development would generate approximately 1,155 pounds of solid waste per day. Solid waste generated at the site would require disposal at Bowerman Landfill. Bowerman landfill has a capacity to receive a maximum of 8,500 tons of solid waste per day. If its daily tonnage limit is reached, waste is diverted to Prima Deschecha Landfill in San Juan Capistrano. Prima Deschecha Landfill has a capacity to receive 4,000 tons of solid waste per day. Bowerman Landfill has capacity to serve the site until 2022 and Prima Deschecha has adequate capacity to serve the diverted waste, if needed, until 2067.

The residential development would be required to participate in City-wide recycling programs and household hazardous waste disposal to reduce demands for landfill space and prevent land or water contamination from hazardous wastes. The City of Newport Beach recycles approximately 25% of its waste at the five Material Recovery Facilities (MRF) operated by the County. By using this rate, the proposed Project would only generate approximately 866 pounds of solid waste per day that would require disposal at county landfills. Thus, the proposed Project would be adequately served by county landfills. No significant impact on solid waste disposal is expected

*(Sources: Project Plans, Newport Beach General Plan, and County of Orange Integrated Waste Management Division)*

**G. Would the Project comply with federal, state, and local statutes and regulations related to solid waste?**

**Less than Significant Impact.** The city does not provide refuse collection for the proposed Project site. The City of Newport Beach General Services Department provides a list of solid waste haulers, which are licensed and franchised with the City. The proposed Project would employ one of the listed haulers to transport waste from the site to the MRF for recycling and to final landfill disposal at Bowerman Landfill in the City of Irvine.

The residential development would be required to participate in City-wide curbside recycling programs for residential uses and household hazardous waste disposal to reduce demands for landfill space and prevent land or water contamination from hazardous wastes. The proposed Project; therefore, would comply with federal, state, and local solid waste regulations. Less than significant impact is expected.

*(Sources: Project Plans, City of Newport Beach General Services Department)*

# SECTION 4: MANDATORY FINDINGS OF SIGNIFICANCE

## 4.1 FINDINGS

The environmental analysis in Section 3 of this Initial Study indicates that the proposed Santa Barbara Condominiums Project would not have the potential for significant adverse environmental impacts with implementation of standard City conditions and the recommended mitigation measures. The following findings can be made regarding the mandatory findings of significance set forth in Section 15065 of the CEQA Guidelines, as based on the results of this environmental assessment:

- The proposed project would not have the potential to degrade the quality of the environment. There are no sensitive plant or animal species on the project site and the proposed project would not reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, or reduce the number or restrict the range of a rare or endangered plant or animal. No historic structures or sites, archaeological resources or paleontological resources are present in the project area, which may be affected by the proposed project. The proposed project would not eliminate important examples of the major periods of California history or prehistory.

- The proposed project would not have the potential to achieve short-term goals to the disadvantage of long term environmental goals. The proposed project contains 79 residential units with open space and recreational areas on a 4.25-acre site in Newport Beach. Although the project would have impacts to air quality, cultural resources, geology and soils, noise, public services, transportation/traffic and utilities and service systems, mitigation measures would decrease these impacts to below a level of significance. The project would not significantly impact environmental resources.

- The proposed project would not have environmental impacts, which are individually limited but cumulatively considerable, when considering planned or proposed development in the immediate vicinity of the site. The proposed project would not cumulatively lead to significant adverse impacts, when added to proposed, planned or anticipated development in the area.

- The proposed project would not have environmental impacts, which may have adverse effects on humans, either directly or indirectly, with implementation of the recommended mitigation measures. The project may create short-term noise and air quality impacts during demolition and construction. However, implementation of the recommended mitigation measures would avoid significant adverse impacts and would reduce the identified impacts to insignificant levels.

The City of Newport Beach has determined that the proposed project would not have significant adverse impacts on the environment with the implementation of mitigation measures, and no additional environmental analysis is warranted. The City of Newport Beach would consider adoption of a Mitigated Negative Declaration for the proposed Santa Barbara Condominiums Project, with the incorporation of the recommended mitigation measures.

## 4.2 MITIGATION MEASURES

The proposed project would need to comply with existing federal, state and City regulations and applicable ordinances. In addition, the following mitigation measures are recommended to reduce or avoid the project's potentially significant adverse impacts to less than significant levels:

***Air Quality***

The following mitigation measures would reduce emissions associated with construction of the proposed project:

**Mitigation Measure 3.3.A:** During grading activities, any exposed soil areas shall be watered twice per day. On windy days or when fugitive dust can be observed leaving the proposed Project site, additional applications of water shall be applied to maintain a minimum 12 percent moisture content as defined by SCAQMD Rule 403. Under windy conditions where velocities are forecast to exceed 25 miles per hour (as ascertained by phone calls to the SCAQMD), all ground disturbing activities shall be halted until winds that are forecast to abate below this threshold.

**Mitigation Measure 3.3.B:** The proposed Project shall comply with regional rules such as SCAQMD Rules 402 and 403, which would assist in reducing short-term air pollutant emissions. Rule 403 requires that fugitive dust be controlled with best available control measures so that the presence of such dust does not remain visible in the atmosphere beyond the property line of the emission source. Rule 402 requires dust suppression techniques be implemented to prevent fugitive dust from creating a nuisance offsite. These dust suppression techniques are summarized as follows:

a. Portions of the construction site to remain inactive longer than a period of three months shall be seeded and watered until grass cover is grown or otherwise stabilized in a manner acceptable to the City.

b. All on-site roads shall be paved as soon as feasible or watered periodically or chemically stabilized.

c. All material transported offsite shall be either sufficiently watered or securely covered to prevent excessive amounts of dust.

d. The area disturbed by clearing, grading, earthmoving, or excavation operations shall be minimized at all times.

**Mitigation Measure 3.3.C:** All vehicles on the construction site shall travel at speeds less than 15 miles per hour.

**Mitigation Measure 3.3.D:** All material stockpiles subject to wind erosion during construction activities, that will not be utilized within three days, shall be covered with plastic, an alternative cover deemed equivalent to plastic, or sprayed with a nontoxic chemical stabilizer.

**Mitigation Measure 3.3.E:** Where vehicles leave the construction site and enter adjacent public streets, the streets shall be swept daily or washed down at the end of the work day to remove soil tracked onto the paved surface. Any visible track-out extending for more than fifty (50) feet from the access point shall be swept or washed within thirty (30) minutes of deposition.

**Mitigation Measure 3.3.F:** All diesel-powered vehicles and equipment shall be properly operated and maintained.

**Mitigation Measure 3.3.G:** All diesel-powered vehicles and gasoline-powered equipment shall be turned off when not in use for more than five (5) minutes.

**Mitigation Measure 3.3.H:** The construction contractor shall utilize electric or natural gas-powered equipment instead of gasoline or diesel-powered engines, where feasible.

**Mitigation Measure 3.3.I:** As much as possible, the construction contractor shall time the construction activities so as not to interfere with peak hour traffic. To minimize obstruction of through traffic lanes adjacent to the site, a flag person shall be retained to maintain safety adjacent to existing roadways, if necessary.

**Mitigation Measure 3.3.J:** The construction contractor shall support and encourage ridesharing and transit incentives for the construction crew.

**Mitigation Measure 3.3.K:** The construction contractor shall utilize, as much as possible, pre-coated/natural colored building materials. Water-based or low VOC coatings shall be used that comply with the most stringent SCAQMD Rule 1113 limits. Spray equipment with high transfer efficiency, such as the high volume-low pressure (HVLP) paint applicators with 50 percent efficiency, or manual coatings application such as paint brush hand roller, trowel, spatula, dauber, rag, or a sponge shall be used to reduce VOC emissions, where practical. Additionally, paint application shall use lower volatility paint not exceeding 100 grams of ROG per liter.

**Mitigation Measure 3.3.L:** If construction equipment powered by alternative fuel sources (LPG/CNG) is available at comparable cost, the developer shall specify that such equipment be used during all construction activities on the proposed Project site.

**Mitigation Measure 3.3.M:** The developer shall require the use of particulate filters on diesel construction equipment if use of such filters is demonstrated to be cost-competitive for use on this proposed Project..

***Cultural Resources***

The following mitigation measures would reduce potential impacts associated with unknown cultural resources on-site:

**Mitigation Measure 3.5.A:** Prior to the issuance of a grading permit, the applicant shall provide written evidence to the planning director that a qualified archaeologist has been retained to observe grading activities and conduct salvage excavation of archaeological resources as necessary. The archaeologist shall be present at the pre-grading conference, shall establish procedures for archaeological resources surveillance, and shall establish, in

cooperation with the applicant, procedures for temporarily halting or redirecting work to permit the sampling, identification and evaluation of the artifacts as appropriate. If additional or unexpected archaeological features are discovered, the archaeologist shall report such findings to the applicant and to the Planning Department. If the archaeological resources are found to be significant, the archaeological observer shall determine appropriate actions, in cooperation with the applicant, for exploration and/or salvage. These actions, as well as final mitigation and disposition of the resources, shall be subject to the approval of the Planning Director.

**Mitigation Measure 3.5.B:** Prior to the issuance of a grading permit, the applicant shall provide written evidence to the planning director that a qualified paleontologist has been retained to observe grading activities and conduct salvage fossils as necessary. The paleontologist shall be present at the pre-grading conference, shall establish procedures for paleontological resource surveillance, and shall establish cooperation with the applicant, procedures for temporarily halting or redirecting work to permit the sampling, identification and evaluation of fossils. If major paleontological resources are discovered which require long term baiting or redirecting of grading, the paleontologist shall report such findings to the applicant and to the Planning Department. The paleontologist shall determine appropriate actions, in cooperation with the applicant, which ensure proper exploration and/or salvage. These actions, as well as final mitigation and disposition of the resources, shall be subject to the approval of the Planning Director.

**Mitigation Measure 3.5.C:** In accordance with Public Resources Code 5097.94, if human remains are found, the Orange County coroner must be notified within 24 hours of the discovery. If the coroner determines that the remains are not recent, the coroner will notify the Native American Heritage Commissions in Sacramento to determine the most likely descendent for the area. The designated Native American representative then determines in consultation with the property owner the disposition of the human remains.

***Geology and Soils***

The following mitigation measures would reduce potential impacts associated with unsuitable on-site soils:

**Mitigation Measure 3.6.A:** In areas where compacted fill will be required to establish design grades and in design cut areas where the depth of the proposed cut does not exceed the thickness of the existing unsuitable surficial soils, on-site surficial soils shall be excavated and recompacted to create stable soil conditions and correct poor slope performance.

**Mitigation Measure 3.6.B:** During grading activities, where cut-to-fill transitions exist following remedial grading, they shall be eliminated by overexcavating the "cut" portions of the building pads and replacing the excavated material as properly compacted fill.

The generally recommended depth of over excavation is one-half the maximum thickness of fill beneath the pad area, to a minimum depth of 3 feet and a maximum depth of 15 feet below proposed pad grade. The horizontal limits of overexcavation should extend to within approximately 1 to 2 feet of property lines and/or the tops and toes of slopes. The actual lots that will require overexcavation and overexcavation depths will have to be determined during

grading by the project geotechnical consultant based on actual conditions encountered.

**Mitigation Measure 3.6.C:** During remedial grading and construction of the proposed subterranean parking areas and associated improvements, temporary excavations with sidewalls varying up to approximately 13 feet in height may be necessary. Temporary excavation sidewalls will require sloping back at a ratio of approximately 12:1, horizontal to vertical. Should excessive caving be observed during grading, flatter inclinations may be required locally.

Depending on required depths of cut and remedial grading, it may not be possible to construct temporary excavations along the east side of Buildings I and II (i.e., adjacent to Santa Barbara Drive) and along the southeast side of Building I (adjacent to the existing Marriott tower and appurtenant improvements) at a safe and stable slope ratio without encroaching into the adjacent street right-of-way and/or causing the loss of lateral support of the existing hotel building, the associated buried utilities and other improvements. For this reason, temporary shoring may be required in these areas. Recommendations for design of temporary shoring will be provided in the comprehensive preliminary geotechnical report once grading plans for the site become available for review.

***Noise***

The following mitigation measures are recommended to reduce construction noise impacts on adjacent noise sensitive land uses:

**Mitigation Measure 3.11.A:** Construction activities shall be confined to the hours of 7:00 a.m. and 6:30 p.m. on weekdays and on Saturdays between the hours of 8:00 a.m. and 6:00 p.m.

**Mitigation Measure 3.11.B:** Equipment mufflers for construction equipment shall be used at all times.

**Mitigation Measure 3.11.C:** Idling of construction vehicles and equipment shall be limited to the extent feasible. Construction vehicles and equipment shall be properly operated and maintained and shall be turned off when not in use.

***Public Services***

The following mitigation measure would reduce potential adverse impacts on school services:

**Mitigation Measure 3.13.A:** Prior to issuance of the first building permit, school impacts fees will be paid to the Newport-Mesa Unified School District to assist in funding school facility expansion and educational services to area residents.

***Transportation/Traffic***

The following mitigation measures would reduce any potential traffic and parking related impacts from the proposed project:

**Mitigation Measure 3.15.A:** Sight distance at the project accesses should be reviewed with respect to City of Newport Beach standards in conjunction with the preparation of final grading, landscape, and street improvement plans.

**Mitigation Measure 3.15.B:** On-site traffic signing and striping should be implemented in conjunction with detailed construction plans for the project.

**Mitigation Measure 3.15.C:** The City of Newport Beach should periodically review traffic operations in the vicinity of the project once the project is constructed to assure that the traffic operations are satisfactory.

**Mitigation Measure 3.15.D:** The parking design shall meet all City requirements regarding parking stall width, parking stall depth, parking aisle grade, and parking aisle-turning radii.

**Mitigation Measure 3.15.E:** Each parking level should have large numbers on the pillars or walls designating on which floor level the user has parked. Letters can also be added to designate what area within a parking level the person has parked, such as 2B.

***Utilities and Service Systems***

While adequate water supplies would be available to serve the project site, the implementation of water conservation measures suggested by the City of Newport Beach, would reduce demand for groundwater, surface water and imported water supplies. These water conservation measures include:

**Mitigation Measure 3.16 A:** New landscaping shall incorporate drought-tolerant plant materials and drip irrigation systems, wherever possible.

**Mitigation Measure 3.16 B:** Water leaving the project site due to over-irrigation of landscape, shall be minimized. If an incident such as this is reported, a representative from the Code and Water Quality Enforcement Division of the City Manager's Office shall visit the location, investigate, inform resident if possible, leave a note and in some cases shut-off the water.

**Mitigation Measure 3.16 C:** Watering should be done during the early morning or evening hours to minimize evaporation (between 4:00 p.m. and 9:00 a.m., the following morning).

**Mitigation Measure 3.16 D:** All leaks shall be investigated by a representative from the Code and Water Quality Enforcement Division of the City Manager's Office and any the applicant shall complete all required repairs.

**Mitigation Measure 3.16 E:** Water should not be used to clean paved surfaces, such as sidewalks, driveways, parking areas, etc., except to alleviate immediate safety or sanitation hazards.

**Mitigation Measure 3.16 F:** Reclaimed water shall be used wherever available, assuming it is economically feasible.

**Mitigation Measure 3.16 G:** Installation of Ultra-Low Flush Toilets (ULFT) in the residential units.

# SECTION 5: LIST OF PREPARERS/REFERENCES

## 5.1 PREPARERS OF THE MND/INITIAL STUDY

***David Evans and Associates, Inc.***
23382 Mill Creek Drive, Suite 225
Laguna Hills, California 92653-1684
(949) 588-5050

Dustin Fuller, Project Manager
Amy Gramlich, Environmental Planner/Analyst

## 5.2 REFERENCES

The following references were used in the preparation of this Initial Study and are available for review by the public at the offices of the City of Newport Beach at 3300 Newport Boulevard in Newport Beach, California 92663 or at the offices of David Evans and Associates, Inc. at 23382 Mill Creek Drive, Suite 225 in Laguna Hills, California 92653 by calling during normal business hours.

California Department of Conservation Farmland Mapping and Monitoring Program, Important Farmland, 2000.

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Petra Geotechnical, Inc., Preliminary Geotechnical Evaluation for the Proposed Santa Barbara Condominiums, November 2003.

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SCAQMD, 1998-2002 Air Quality Readings, 1998-2002.

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U.S. Environmental Protection Agency; Envirofacts Database; 2004.

U.S. Environmental Protection Agency, Noise from Construction Equipment and Operations, Building Equipment and Home Appliances, 1971.

U.S. Geological Survey, 7 ½ Minute Quadrangle for Laguna Beach, 2004.

Western Regional Climate Center, Climate Data, 2002.

## 5.3 PERSONS CONTACTED

Alfred Castanon, Newport Beach Utilities Department
Ara K. Zareczny, Newport-Mesa Unified School District
Gayleen Olson, Newport Beach Fire Department
Linda Hagthrop, Orange County Integrated Waste Management Division
Sergeant Steve Shulman, Newport Beach Police Department

PA2004-169

# APPENDICES TO THE FINAL INITIAL STUDY and MITIGATED NEGATIVE DECLARATION for the proposed SANTA BARBARA CONDOMINIUMS PROJECT

Prepared for:
***City of Newport Beach***
Planning Department
3300 Newport Boulevard
Newport Beach, CA 92663
Rosalinh M. Ung, Associated Planner
(949) 644-3208

Draft: July 15, 2005
Final: January 10, 2006

# Appendix A - Environmental Checklist Form

# ENVIRONMENTAL CHECKLIST FORM

1. Project Title: Santa Barbara Condominiums Project

2. Lead Agency Name and Address: City of Newport Beach
   Planning Department
   3300 Newport Boulevard
   Newport Beach, CA 92663

3. Contact Person and Phone Number: Rosalinh Ung, Associate Planner
   (949) 644-3208

4. Project Location: 900 Newport Center Drive
   Newport Beach, CA 92660
   Orange County

5. Project Sponsor's Name & Address: City of Newport Beach
   Planning Department
   3300 Newport Boulevard
   Newport Beach, CA 92663

6. General Plan Designation: Administrative, Professional, Financial Commercial (APF)

7. Zoning: Administrative, Professional, Financial (APF)

8. Description of Project: (Describe the whole action involved, including but not limited to later phases of the project, and any secondary, support, or off-site features necessary for its implementation. Attach additional sheet(s) if necessary.)

   A proposed development of 79 condominiums on a 4.25 acre site, currently in the Newport Beach Marriott Hotel's tennis complex. The project consists of three separate buildings with eight different floor plan options and has an approximately 79,140 square fee of open space and 21,300 square feet of recreational areas for use by residents and their guests. The four-story buildings are approximately 65 feet in height with subterranean parking levels. The project would require a General Plan Amendment and Local Coastal Plan Land Use Plan Amendment to change the current land use designation from Administrative, Professional, Financial (APF) to Multi-Family Residential (MFR); a Zone change to rezone the subject property from APF to MFR; a Parcel Map to subdivide the subject property from the hotel development for financing purposes; a Tract Map for the condominium ownerships; and a Modification Permit for the front yard setback encroachment.

9. Surrounding Land Uses and Setting: (Briefly describe the project's surroundings.)

The proposed project would be located along Santa Barbara Drive. Adjacent land uses include the Newport Beach Country Golf Course to the North and west, the Marriott Hotel to the south, Pacific Financial Plaza with a two story parking structure to the east and a multi-family residential development ("The Colony") to the northeast.

10. Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement): California Coastal Commission – Coastal Development Permit

**ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:**

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

| | | |
|---|---|---|
| ☐ Aesthetics | ☐ Agriculture Resources | ■ Geology/Soils |
| ☐ Biological Resources | ■ Cultural Resources | ☐ Land Use/Planning |
| ☐ Hazards & Hazardous Materials | ☐ Hydrology/Water Quality | ☐ Population/Housing |
| | ■ Noise | ■ Transportation/Traffic |
| ☐ Mineral Resources | ☐ Recreation | |
| ■ Public Services | ■ Air Quality | |
| ■ Utilities/Service Systems | ☐ Mandatory Findings of Significance | |

**DETERMINATION** (To be completed by the Lead Agency):

On the basis of this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

■ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

| | |
|---|---|
| Signature | Date |
| Rosalinh Ung, Associate Planner | City of Newport Beach |
| Printed Name | For |

**EVALUATION OF ENVIRONMENTAL IMPACTS:**

1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g. the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g. the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect is significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from Section XVII, "Earlier Analyses," may be cross-referenced).

5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:

a) Earlier Analyses Used. Identify and state where they are available for review.

b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.

c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures, which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g. general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7) Supporting Information Sources. A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions form this checklist that are relevant to a project's environmental effects in whatever format is selected.

9) The explanation of each issue should identify:

a) the significance criteria or threshold, if any, used to evaluate each question; and
b) the mitigation measure identified, if any, to reduce the impact to less than significance.

**ENVIRONMENTAL ANALYSIS QUESTIONS:**

| Issues: | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| ***I. AESTHETICS.*** Would the project: | | | | |
| a) Have a substantial adverse effect on a scenic vista? | ☐ | ☐ | ■ | ☐ |
| b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? | ☐ | ☐ | ☐ | ■ |
| c) Substantially degrade the existing visual character or quality of the site and its surroundings? | ☐ | ☐ | ■ | ☐ |
| d) Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area? | ☐ | ☐ | ■ | ☐ |
| ***II. AGRICULTURE RESOURCES.*** In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project: | | | | |
| a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? | ☐ | ☐ | ☐ | ■ |
| b) Conflict with existing zoning for agricultural use, or a Williamson Act contract? | ☐ | ☐ | ☐ | ■ |
| c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use? | ☐ | ☐ | ☐ | ■ |
| ***III. AIR QUALITY.*** Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project: | | | | |
| a) Conflict with or obstruct implementation of the applicable air quality plan? | ☐ | ☐ | ☐ | ■ |
| b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation? | ☐ | ■ | ☐ | ☐ |
| c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions, which exceed quantitative thresholds for ozone precursors)? | ☐ | ☐ | ■ | ☐ |
| d) Expose sensitive receptors to substantial pollutant concentrations? | ☐ | ☐ | ■ | ☐ |

| Issues: | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| e) Create objectionable odors affecting a substantial number of people? | ☐ | ☐ | ■ | ☐ |
| ***IV. BIOLOGICAL RESOURCES.*** Would the project: | | | | |
| a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? | ☐ | ☐ | ■ | ☐ |
| b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? | ☐ | ☐ | ☐ | ■ |
| c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? | ☐ | ☐ | ☐ | ■ |
| d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites? | ☐ | ☐ | ☐ | ■ |
| e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? | ☐ | ☐ | ☐ | ■ |
| f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan? | ☐ | ☐ | ☐ | ■ |
| ***V. CULTURAL RESOURCES.*** Would the project: | | | | |
| a) Cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5? | ☐ | ☐ | ☐ | ■ |
| b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5? | ☐ | ■ | ☐ | ☐ |
| c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? | ☐ | ■ | ☐ | ☐ |
| d) Disturb any human remains, including those interred outside of formal cemeteries? | ☐ | ■ | ☐ | ☐ |
| ***VI. GEOLOGY AND SOILS.*** Would the project: | | | | |
| Expose people or structures to potential substantial adverse effects, including the risk of loss, injury or death involving: | | | | |

| Issues: | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. | ☐ | ☐ | ■ | ☐ |
| b) Strong seismic ground shaking? | ☐ | ☐ | ■ | ☐ |
| c) Seismic-related ground failure, including liquefaction? | ☐ | ■ | ☐ | ☐ |
| d) Landslides? | ☐ | ☐ | ☐ | ■ |
| e) Result in substantial soil erosion or the loss of topsoil? | ☐ | ☐ | ■ | ☐ |
| f) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse? | ☐ | ■ | ☐ | ☐ |
| g) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property? | ☐ | ■ | ☐ | ☐ |
| h) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater? | ☐ | ☐ | ☐ | ■ |
| ***VII. HAZARDS AND HAZARDOUS MATERIALS.*** Would the project: | | | | |
| a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? | ☐ | ☐ | ■ | ☐ |
| b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? | ☐ | ☐ | ■ | ☐ |
| c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? | ☐ | ☐ | ■ | ☐ |
| d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? | ☐ | ☐ | ☐ | ■ |
| e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area? | ☐ | ☐ | ☐ | ■ |
| f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area? | ☐ | ☐ | ☐ | ■ |

| Issues: | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? | ☐ | ☐ | ■ | ☐ |
| h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands? | ☐ | ☐ | ☐ | ■ |
| ***VIII. HYDROLOGY AND WATER QUALITY.*** Would the project: | | | | |
| a) Violate any water quality standards or waste discharge requirements? | ☐ | ☐ | ■ | ☐ |
| b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)? | ☐ | ☐ | ☐ | ■ |
| c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site? | ☐ | ☐ | ■ | ☐ |
| d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site? | ☐ | ☐ | ■ | ☐ |
| e) Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff? | ☐ | ☐ | ■ | ☐ |
| f) Otherwise substantially degrade water quality? | ☐ | ☐ | ■ | ☐ |
| g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map? | ☐ | ☐ | ☐ | ■ |
| h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows? | ☐ | ☐ | ☐ | ■ |
| i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam? | ☐ | ☐ | ☐ | ■ |
| j) Inundation by seiche, tsunami, or mudflow? | ☐ | ☐ | ■ | ☐ |
| k) Result in significant alteration of receiving water quality during or following construction? | ☐ | ☐ | ■ | ☐ |

| Issues: | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| l) Result in a potential for discharge of stormwater pollutants from areas of material storage, vehicle or equipment fueling, vehicle or equipment maintenance (including washing), waste handling, hazardous materials handling or storage, delivery areas, loading docks or other outdoor work areas? | ☐ | ☐ | ☐ | ■ |
| m) Result in the potential for discharge of stormwater to affect the beneficial uses of the receiving waters? | ☐ | ☐ | ■ | ☐ |
| n) Create the potential for significant changes in the flow velocity or volume of stormwater runoff to cause environmental harm? | ☐ | ☐ | ■ | ☐ |
| o) Create significant increases in erosion of the project site or surrounding areas? | ☐ | ☐ | ■ | ☐ |
| ***IX. LAND USE AND PLANNING.*** Would the project: | | | | |
| a) Physically divide an established community? | ☐ | ☐ | ☐ | ■ |
| b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect? | ☐ | ☐ | ■ | ☐ |
| c) Conflict with any applicable habitat conservation plan or natural community conservation plan? | ☐ | ☐ | ☐ | ■ |
| ***X. MINERAL RESOURCES.*** Would the project: | | | | |
| a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state? | ☐ | ☐ | ☐ | ■ |
| b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan? | ☐ | ☐ | ☐ | ■ |
| ***XI. NOISE.*** Would the project result in: | | | | |
| a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? | ☐ | ■ | ☐ | ☐ |
| b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels? | ☐ | ■ | ☐ | ☐ |
| c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project? | ☐ | ■ | ☐ | ☐ |
| d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project? | ☐ | ☐ | ■ | ☐ |

| Issues: | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels? | ☐ | ☐ | ☐ | ■ |
| f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels? | ☐ | ☐ | ☐ | ■ |
| ***XII. POPULATION AND HOUSING.*** Would the project: | | | | |
| a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of road or other infrastructure)? | ☐ | ☐ | ■ | ☐ |
| b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere? | ☐ | ☐ | ☐ | ■ |
| c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere? | ☐ | ☐ | ☐ | ■ |
| ***XIII. PUBLIC SERVICES.*** Would the project: | | | | |
| a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: | | | | |
| Fire protection? | ☐ | ☐ | ■ | ☐ |
| Police protection? | ☐ | ☐ | ■ | ☐ |
| Schools? | ☐ | ■ | ☐ | ☐ |
| Parks? | ☐ | ☐ | ■ | ☐ |
| Other public facilities? | ☐ | ☐ | ■ | ☐ |
| ***XIV. RECREATION.*** Would the project: | | | | |
| a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? | ☐ | ☐ | ■ | ☐ |
| b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which have an adverse physical effect on the environment? | ☐ | ☐ | ☐ | ■ |

| Issues: | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| ***XV. TRANSPORTATION / TRAFFIC.*** Would the project: | | | | |
| a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)? | ☐ | ☐ | ■ | ☐ |
| b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways? | ☐ | ☐ | ■ | ☐ |
| c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks? | ☐ | ☐ | ☐ | ■ |
| d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? | ☐ | ■ | ☐ | ☐ |
| e) Result in inadequate emergency access? | ☐ | ☐ | ☐ | ■ |
| f) Result in inadequate parking capacity? | ☐ | ■ | ☐ | ☐ |
| g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)? | ☐ | ☐ | ☐ | ■ |
| ***XVI. UTILITIES AND SERVICE SYSTEMS.*** Would the project: | | | | |
| a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board? | ☐ | ☐ | ■ | ☐ |
| b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? | ☐ | ☐ | ■ | ☐ |
| c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? | ☐ | ☐ | ■ | ☐ |
| d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed? | ☐ | ■ | ☐ | ☐ |
| e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments? | ☐ | ☐ | ■ | ☐ |
| f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs? | ☐ | ☐ | ■ | ☐ |
| g) Comply with federal, state, and local statutes and regulations related to solid waste? | ☐ | ☐ | ■ | ☐ |

| Issues: | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| ***XVII. MANDATORY FINDINGS OF SIGNIFICANCE.*** | | | | |
| a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat or a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory? | ☐ | ☐ | ■ | ☐ |
| b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current project, and the effects of probable future projects.) | ☐ | ☐ | ■ | ☐ |
| c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly? | ☐ | ■ | ☐ | ☐ |

# Appendix B – Air Quality Assessment

**Giroux & Associates**
Environmental Consultants

# AIR QUALITY ANALYSIS

# SANTA BARBARA CONDOMINIUM PROJECT

# CITY OF NEWPORT BEACH, CALIFORNIA

Prepared for:

David Evans & Associates
Attn: Dustin Fuller
9635 Granite Ridge Drive, Suite 300
San Diego, California 92123

Date:

February 25, 2005

Project No.: P05-006

*3 Rushingwind, Irvine, California 92614 - Phone (949) 387-5477 - Fax (949) 387-5478*

## METEOROLOGICAL SETTING

The project site's climate, as with all Southern California, is dominated by the strength and position of the semi-permanent high pressure pattern over the Pacific Ocean near Hawaii. It creates cool summers, mild winters, and infrequent rainfall. It drives the cool daytime sea breeze, and it maintains comfortable humidities and ample sunshine after the frequent morning clouds dissipate. Unfortunately, the same atmospheric processes that create the desirable living climate combine to restrict the ability of the atmosphere to disperse the air pollution generated by the large population attracted in part by the desirable climate. Portions of the Los Angeles Basin therefore experience some of the worst air quality in the nation for certain pollutants.

Temperatures in the City of Newport Beach average 61 degrees annually. Daily and seasonal oscillations of temperature are small because of the moderating effects of the nearby oceanic thermal reservoir. In contrast to the steady temperature regime, rainfall is highly variable. Measurable precipitation occurs mainly from early November to mid-April, but total amounts are generally small. Newport Beach averages 12 inches of rain annually with January as the wettest month.

Winds in the project vicinity display several characteristic regimes. During the day, especially in summer, winds are from the south in the morning, and from the west in the afternoon. Daytime wind speeds are 7 – 9 miles per hour on average. At night, especially in winter, the land becomes cooler than the ocean, and an off-shore wind of 3-5 miles per hour develops. Early morning winds are briefly from the south-east parallel to the coastline before the daytime on-shore flow becomes well established again. One other important wind regime occurs when high pressure occurs over the western United States that creates hot, dry and gusty Santa Ana winds from the north and northeast across Newport Beach.

The net effect of the wind pattern on air pollution is that any locally generated emissions will be carried offshore at night, and toward inland Orange County by day. Daytime ventilation is much more vigorous. Unless daytime winds rotate far into the north and bring air pollution from developed areas of the air basin into Newport Beach, warm season air quality is much better in the project vicinity than in inland valleys of the air basin. Both summer and winter air quality in the project area is generally good.

In addition to winds that control the rate and direction of pollution dispersal, Southern California is notorious for strong temperature inversions that limit the vertical depth through which pollution can be mixed. In summer, coastal areas are characterized by a sharp discontinuity between the cool marine air at the surface and the warm, sinking air aloft within the high pressure cell over the ocean to the west. This marine/subsidence inversion allows for good local mixing, but acts like a giant lid over the basin. Air starting onshore at the beach is relatively clean, but becomes progressively more polluted as sources continue to add pollution from below without any dilution from above. Because of Newport Beach's location relative to the ocean, the incoming marine air during warm season onshore flow contains little air pollution. Local air quality is not substantially affected by the regional subsidence inversions.

A second inversion type forms on clear, winter nights when cold air off the mountains sinks to the surface while the air aloft remains warm. This process forms radiation inversions. These inversions, in conjunction with calm winds, trap pollutants such as automobile exhaust near their source. During the long nocturnal drainage flow from land to sea, the exhaust pollutants continually accumulate within the shallow, cool layer of air near the ground. Some areas of Orange County thus may experience elevated levels of carbon monoxide and nitrogen oxides because of this winter radiation inversion condition. However, the coastal areas of Orange County have not substantially been affected by limited nocturnal mixing effects (no elevated levels of CO) in approximately 10 years. Both types of inversions occur throughout the year to some extent, but the marine inversions are very dominant during the day in summer, and radiation inversions are much stronger on winter nights when nights are long and air is cool. The governing role of these inversions in atmospheric dispersion leads to a substantially different air quality environment in summer in the South Coast Air Basin than in winter.

## AIR QUALITY SETTING

### Ambient Air Quality Standards (AAQS)

In order to gauge the significance of the air quality impacts of the proposed Santa Barbara Condominium Project, those impacts, together with existing background air quality levels, must be compared to the applicable ambient air quality standards. These standards are the levels of air quality considered safe, with an adequate margin of safety, to protect the public health and welfare. The standards are designed to protect those people most susceptible to further respiratory distress such as asthmatics, the elderly, very young children, people already weakened by other disease or illness, and persons engaged in strenuous work or exercise, called "sensitive receptors." Healthy adults can tolerate occasional exposure to air pollutant concentrations considerably above these minimum standards before adverse effects are observed. Recent health research has shown, however, that chronic exposure to ozone (the primary ingredient in photochemical smog) may lead to adverse respiratory health even at concentrations close to the ambient standard.

National AAQS were established in 1971 for six pollution species with states retaining the option to add other pollutants, require more stringent compliance, or to include different exposure periods. The initial attainment deadline of 1977 was extended several times in air quality problem areas like Southern California. In June 2003, EPA proposed a rule which could extend and establish a new attainment deadline for ozone, which would be as late as year 2021. Because California had established AAQS several years before the federal action and because of unique air quality problems introduced by the restrictive dispersion meteorology, there is considerable difference between state and national clean air standards. Those standards currently in effect in California are shown in Table 1. Sources and health effects of various pollutants are shown in Table 2.

The Federal Clean Air Act Amendments (CAAA) of 1990 required that the U.S. Environmental Protection Agency (EPA) review all national AAQS in light of currently known health effects. EPA was charged with modifying existing standards or promulgating new ones where appropriate. EPA subsequently developed standards for chronic ozone exposure (8+ hours per day) and for very small diameter particulate matter (called "PM-2.5"). New national AAQS were adopted on July 17, 1997.

Planning and enforcement of the new federal standards for PM-2.5 and for ozone (8-hour) were challenged by trucking and manufacturing organizations. In a unanimous decision published at the end of February 2001, the U.S. Supreme Court ruled that EPA did not require specific congressional authorization to adopt national clean air standards. The Court also ruled that health-based standards did not require preparation of a cost-benefit analysis. The Court did find, however, that there was some inconsistency between existing and "new" standards in their respective attainment schedules. Such attainment-planning schedule inconsistencies centered mainly on the 8-hour ozone standard. EPA subsequently agreed to downgrade the attainment designation for a large number of communities to "non-attainment" for the 8-hour ozone standard. Because the South Coast Air Basin is far from attaining the 1-hour federal standard, the 8-hour ozone non-attainment designation will not substantially alter the attainment planning process. The compliance deadline for the 8-hour ozone standard has been extended to 2021.

# Table 1
# Ambient Air Quality Standards

| Pollutant | Averaging Time | California Standards | | Federal Standards | | |
|---|---|---|---|---|---|---|
| | | Concentration | Method | Primary | Secondary | Method |
| Ozone ($O_3$) | 1 Hour | 0.09 ppm (180 µg/m³) | Ultraviolet Photometry | 0.12 ppm (235 µg/m³) | Same as Primary Standard | Ultraviolet Photometry |
| | 8 Hour | – | | 0.08 ppm (157 µg/m³) | | |
| Respirable Particulate Matter ($PM_{10}$) | 24 Hour | 50 µg/m³ | Gravimetric or Beta Attenuation | 150 µg/m³ | Same as Primary Standard | Inertial Separation and Gravimetric Analysis |
| | Annual Arithmetic Mean | 20 µg/m³ | | 50 µg/m³ | | |
| Fine Particulate Matter ($PM_{2.5}$) | 24 Hour | No Separate State Standard | | 65 µg/m³ | Same as Primary Standard | Inertial Separation and Gravimetric Analysis |
| | Annual Arithmetic Mean | 12 µg/m³ | Gravimetric or Beta Attenuation | 15 µg/m³ | | |
| Carbon Monoxide (CO) | 8 Hour | 9.0 ppm (10 mg/m³) | Non-Dispersive Infrared Photometry (NDIR) | 9 ppm (10 mg/m³) | None | Non-Dispersive Infrared Photometry (NDIR) |
| | 1 Hour | 20 ppm (23 mg/m³) | | 35 ppm (40 mg/m³) | | |
| | 8 Hour (Lake Tahoe) | 6 ppm (7 mg/m³) | | – | – | – |
| Nitrogen Dioxide ($NO_2$) | Annual Arithmetic Mean | – | Gas Phase Chemiluminescence | 0.053 ppm (100 µg/m³) | Same as Primary Standard | Gas Phase Chemiluminescence |
| | 1 Hour | 0.25 ppm (470 µg/m³) | | – | | |
| Lead | 30-Day average | 1.5 µg/m³ | Atomic Absorption | – | – | – |
| | Calendar Quarter | – | | 1.5 µg/m³ | Same as Primary Standard | High Volume Sampler and Atomic Absorption |
| Sulfur Dioxide ($SO_2$) | Annual Arithmetic Mean | – | Ultraviolet Fluorescence | 0.030 ppm (80 µg/m³) | – | Spectrophotometry (Pararosaniline Method) |
| | 24 Hour | 0.04 ppm (105 µg/m³) | | 0.14 ppm (365 µg/m³) | – | |
| | 3 Hour | – | | – | 0.5 ppm (1,300 µg/m³) | |
| | 1 Hour | 0.25 ppm (655 µg/m³) | | – | – | |
| Visibility Reducing Particles | 8 Hour | Extinction coefficient of 0.23 per kilometer–visibility of 10 miles or more (0.07–30 miles or more for Lake Tahoe) due to particles when relative humidity is less than 70 percent. Method: Beta Attenuation and Transmittance through Filter Tape. | | No Federal Standards | | |
| Sulfates | 24 Hour | 25 µg/m³ | Ion Chromatography | | | |
| Hydrogen Sulfide | 1 Hour | 0.03 ppm (42 µg/m³) | Ultraviolet Fluorescence | | | |
| Vinyl Chloride | 24 Hour | 0.01 ppm (26 µg/m³) | Gas Chromatography | | | |

## Table 2

## Health Effects of Major Criteria Pollutants

| Pollutants | *Sources* | Primary Effects |
|---|---|---|
| Carbon Monoxide (CO) | • Incomplete combustion of fuels and other carbon-containing substances, such as motor exhaust.<br>• Natural events, such as decomposition of organic matter. | • Reduced tolerance for exercise.<br>• Impairment of mental function.<br>• Impairment of fetal development.<br>• Death at high levels of exposure.<br>• Aggravation of some heart diseases (angina). |
| Nitrogen Dioxide ($NO_2$) | • Motor vehicle exhaust.<br>• *High temperature stationary combustion.*<br>• Atmospheric reactions. | • Aggravation of respiratory illness.<br>• Reduced visibility.<br>• Reduced plant growth.<br>• Formation of acid rain. |
| Ozone ($O_3$) | • Atmospheric reaction of organic gases with nitrogen oxides in sunlight. | • Aggravation of respiratory and cardiovascular diseases.<br>• Irritation of eyes.<br>• Impairment of cardiopulmonary function.<br>• Plant leaf injury. |
| Lead (Pb) | • Contaminated soil. | • Impairment of blood function and nerve construction.<br>• Behavioral and hearing problems in children. |
| Fine Particulate Matter (PM-10) | • Stationary combustion of solid fuels.<br>• Construction activities.<br>• Industrial processes.<br>• Atmospheric chemical reactions. | • Reduced lung function.<br>• Aggravation of the effects of gaseous pollutants.<br>• Aggravation of respiratory and cardio respiratory diseases.<br>• Increased cough and chest discomfort.<br>• Soiling.<br>• Reduced visibility. |
| Fine Particulate Matter (PM-2.5) | • Fuel combustion in motor vehicles, equipment, and industrial sources.<br>• Residential and agricultural burning.<br>• Industrial processes.<br>• Also, formed from photochemical reactions of other pollutants, including NOx, sulfur oxides, and organics. | • Increases respiratory disease.<br>• Lung damage.<br>• Cancer and premature death.<br>• Reduces visibility and results in surface soiling. |
| Sulfur Dioxide ($SO_2$) | • Combustion of sulfur-containing fossil fuels.<br>• Smelting of sulfur-bearing metal ores.<br>• Industrial processes. | • Aggravation of respiratory diseases (asthma, emphysema).<br>• Reduced lung function.<br>• Irritation of eyes.<br>• Reduced visibility.<br>• Plant injury.<br>• Deterioration of metals, textiles, leather, finishes, coatings, etc. |

Source: California Air Resources Board, 2002.

Analysis of the most current data on the health effects of inhalation of fine particulate matter prompted the California Air Resources Board (ARB) to recommend adoption of the statewide PM-2.5 standard that is more stringent than the federal standard. This standard was adopted on June 20, 2002. The State PM-2.5 standard is more of a goal in that it does not have specific attainment planning requirements like a federal clean air standard. The state standard became enforceable in 2003 when it was incorporated into the California Health and Safety Code. Because of the strong evidence that chronic ozone exposure is more harmful than short-term hourly levels, the ARB has proposed adoption of a new ozone standard. The new standard would mirror the federal longer-term (8 hour) exposure limit. Adoption of the new state standard is anticipated for 2005 with implementation beginning in 2006.

## Baseline Air Quality

Existing and probable future levels of air quality in Newport Beach can be best inferred from ambient air quality measurements conducted by the South Coast Air Quality Management District (SCAQMD) at its Costa Mesa and El Toro monitoring stations. These stations measure both regional pollution levels such as dust (particulates) and smog, as well as levels of primary vehicular pollutants such as carbon monoxide.

Table 3 summarizes the last seven years of the published data from a composite of gaseous species monitored at Costa Mesa and particulates at El Toro (there are no particulate data available from Costa Mesa). The following conclusions can be drawn from these data:

1. Photochemical smog (ozone) levels periodically sometimes exceed standards. The frequency of first-stage smog episodes, as evidence of extremely degraded air quality, is, however, almost non-existent in coastal Orange County with the last first-stage smog alert as far back as 1985.

2. Annual maximum ozone levels tend to reflect some annual variations in dispersion patterns that cause concentrated airflow from more developed areas of the air basin to be carried into the coastal area during some years, while only the fringe of the basin-wide "urban plume" reaches the coastal corridor in others. Since 1993, the federal one hour standard of 0.12 ppm has not been exceeded.

3. Measurements of carbon monoxide at the Costa Mesa station reflect the history of nocturnal air mass that has passed over intensively developed areas in Central Orange County before following the Santa Ana River drainage toward the ocean. The last violation of the 8-hour CO standard in Costa Mesa was in 1992. The project area has likely been in attainment for CO even longer. The data suggests that baseline CO levels in Newport Beach are generally healthful and can accommodate a reasonable level of additional traffic emissions before any adverse air quality effects would be expected.

4. PM-10 levels as measured at El Toro, periodically exceed the state standard, but no measurements in excess of the national particulate standard has been recorded in the last seven years. With more of the air having a marine origin in Newport Beach than in El Toro area, the frequency of violations of the PM-10 standard near the proposed project site is likely to be slightly lower than that suggested in Table 3.

## Table 3

### Project Area Air Quality Monitoring Summary (1995 - 2001)
**(Number of days standards were exceeded, and maximum levels during such violations)**

| Pollutant/Standard | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 |
|---|---|---|---|---|---|---|---|
| **Ozone** | | | | | | | |
| 1-Hour > 0.09 ppm | 1 | 5 | 1 | 1 | 1 | 0 | 4 |
| 1-Hour > 0.12 ppm | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8-Hour > 0.08 ppm | 1 | 4 | 0 | 1 | 0 | 0 | 1 |
| Max. 1-Hour Conc. (ppm) | 0.10 | 0.12 | 0.10 | 0.10 | 0.10 | 0.09 | 0.11 |
| **Carbon Monoxide** | | | | | | | |
| 1-Hour > 20. ppm | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8-Hour > 9. ppm | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Max. 1-Hour Conc. (ppm) | 7. | 9. | 8. | 8. | 6. | 5. | xx |
| Max. 8-Hour Conc. (ppm) | 5.8 | 7.0 | 6.4 | 6.3 | 4.6 | 4.3 | 5.9 |
| **Nitrogen Dioxide** | | | | | | | |
| 1-Hour > 0.25 ppm | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Max. 1-Hour Conc. (ppm) | 0.12 | 0.12 | 0.12 | 0.11 | 0.08 | 0.11 | 0.11 |
| **Inhalable Particulates (PM-10)** | | | | | | | |
| 24-Hour > 50 $\mu g/m^3$ | 4/56 | 6/59 | 6/60 | 2/60 | 3/57 | 5/60 | 2/xx |
| 24-Hour > 150 $\mu g/m^3$ | 0/56 | 0/59 | 0/60 | 0/60 | 0/57 | 0/60 | 0/xx |
| Max. 24-Hour Conc. ($\mu g/m^3$) | 86. | 70. | 111. | 98. | 60. | 80. | 64. |
| **Ultra-Fine Particulates (PM-2.5)** | | | | | | | |
| 24-Hour > 65 $\mu g/m^3$ | - | - | 0/65 | 1/119 | 0/102 | 0/119 | 0/xxx |
| Max. 24-Hour Conc. ($\mu g/m^3$) | - | - | 57. | 95. | 53. | 58. | 51. |

Note: Entries shown as ratios = samples exceeding standards/samples taken. xx = Data not available.
xxx = Data not available.

Source: South Coast Air Quality Management District, Costa Mesa Station for gaseous species; El Toro Station for particulate pollutants up to 1999, Mission Viejo from 2000-2003.

## Air Quality Management Planning

The Federal Clean Air Act (1977 Amendments) required that designated agencies in any area of the nation not meeting national clean air standards must prepare a plan demonstrating the steps that will bring the area into compliance with all national standards by December 31, 1987. The South Coast Air Basin (SCAB) could not meet the deadline for ozone, nitrogen dioxide, carbon monoxide, or PM-10. In the SCAB, the agencies designated by the governor to develop regional air quality plans are the SCAQMD and the Southern California Association of Governments (SCAG). The two agencies first adopted the Air Quality Management Plan (AQMP) in 1979 and revised it several times subsequently as earlier attainment forecasts were shown to be overly optimistic.

In 1988, because of considerable uncertainty in Federal Clean Air Act reauthorization, the California Legislature enacted the California Clean Air Act (CCAA). The CCAA requires that regional emissions be reduced by 5 percent per year until attainment can be demonstrated. In July 1991, the SCAQMD adopted a revised AQMP that was designed to meet the CCAA requirements. The 1991 AQMP deferred the attainment date to 2010, consistent with the 1990 Federal Clean Air Act.

The 1990 Federal Clean Air Act Amendments (CAAA) required that all states with air basins with "serious" or worse ozone problems submit a revision to the State Implementation Plan (SIP). The 1991 AQMP was modified/adapted and submitted as the SCAB portion of the SIP. The 1991 SIP submittal estimated that an 85 percent basin-wide reduction in volatile organic compound (VOC) emissions and a 59 percent reduction in oxides of nitrogen (NOx) between 1990 to 2010 was needed to meet federal clean air standards. About 40 percent of these reductions were to come from existing pollution control programs. The rest were to come from new rules, technologies or other reduction programs.

In 1996, EPA approved the 1994 submittal of the SCAB portion of the SIP. The plan was finally approved after considerable debate on the contingency measures that should be implemented if progress is not as rapid as anticipated in the 1994 SIP. The CAAA required that an updated plan be submitted by February 8, 1997 that included attainment plans for all pollutants exceeding federal standards. The CCAA requires an update of the state-mandated clean air plan every three years. The last update was completed December 31, 2003.

An updated 1997 AQMP to meet federal requirements was locally adopted. The California Air Resources Board (ARB) forwarded this plan on to EPA for its consideration and recommended approval. The 1997 AQMP was designed to meet both federal (EPA) and state (ARB) air quality planning guidelines. Components of the 1997 plan update included:

- Demonstration of attainment for ozone, CO, and PM-10.
- Updated emissions inventories (1993 base year) of VOC, NOx, CO, SOx and PM-10.
- Emissions budgets for future years of the inventoried compounds.
- An updated pollution control strategy.
- Contingency measures if the plan as presently proposed fails to meet stated timetables.

Additional research and photochemical computer modeling, as well as improved emissions estimates, now suggest that formerly predicted emissions reductions required to meet standards need not be quite as severe as thought earlier. Table 4 summarizes the currently proposed regional

## Table 4

### South Coast Air Basin Attainment Plan
(Emissions in tons/day)

| | ROG | NOx | CO |
|---|---|---|---|
| **Current Inventory**[a] | | | |
| Stationary + Areawide | 304 | 103 | 246 |
| On-Road Mobile | 276 | 581 | 2,705 |
| Off-Road Mobile | 131 | 286 | 1,003 |
| **TOTAL** | **710** | **970** | **3,953** |
| **2010 Forecast**[b] | | | |
| Stationary | 296 | 89 | 217 |
| On-Road Mobile | 212 | 434 | 2,048 |
| Off-Road Mobile | 122 | 257 | 1,094 |
| **TOTAL** | **630** | **780** | **3,359** |
| **2020 Forecast**[b] | | | |
| Stationary | 340 | 90 | 234 |
| On-Road Mobile | 130 | 206 | 1,097 |
| Off-Road Mobile | 114 | 241 | 1,104 |
| **TOTAL** | **584** | **537** | **2,435** |

[a]2005 Base Year.
[b]With current emissions reduction programs and adopted growth forecasts.

Source: California Air Resources Board, The 2005 California Almanac of Emission & Air Quality.

attainment planning for ozone (ROG and NOx) and for carbon monoxide (CO). Further emissions reductions of around 18 percent for ROG, 45 percent for NOx and 38 percent for CO are anticipated from the currently proposed AQMP update.

The Draft 1997 AQMP was challenged by several environmental organizations as not being consistent with the 1990 CAAA on rates of progress toward attaining the ozone standard. The Ninth Circuit Court found for these organizations. A 1999 Amendment to the proposed SIP Revisions was developed that accelerated the schedule for a number of new SCAQMD rules and regulations. The 1999 SIP Amendment complied with the court-ordered acceleration of the development of new rules and regulations designed to bring the air basin into compliance. The 1999 SIP Amendment was approved by EPA in 2000.

A new clean air plan has been approved locally (SCAQMD/SCAG) and at the state level (ARB). It was forwarded to EPA and has recently become the adopted SIP Revision. The plan continues most emissions reductions programs, but also points out that some emissions have been undercounted and incorrectly reported, and that additional control measures must be implemented if the federal attainment deadlines for clean air standards are to be met. The recent ozone trend toward increased numbers of violations of standards and higher absolute maxima than at the turn of this decade is particularly worrisome. A flattening of the improvement trend was anticipated, but the trend reversal suggests that a "backsliding" process is in motion. The likely failure to meet further near-term improvement targets may require invoking contingency measures that had been hoped as not necessary.

With the conversion of the federal 1-hour ozone standard to an 8-hour standard, a new attainment timeline will likely be adopted. EPA's proposed attainment scheduled for the South Coast Air Basin is 17 years to 2021. The progress mile-posts would be spread out over a longer period than for the current 2010 attainment deadline for the 1-hour standard.

A residential development such as the Santa Barbara Condominium residential project relates to the air quality planning process through the growth forecasts that were used as inputs into the regional transportation model. If a proposed development is consistent with those growth forecasts, and if all available emissions reduction strategies are implemented as effectively as possible on a project-specific basis, then the air quality impact on a regional basis may be considered as less-than-significant. The South Coast AQMD, while acknowledging that the AQMP is a growth-accommodating document, recommends that project air quality impacts be analyzed independent of planning consistency. Inconsistency as to project scope or schedule is considered a basis for a finding of impact significance. The converse, however, i.e., project/clean air plan consistency, is not considered an adequate basis to support a finding of a less-than-significant impact.

## AIR QUALITY IMPACT

Residential developments such as those proposed for the Santa Barbara Condominium project in Newport Beach potentially impact air quality almost exclusively through increased automotive emissions. Any single project typically does not cause enough traffic and associated air pollutants to be generated as to individually threaten clean air standards. It is the cumulative effect of hundreds of such developments that cause the small incremental impact from any one development to become cumulatively significant. Minor secondary emissions during construction, from increased fossil-fueled energy utilization and from small miscellaneous sources will also be generated, but these are usually much smaller in both duration and volume than the mobile source emissions.

### Standards of Significance

Many air quality impacts that result from the dispersed mobile sources, i.e., the dominant pollution generators in the basin, often occur hours later and miles away after photochemical processes have converted the primary exhaust pollutants into secondary contaminants such as ozone. The incremental regional air quality impact of an individual project is generally immeasurably small. The SCAQMD has therefore developed suggested significance thresholds based on the volume of pollution emitted rather than on actual ambient air quality because the direct air quality impact of a project is not quantifiable on a regional scale. Any projects in the SCAB with daily emissions that exceed any of the following thresholds are recommended by the SCAQMD to be considered individually and cumulatively significant:

**SCAQMD Emissions Significance Thresholds**
**(pounds per day)**

| Pollutant | Construction | Operations |
|---|---|---|
| ROG | 75 | 55 |
| NOx | 100 | 55 |
| CO | 550 | 550 |
| PM-10 | 150 | 150 |
| SOx | 150 | 150 |

Source: SCAQMD CEQA Air Quality Handbook, November, 1993 Rev.

## Additional Indicators

In its CEQA Handbook, the SCAQMD also states that additional indicators should be used as screening criteria to determine the need for further analysis with respect to air quality. The additional indicators are as follows:

- Project could interfere with the attainment of the Federal or State ambient air quality standards by either violating or contributing to an existing or projected air quality violation.
- Project could result in population increases within the regional statistical area which would be in excess of that projected in the AQMP.
- Project could generate vehicle trips that cause a CO hot spot.
- Project might have the potential to create or be subjected to objectionable odors.
- Project could have hazardous materials on site and could result in an accidental release of air toxic emissions.
- Project could emit an air toxic contaminant regulated by District rules or that is on a federal or State air toxic list.
- Project could involve disposal of hazardous waste.
- Project could be occupied by sensitive receptors near a facility that emits air toxics or near CO hot spots.
- Project could emit carcinogenic air contaminants that could pose a cancer risk.

Residential land uses, such as those proposed for the Santa Barbara Condominium project, are not known to trigger the above secondary significance criteria. Potential impact significance thus relates mainly to the SCAQMD CEQA Handbook numerical emissions thresholds identified above.

For PM-2.5 exhaust emissions, recently adopted policies require the gradual conversion of delivery fleets to diesel alternatives, or the use of "clean" diesel if emissions are demonstrated to be as low as those from alternative fuels. Because health risks from toxic air contaminants (TACs) are cumulative over an assumed 70-year lifespan, measurable off-site public health risk from TAC exposure would occur for only a brief portion early in project lifetime, and only in dilute quantity.

## Project-Related Sources of Potential Impact

Intensification of land uses in the Orange County area potentially impacts ambient air quality on two scales of motion. As cars drive throughout Southern California, the small incremental contribution to the basin air pollution burden from any single vehicle is added to that from several million other vehicles. The impact from the Santa Barbara Condominium development, even if it generates a significant number of new vehicle trips, is very small on a regional scale. Basin-wide air quality impacts are, therefore, addressed in terms of project compatibility with regional air quality plans. If any given project or plan has been properly incorporated into basin-wide growth projections which are the basis for regional air quality/ transportation planning, then there will be no significant basin-wide impact because of unanticipated growth.

Locally, changes in the location of any collection of automotive sources, or changes in the number of vehicles or travel speeds may impact the micro-scale air quality around any given development site. Traffic increases not only contribute air pollutants in direct proportion to their cumulative percentage of traffic volume growth, but they may slow all existing traffic to slower, more inefficient travel speeds. The development traffic/air quality impact is thus potentially compounded.

Temporary construction activity emissions will occur during project build-out. Such emissions include on-site generation of dust and equipment exhaust, and off-site emissions from construction employee commuting and/or trucks delivering building materials.

Construction activity emissions are difficult to quantify, since the exact type and amount of equipment that will be used or the acreage that may be disturbed on any given day in the future is not known with any reasonable certainty. The emphasis in environmental documents relative to construction activity emission impacts has therefore been to minimize the emissions as fully as possible through comprehensive emissions control even if the exact amount of emissions cannot be precisely quantified.

## Construction Activity Impacts

Construction has traditionally been considered mainly a source of potential nuisance from dust or odors such that these temporary emissions are typically categorized as insignificant in many air quality impact analyses. However, because construction activities are substantial contributors to the basin-wide air pollution burden, they have become increasingly important in the regional air pollution attainment strategy. Regulatory programs such as SCAQMD Rule 403 have been strengthened, and CEQA-based discretionary emissions reduction measures for construction are actively encouraged and pursued.

Dust is normally the primary concern during construction of new buildings and amenities. Dust includes small inhalable particulate matter, as well as larger diameter particles that rapidly settle out on any surface adjacent to the source. Because such emissions are not amenable to collection and discharge through a controlled source, they are called "fugitive" emissions.

Dust (PM-10) emission rates vary as a function of many parameters (soil silt, soil moisture, wind speed, area disturbed, number of vehicles, depth of disturbance or excavation, etc.). Regulatory agencies typically use one universal factor based on the area disturbed assuming that all other input parameters into emission rate prediction fall into mid-range average values. The SCAQMD, in its 1993 "CEQA Air Quality Handbook," estimates daily PM-10 emissions during construction to be 26.4 pounds per day per acre disturbed when "standard" dust control procedures required by SCAQMD Rule 403 are used. Upgraded dust control procedures will reduce the average daily PM-10 emission rate to as low as around 10.0 pounds per day when a highly aggressive control program is implemented.

Use of "standard" daily PM-10 emission factors allows for the simultaneous disturbance of around 5.7 acres to generate a potentially significant emission level of 150 pounds per day determined to be

potentially significant in the SCAQMD Handbook (150 ÷ 26.4 = 5.7). If strongly enhanced dust control procedures are implemented, around 15 acres of the project site could be under simultaneous disturbance to maintain a less-than-significant daily PM-10 emission rate.

The proposed project site occupies approximately 4.25 acres of land currently developed with tennis courts, along the southerly side of Santa Barbara Drive, between Jamboree Road and Newport Center Drive. It is unknown whether the entire site will undergo simultaneous disturbance. The California Air Resources Board (CARB) emissions computer model URBEMIS2002 predicts that the maximum daily disturbance "footprint" for the proposed land uses will be 1.0 acres. Calculated PM-10 emissions have been calculated with the application of "standard" dust control, and with the application of enhanced dust control measures. A comparison of PM-10 dust emissions for the entire site and the predicted disturbance area are as follows (pounds/day):

| Disturbance Area | With Standard Dust Control | With Best Available Control Measures |
|---|---|---|
| Entire Site: 4.25 acres | 1122. pounds/day* | 42.5 pounds/day* |
| Predicted Area: 1.0 acres | 26.4 pounds/day* | 10.0 pounds/day* |

*Below the 150-pound/day suggested significance threshold.

As shown above, limiting the grading footprint area and/or use of best available control measures (BACMs) are not required to achieve a less-than-significant dust (PM-10) emission rate. However, the non-attainment status of the air basin for PM-10 dictates that all reasonably available control measures be implemented. Use of BACMs during construction is therefore recommended even if thresholds are not exceeded.

A new federal clean air standard for ultra-fine diameter particulate matter of 2.5 microns or less (called "PM-2.5") was promulgated in 1997. This standard is believed more closely tied to any adverse health effects from particulate inhalation. A baseline PM-2.5 level has not yet been established. However, construction activities are known to generate only very small amounts of PM-2.5 within their total particulate burden. Chemical analysis of airborne PM-2.5 in the South Coast Air Basin has found that only 5 to 10 percent of all PM-2.5 is in the form of "crustal material," i.e., soil particulate matter. For PM-10 dust, about one-third of the suspended fine particulate matter derives from soil disturbance. In the almost complete absence of PM-2.5 within the fugitive dust generated during grading and construction activities, project-related construction activities will not adversely impact PM-2.5 exposure in the City of Newport Beach area.

In addition to fine particles that remain suspended in the atmosphere semi-indefinitely, construction activities generate many larger particles with shorter atmospheric residence times. This dust is comprised mainly of large diameter inert silicates that are chemically non-reactive and are further readily filtered out by human breathing passages. These fugitive dust particles are therefore more of a potential soiling nuisance as they settle out on parked cars, outdoor furniture or landscape foliage rather than any adverse health hazard. Any dust nuisance potential will tend to be highly localized when a new tract is built in very close proximity to an already completed development.

Exhaust emissions will result from on- and off-site heavy equipment during grading. Emissions will also be generated during finish construction, especially during the application of paints or other coatings. The types and numbers of equipment will vary among contractors such that such emissions cannot be quantified with certainty. During grading, the following equipment fleet has been assumed to be utilized as a basis for estimating maximum daily equipment exhaust emissions:

1 Excavator
1 Rubber Tire Loader
1 Tractor/Loader/Backhoe
1 Other Equipment
1 Trencher

truck 90 trips per day

The CARB's URBEMIS2002 computer model was used to estimate daily emissions during grading and finish construction with the following results (pounds/day):

| Activity | ROG | NOx | CO | $SO_2$ | PM-10 Total | PM-10 Equipment Exhaust | PM-10 Dust |
|---|---|---|---|---|---|---|---|
| Grading | 7.0 | 48.7 | 57.1 | 0.0 | 12.1 | 2.1 | 10.0 |
| Finish Work | 143.1[a] | 30.8 | 35.7 | 0.0 | 1.4 | 1.3 | 0.1 |
| SCAQMD Threshold | 75. | 100. | 550. | 150. | 150. | - | - |

[a] Exceeds threshold due to application of paints and coatings.

During finish work, application of paintings and coatings can create ROG emissions exceeding the SCAQMD threshold. This estimate is based upon every unit completed in a single month (22 working days). The actual project build-out will be phased over a much longer period. Nevertheless, use of available emissions reduction measures are recommended to reduce ROG emissions. Emissions minimization can be accomplished as follows:

- Use pre-coated building materials
- Use high pressure-low volume (HPLV) paint applicators with 50 percent efficiency
- Use lower volatility paint not exceeding 100 grams of ROG per liter

Use of the above measures can reduce emissions from architectural coatings to perhaps 1/3 of their calculated values. Daily emissions can be reduced to about 48 pounds per day (143.1 ÷ 3 = 47.7). This is less than the identified daily significance threshold. With the above recommended measures, ROG emissions from paints and coatings can likely be maintained at less-than-significant levels.

Construction activity air quality impacts occur mainly in close proximity to individual disturbance areas. There may, however, be some "spill-over" into the surrounding community. That spillover may be physical as vehicles drop or carry out dirt or silt is washed into public streets. Passing non-project vehicles then pulverize the dirt to create off-site dust impacts. Spill-over could also occur

via congestion effects. Construction may entail roadway encroachment, detours, lane closures and competition between construction vehicles (trucks and contractor employee commuting) and ambient traffic for available roadway capacity. Emissions controls require good housekeeping procedures and a construction traffic management plan that maintains such "spill-over" effects at a less-than-significant level.

## Operational Impacts

There are 330 projected 'new' vehicle trips that will be generated at project completion. For typical local commuter trips in Orange County, averaging 10 miles one way, additional vehicle travel from project implementation will be about 3,300 vehicle miles traveled (VMT) per day. The California ARB land use and air pollution emissions computer model URBEMIS2002 was run for a worst-case project build-out of year 2007. The project-related mobile source emissions burden, along with a comparison of SCAQMD recommended significance thresholds, is shown in Table 5. Thresholds will not be exceeded and all pollutant emissions are below significance levels by a wide margin of safety.

## Micro-Scale Impact Analysis

In addition to regional air quality concerns that focus on the photochemical conversion of air pollution emissions to more harmful forms, vehicular exhaust may impact air quality immediately adjacent to the roadway travel lanes. Such impacts occur during periods of maximum traffic congestion and minimum atmospheric dispersion.

As seen in Table 5, the carbon monoxide impacts from the proposed project are only nineteen (19) percent of the significance threshold. Any associated micro-scale air quality impacts would be expected to be minimal. In order to determine whether any possible traffic congestion may contribute to localized air pollution standard violations, a screening procedure based upon the California roadway dispersion model CALINE4 was run at those intersections near the project site area with the most degraded levels-of-service (LOS). Carbon monoxide (CO) was used as an indicator pollutant to determine "hot spot" potential. Rush hour traffic was combined with minimum dispersion conditions in order to create the theoretical worst-case impact estimate. The result of these calculations is shown in Table 6.

Calculations were performed for three traffic scenarios, including:

Traffic Phasing Ordinance (TPO) Compliance
California Environmental Quality Act (CEQA) Consistency
General Plan (GPA) Build-out

The proposed project will add negligibly to any localized CO exposures. The maximum project-related CO increment is + 0.1 ppm (0.5 percent of the 1-hour standard) for the CEQA-based analysis. The project increment is less than 0.05 ppm (0.25 percent of the most stringent CO standard) for the TPO or GPA traffic scenarios.

**Table 5**

**Average Daily Project Mobile Source**
**Air Pollution Emissions**
**(pounds/day)**

| Condominium Residential Uses | ROG | NOx | CO | SOx | PM-10 |
|---|---|---|---|---|---|
| Area Source Emissions | 4.1 | 0.6 | 1.4 | 0.0 | 0.0 |
| Vehicle Source Emissions | 8.5 | 9.4 | 101.8 | 0.1 | 9.1 |
| **TOTAL** | **12.6** | **10.0** | **103.2** | **0.1** | **9.1** |
| SCAQMD Threshold | 55. | 55. | 550. | 150. | 150. |
| Exceeds Threshold? | No | No | No | No | No |
| Percent of Threshold | 23 | 18 | 19 | <1 | 6 |

Source: URBEMIS2002 computer model, Output in Appendix

## Table 6

### Micro-scale Impact Assessment
### (1-Hour CO concentrations [ppm] above background levels)

| A.M. Peak Hour | TPO Analysis | | CEQA Analysis | | GPA Analysis | |
|---|---|---|---|---|---|---|
| **Intersection:** | **Existing + Approved** | **Existing + Approved + Project** | **Existing + Approved + Cumulative** | **Existing + Approved + Cumulative + Project** | **Existing + Approved + Cumulative** | **Existing + Approved + Cumulative + Project** |
| **Jamboree Road:** | | | | | | |
| Eastbluff Drive | 4.6 | 4.6 | 6.2 | 6.2 | - | - |
| Coast Highway | - | - | - | - | 8.8 | 8.8 |
| **MacArthur Boulevard:** | | | | | | |
| Ford Road | 6.7 | 6.7 | 8.4 | 8.4 | 7.7 | 7.7 |
| San Joaquin Hills Road | 4.6 | 4.6 | 5.0 | 5.0 | 6.4 | 6.4 |

| P.M. Peak Hour | TPO Analysis | | CEQA Analysis | | GPA Analysis | |
|---|---|---|---|---|---|---|
| **Intersection:** | **Existing + Approved** | **Existing + Approved + Project** | **Existing + Approved + Cumulative** | **Existing + Approved + Cumulative + Project** | **Existing + Approved + Cumulative** | **Existing + Approved + Cumulative + Project** |
| **Jamboree Road:** | | | | | | |
| Eastbluff Drive | 3.1 | 3.1 | 4.3 | 4.4 | - | - |
| Coast Highway | - | - | - | - | 8.9 | 8.9 |
| **MacArthur Boulevard:** | | | | | | |
| Ford Road | 4.2 | 4.2 | 5.9 | 6.0 | 16.1 | 16.1 |
| San Joaquin Hills Road | 6.0 | 6.0 | 6.6 | 6.6 | 11.0 | 11.0 |

TPO = Traffic Phasing Ordinance
CEQA = California Environmental Quality Act
GPA = General Plan Amendment

Maximum background one-hour CO levels in Newport Beach are approximately 4 ppm. The worst-case p.m. peak hour local contribution under the GPA analysis is 16.1 ppm at MacArthur Boulevard and Ford Road because this intersection would operate at LOS = F. The sum of background plus local CO levels could exceed the one-hour CO standard. The cumulative impact from the project is negligible, however, because:

a. The project contribution is immeasurably small,
b. The GPA build-out condition will not be achieved until well into the future when cars are cleaner whereas the analysis was conducted assuming a 2005 traffic fleet, and,
c. GPA build-out causing LOS = F conditions may not be achieved. Non-GPA bould-out scenarios predict no violations of CO standards.

There are thus no "hot spot" CO impacts (individually or cumulatively) associated with implementation of the Santa Barbara Condominium residential project in the City of Newport Beach.

## IMPACT MITIGATION

Operational emissions from project-related traffic will not exceed suggested SCAQMD significance thresholds.

Air quality impacts during construction could temporarily exceed significance threshold levels for ROG emissions in the absence of any mitigation measures.

A mitigation plan for dust and air pollution should be developed to insure that scheduling and pollution management practices are followed as assumed in the air quality impact analysis. Even if the construction activity PM-10 emissions are maintained below SCAQMD thresholds, any increase in air pollution in a non-attainment area should be considered as an adverse impact and reduced to the extent reasonable and feasible. Emissions from construction activities should therefore be minimized where possible. Project conditions for approval should incorporate emissions control requirements to address these construction impact concerns. SCAQMD Rule 403 requires use of at least one dust control measure. An enhanced program incorporating multiple measures is recommended, including:

1. During grading activities, any exposed soil areas shall be watered twice per day. On windy days or when fugitive dust can be observed leaving the project site, additional applications of water shall be applied to maintain a minimum 12 percent moisture content as defined by SCAQMD Rule 403. Under windy conditions where velocities are forecast to exceed 25 miles per hour (as ascertained by phone calls to the SCAQMD), all ground disturbing activities shall be halted until winds that are forecast to abate below this threshold.

2. The project shall comply with regional rules such as SCAQMD Rules 402 and 403, which would assist in reducing short-term air pollutant emissions. Rule 403 requires that fugitive dust be controlled with best available control measures so that the presence of such dust does not remain visible in the atmosphere beyond the property line of the emission source. Rule 402 requires dust suppression techniques be implemented to prevent fugitive dust from creating a nuisance offsite. These dust suppression techniques are summarized as follows:

    a. Portions of the construction site to remain inactive longer than a period of three months shall be seeded and watered until grass cover is grown or otherwise stabilized in a manner acceptable to the City.

    b. All on-site roads shall be paved as soon as feasible or watered periodically or chemically stabilized.

    c. All material transported offsite shall be either sufficiently watered or securely covered to prevent excessive amounts of dust.

    d. The area disturbed by clearing, grading, earthmoving, or excavation operations shall be minimized at all times.

3. All vehicles on the construction site shall travel at speeds less than 15 miles per hour.

4. All material stockpiles subject to wind erosion during construction activities, that will not be utilized within three days, shall be covered with plastic, an alternative cover deemed equivalent to plastic, or sprayed with a nontoxic chemical stabilizer.

5. Where vehicles leave the construction site and enter adjacent public streets, the streets shall be swept daily or washed down at the end of the work day to remove soil tracked onto the paved surface. Any visible track-out extending for more than fifty (50) feet from the access point shall be swept or washed within thirty (30) minutes of deposition.

6. All diesel-powered vehicles and equipment shall be properly operated and maintained.

7. All diesel-powered vehicles and gasoline-powered equipment shall be turned off when not in use for more than five (5) minutes.

8. The construction contractor shall utilize electric or natural gas-powered equipment instead of gasoline or diesel-powered engines, where feasible.

9. As much as possible, the construction contractor shall time the construction activities so as not to interfere with peak hour traffic. To minimize obstruction of through traffic lanes adjacent to the site, a flagperson shall be retained to maintain safety adjacent to existing roadways, if necessary.

10. The construction contractor shall support and encourage ridesharing and transit incentives for the construction crew.

11. The construction contractor shall utilize as much as possible pre-coated/natural colored building materials. Water-based or low VOC coatings shall be used that comply with the most stringent SCAQMD Rule 1113 limits. Spray equipment with high transfer efficiency, such as the high volume-low pressure (HVLP) spray method, or manual coatings application such as paint brush hand roller, trowel, spatula, dauber, rag, or a sponge shall be used to reduce VOC emissions, where practical.

12. If construction equipment powered by alternative fuel sources (LPG/CNG) is available at comparable cost, the developer shall specify that such equipment be used during all construction activities on the project site.

13. The developer shall require the use of particulate filters on diesel construction equipment if use of such filters is demonstrated to be cost-competitive for use on this project.

# APPENDIX

## URBEMIS2002 Computer Model Output

## Project Build-out Year 2007

URBEMIS 2002 For Windows 7.5.0

File Name: <Not Saved>
Project Name: Santa Barbara
Project Location: South Coast Air Basin (Los Angeles area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Pounds/Day - Summer)

CONSTRUCTION EMISSION ESTIMATES

| *** 2005 *** | ROG | NOx | CO | SO2 | PM10 TOTAL | PM10 EXHAUST | PM10 DUST |
|---|---|---|---|---|---|---|---|
| TOTALS (lbs/day,unmitigated) | 7.04 | 48.70 | 57.11 | 0.00 | 12.06 | 2.05 | 10.01 |

| *** 2006 *** | ROG | NOx | CO | SO2 | PM10 TOTAL | PM10 EXHAUST | PM10 DUST |
|---|---|---|---|---|---|---|---|
| TOTALS (lbs/day,unmitigated) | 143.10 | 30.83 | 35.72 | 0.00 | 1.41 | 1.35 | 0.06 |

AREA SOURCE EMISSION ESTIMATES

| | ROG | NOx | CO | SO2 | PM10 |
|---|---|---|---|---|---|
| TOTALS (lbs/day,unmitigated) | 4.08 | 0.61 | 1.42 | 0.00 | 0.00 |

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

| | ROG | NOx | CO | SO2 | PM10 |
|---|---|---|---|---|---|
| TOTALS (lbs/day,unmitigated) | 8.52 | 9.41 | 101.87 | 0.06 | 9.13 |

SUM OF AREA AND OPERATIONAL EMISSION ESTIMATES

| | ROG | NOx | CO | SO2 | PM10 |
|---|---|---|---|---|---|
| TOTALS (lbs/day,unmitigated) | 12.59 | 10.02 | 103.29 | 0.06 | 9.13 |

URBEMIS 2002 For Windows 7.5.0

File Name: <Not Saved>
Project Name: Santa Barbara
Project Location: South Coast Air Basin (Los Angeles area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
(Pounds/Day - Summer)

Construction Start Month and Year: June, 2005
Construction Duration: 12
Total Land Use Area to be Developed: 0 acres
Maximum Acreage Disturbed Per Day: 1 acres
Single Family Units: 0 Multi-Family Units: 79
Retail/Office/Institutional/Industrial Square Footage: 0

CONSTRUCTION EMISSION ESTIMATES UNMITIGATED (lbs/day)

| Source | ROG | NOx | CO | SO2 | PM10 TOTAL | PM10 EXHAUST | PM10 DUST |
|---|---|---|---|---|---|---|---|
| *** 2005*** | | | | | | | |
| Phase 1 - Demolition Emissions | | | | | | | |
| Fugitive Dust | - | - | - | - | 0.00 | - | 0.00 |
| Off-Road Diesel | 0.00 | 0.00 | 0.00 | - | 0.00 | 0.00 | 0.00 |
| On-Road Diesel | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Worker Trips | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Maximum lbs/day | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Phase 2 - Site Grading Emissions | | | | | | | |
| Fugitive Dust | - | - | - | - | 10.00 | - | 10.00 |
| Off-Road Diesel | 6.92 | 48.56 | 54.32 | - | 2.05 | 2.05 | 0.00 |
| On-Road Diesel | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Worker Trips | 0.12 | 0.14 | 2.79 | 0.00 | 0.01 | 0.00 | 0.01 |
| Maximum lbs/day | 7.04 | 48.70 | 57.11 | 0.00 | 12.06 | 2.05 | 10.01 |
| Phase 3 - Building Construction | | | | | | | |
| Bldg Const Off-Road Diesel | 4.16 | 31.85 | 30.89 | - | 1.45 | 1.45 | 0.00 |
| Bldg Const Worker Trips | 0.19 | 0.11 | 2.29 | 0.00 | 0.03 | 0.00 | 0.03 |
| Arch Coatings Off-Gas | 0.00 | - | - | - | - | - | - |
| Arch Coatings Worker Trips | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Asphalt Off-Gas | 0.00 | - | - | - | - | - | - |
| Asphalt Off-Road Diesel | 0.00 | 0.00 | 0.00 | - | 0.00 | 0.00 | 0.00 |
| Asphalt On-Road Diesel | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Asphalt Worker Trips | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Maximum lbs/day | 4.36 | 31.96 | 33.18 | 0.00 | 1.48 | 1.45 | 0.03 |
| Max lbs/day all phases | 7.04 | 48.70 | 57.11 | 0.00 | 12.06 | 2.05 | 10.01 |
| *** 2006*** | | | | | | | |
| Phase 1 - Demolition Emissions | | | | | | | |
| Fugitive Dust | - | - | - | - | 0.00 | - | 0.00 |
| Off-Road Diesel | 0.00 | 0.00 | 0.00 | - | 0.00 | 0.00 | 0.00 |
| On-Road Diesel | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Worker Trips | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Maximum lbs/day | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Phase 2 - Site Grading Emissions | | | | | | | |
| Fugitive Dust | - | - | - | - | 0.00 | - | 0.00 |
| Off-Road Diesel | 0.00 | 0.00 | 0.00 | - | 0.00 | 0.00 | 0.00 |
| On-Road Diesel | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Worker Trips | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Maximum lbs/day | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Phase 3 - Building Construction | | | | | | | |
| Bldg Const Off-Road Diesel | 4.16 | 30.67 | 31.63 | - | 1.35 | 1.35 | 0.00 |
| Bldg Const Worker Trips | 0.18 | 0.10 | 2.17 | 0.00 | 0.03 | 0.00 | 0.03 |
| Arch Coatings Off-Gas | 138.60 | - | - | - | - | - | - |
| Arch Coatings Worker Trips | 0.17 | 0.08 | 2.05 | 0.00 | 0.03 | 0.00 | 0.03 |
| Asphalt Off-Gas | 0.00 | - | - | - | - | - | - |
| Asphalt Off-Road Diesel | 0.00 | 0.00 | 0.00 | - | 0.00 | 0.00 | 0.00 |
| Asphalt On-Road Diesel | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Asphalt Worker Trips | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Maximum lbs/day | 143.10 | 30.83 | 35.72 | 0.00 | 1.41 | 1.35 | 0.06 |
| Max lbs/day all phases | 143.10 | 30.83 | 35.72 | 0.00 | 1.41 | 1.35 | 0.06 |

Phase 1 - Demolition Assumptions: Phase Turned OFF

Phase 2 - Site Grading Assumptions
Start Month/Year for Phase 2: Jun '05
Phase 2 Duration: 1.3 months
On-Road Truck Travel (VMT): 0
Off-Road Equipment

| No. | Type | Horsepower | Load Factor | Hours/Day |
|---|---|---|---|---|
| 1 | Excavators | 180 | 0.580 | 8.0 |
| 1 | Other Equipment | 190 | 0.620 | 8.0 |
| 1 | Rubber Tired Loaders | 165 | 0.465 | 8.0 |
| 1 | Tractor/Loaders/Backhoes | 79 | 0.465 | 8.0 |
| 1 | Trenchers | 82 | 0.695 | 8.0 |

Phase 3 - Building Construction Assumptions
Start Month/Year for Phase 3: Jul '05
Phase 3 Duration: 10.7 months
Start Month/Year for SubPhase Building: Jul '05
SubPhase Building Duration: 10.7 months
Off-Road Equipment

| No. | Type | Horsepower | Load Factor | Hours/Day |
|---|---|---|---|---|
| 1 | Cranes | 190 | 0.430 | 8.0 |
| 1 | Other Equipment | 190 | 0.620 | 8.0 |
| 1 | Tractor/Loaders/Backhoes | 79 | 0.465 | 8.0 |

Start Month/Year for SubPhase Architectural Coatings: Apr '06
SubPhase Architectural Coatings Duration: 1.1 months
Start Month/Year for SubPhase Asphalt: May '06
SubPhase Asphalt Duration: 0.5 months
Acres to be Paved: 0
Off-Road Equipment

| No. | Type | Horsepower | Load Factor | Hours/Day |
|---|---|---|---|---|

AREA SOURCE EMISSION ESTIMATES (Summer Pounds per Day, Unmitigated)

| Source | ROG | NOx | CO | SO2 | PM10 |
|---|---|---|---|---|---|
| Natural Gas | 0.05 | 0.60 | 0.25 | - | 0.00 |
| Wood Stoves - No summer emissions | | | | | |
| Fireplaces - No summer emissions | | | | | |
| Landscaping | 0.16 | 0.01 | 1.17 | 0.00 | 0.00 |
| Consumer Prdcts | 3.86 | - | - | - | - |
| TOTALS(lbs/day,unmitigated) | 4.08 | 0.61 | 1.42 | 0.00 | 0.00 |

UNMITIGATED OPERATIONAL EMISSIONS

| | ROG | NOx | CO | SO2 | PM10 |
|---|---|---|---|---|---|
| Condo/townhouse general | 6.40 | 6.66 | 73.26 | 0.04 | 6.50 |
| Tennis Courts | 2.12 | 2.75 | 28.62 | 0.02 | 2.63 |
| TOTAL EMISSIONS (lbs/day) | 8.52 | 9.41 | 101.87 | 0.06 | 9.13 |

Does not include correction for passby trips.
Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2007 Temperature (F): 90 Season: Summer

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

| Unit Type | Trip Rate | Size | Total Trips |
|---|---|---|---|
| Condo/townhouse general | 8.10 trips / dwelling units | 79.00 | 639.90 |
| Tennis Courts | 38.70 trips / Court | 8.00 | 309.60 |

Vehicle Assumptions:

Fleet Mix:

| Vehicle Type | Percent Type | Non-Catalyst | Catalyst | Diesel |
|---|---|---|---|---|
| Light Auto | 55.20 | 1.80 | 97.80 | 0.40 |
| Light Truck < 3,750 lbs | 15.10 | 3.30 | 94.00 | 2.70 |
| Light Truck 3,751- 5,750 | 16.10 | 1.90 | 96.90 | 1.20 |
| Med Truck 5,751- 8,500 | 7.10 | 1.40 | 95.80 | 2.80 |
| Lite-Heavy 8,501-10,000 | 1.10 | 0.00 | 81.80 | 18.20 |
| Lite-Heavy 10,001-14,000 | 0.40 | 0.00 | 50.00 | 50.00 |
| Med-Heavy 14,001-33,000 | 1.00 | 0.00 | 20.00 | 80.00 |
| Heavy-Heavy 33,001-60,000 | 0.90 | 0.00 | 11.10 | 88.90 |
| Line Haul > 60,000 lbs | 0.00 | 0.00 | 0.00 | 100.00 |
| Urban Bus | 0.10 | 0.00 | 0.00 | 100.00 |
| Motorcycle | 1.70 | 82.40 | 17.60 | 0.00 |
| School Bus | 0.10 | 0.00 | 0.00 | 100.00 |
| Motor Home | 1.20 | 8.30 | 83.30 | 8.40 |

Travel Conditions

| | Residential | | | Commercial | | |
|---|---|---|---|---|---|---|
| | Home-Work | Home-Shop | Home-Other | Commute | Non-Work | Customer |
| Urban Trip Length (miles) | 11.5 | 4.9 | 6.0 | 10.3 | 5.5 | 5.5 |
| Rural Trip Length (miles) | 11.5 | 4.9 | 6.0 | 10.3 | 5.5 | 5.5 |
| Trip Speeds (mph) | 35.0 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 |
| % of Trips - Residential | 20.0 | 37.0 | 43.0 | | | |
| % of Trips - Commercial (by land use) | | | | | | |
| Tennis Courts | | | | 2.0 | 1.0 | 97.0 |

Changes made to the default values for Land Use Trip Percentages

Changes made to the default values for Construction

Changes made to the default values for Area

Changes made to the default values for Operations

The operational emission year changed from 2004 to 2007.
The double counting internal work trip limit changed from  to 6.192.
The double counting shopping trip limit changed from  to 3.096.
The double counting other trip limit changed from  to 275.157.
The travel mode environment settings changed from  both to: none

# Appendix C – Preliminary Geotechnical Evaluation

November 10, 2003
J.N. 319-03

Mr. Mike Banhagel
GREYSTONE HOMES, INC.
26 Executive Park, Suite 100
Irvine, CA 92614

**Subject: Preliminary Geotechnical Evaluation, Proposed Marriott Condominiums, 900 Newport Center Drive, City of Newport Beach, California**

Dear Mr. Banhagel:

In accordance with your request, **Petra Geotechnical, Inc. (Petra),** is pleased to submit this preliminary geotechnical evaluation of the subject property. As of the date of this report, no definitive grading plan for the proposed development was available for review. Therefore, the discussion presented herein is based on the 40-scale conceptual site plan and cross sections prepared by MV&P International (dated September 3, 2003). Detailed recommendations for site grading and building foundation design will be provided in the form of a comprehensive geotechnical report once the grading plans for the site have been developed.

## SCOPE OF SERVICES

The majority of the geotechnical services outlined in our proposal dated September 3, 2003, have been completed at this time. The work performed to date has included the following:

1. Review of existing reports and literature concerning soil and geologic conditions within and adjacent to the site. This included a review of previous consultant reports for the subject site that are on file with the City of Newport Beach Planning Department.

2. Subsurface investigation consisting of drilling, logging and selective sampling of 10 exploratory boreholes within and adjacent to the areas of proposed building construction.

3. Laboratory analysis of selected soil samples obtained from the exploratory borings. Analyses included determination of in-place moisture content, in-place dry unit weight, maximum dry density and optimum moisture content, expansion index, consolidation characteristics, shear strength, soluble sulfate content, soil pH and minimum resistivity.

4. Analysis of the field and laboratory data and preparation of this summary report documenting our preliminary findings and conclusions.

## GENERAL GEOLOGIC CONDITIONS

### Soil and Bedrock Units

Four distinct geologic units were encountered within the boundaries of the subject site during our subsurface investigation. These include 1) artificial fill placed during original development of the Newport Marriott tennis complex, 2) native alluvial soils, 3) marine terrace deposits, and 4) sedimentary bedrock of the Monterey Formation. Descriptions of these materials are provided in the following paragraphs:

Artificial Fill: Artificial fill was observed in the north-central portion of the site in the area of proposed Buildings II and III. Based on our review of pre-development topographic maps and aerial photographs, it appears that this fill was placed within a previously existing natural drainage channel during original grading of the site. In general, this fill consists of moist, loose to dense clayey sand and soft to stiff sandy clay. The presence of abundant shale bedrock fragments in the fill suggests that this material was generated as a result of nearby excavations into Monterey Formation bedrock.

Where exposed in our exploratory borings, the thickness of artificial fill beneath the site ranges from approximately 2 to 16 feet. Samples of fill soils retrieved from our exploratory borings exhibited highly variable dry densities and moisture contents.

Alluvium: An approximately 3-foot-thick layer of alluvial soil was encountered beneath the existing artificial fill in one of the exploratory borings drilled by our firm within the site. This natural soil consists of most, medium-dense, moderately to highly compressible clayey sand.

Terrace Deposits: Native marine terrace deposits were encountered beneath the surficial soils described above in six of our exploratory borings. Where observed, this unit varies in thickness from approximately 6 to 24 feet, and is generally composed of moist, dense to locally very dense clayey sand interbedded with slightly moist to moist, medium-dense to locally very dense, poorly-graded sand.

Bedrock - Monterey Formation: Sedimentary bedrock of the Monterey Formation was encountered within 2 feet of the surface in the extreme northwestern portion of the site, and exists at depth beneath the surficial fill, alluvium and terrace deposit units across the remainder of the property. The bedrock materials consist of slightly moist to moist, moderately hard to hard, slightly to moderately weathered interbedded silty claystone, friable sandstone and cherty shale. Based on our downhole logging and examination of oriented samples, the bedrock layers are locally folded with highly variable structural orientations. Bedding was observed to dip toward the southwest, northwest and northeast at angles ranging from approximately 8 to 25 degrees.

## Groundwater

Moderate seepage was encountered at a depth of 14 feet below the surface in one of the exploratory boreholes drilled during our field investigation. Groundwater was not encountered in any of the other borings excavated as part of this investigation.

## Faulting and Seismicity

No active or potentially active faults are known to pass through the subject property. In addition, the site does not lie within an Earthquake Fault Zone as designated by the State of California in the Alquist-Priolo Earthquake Zoning Act. Based on our review of published and unpublished geotechnical maps and literature pertaining to the regional geology, the closest active fault with respect to the site is the Newport-Inglewood fault, located approximately 3 miles to the southwest.

**Secondary Seismic Effects**

The site is not located within an designated Seismic Hazard Zone as established by the California Geologic Survey pursuant to the Seismic Hazards Mapping Act.

## SUMMARY OF FINDINGS AND CONCLUSIONS

### General Feasibility

Based on the preliminary results of our field investigation and review available geotechnical literature and maps, it is the opinion of this firm that development of the subject site for residential purposes is feasible from a geotechnical standpoint; however, there are several geotechnical constraints that should be taken into consideration by the Client and other members of the design team during the planning phases of the development. These issues are discussed in the following paragraphs.

### Primary Geotechnical Constraints

- Compressible Surficial Soils: The majority of the site is underlain by surficial soil units (including artificial fill and alluvium) that were found to exhibit variable in-place dry densities and moisture contents, and are thus considered unsuitable for support of new engineered fills and proposed structures. These materials will thus require excavation and recompaction to mitigate excessive settlement and poor slope performance. The unsuitable surficial materials observed in our borings were typically found to extend to depths ranging from 2 to 16 feet below the surface.

  It is important for the project design team to note that the remedial grading requirement discussed above applies only to 1) areas where compacted fill will be required to establish the design grades, and 2) design cut areas where the depth of proposed cut does not exceed the thickness of existing unsuitable surficial soils. Where design cuts exceed the thickness of existing unsuitable surficial material, no additional remedial removals will be needed (with the exception of building pad overexcavations that may be required to eliminate cut-to-fill and/or shallow fill-deep fill transitions).

C Bedrock Excavatability: The surficial materials within the site are underlain by sedimentary bedrock that, while being hard to locally very hard, is expected to be excavatable by moderate ripping with conventional earthwork equipment (D-8 or D-9 bulldozers). Some local areas of cherty shale may require heavy ripping, but these areas are expected to be limited.

•••• Elimination of Cut/Fill Transitions: Based on the anticipated grading concept, it is likely that the design earthwork will result in cut-to-fill transitions being exposed at pad grades within at least some building areas. In some cases, cut-to-fill transitions may be eliminated as part of the remedial grading discussed in the previous paragraphs; however, where cut-to-fill transitions exist following remedial grading, they should be eliminated by overexcavating the "cut" portions of the building pads and replacing the excavated material as properly compacted fill. This procedure is recommended as a means to mitigate the detrimental effects of excessive differential settlement.

The generally recommended depth of over excavation is one-half the maximum thickness of fill beneath the pad area, to a minimum depth of 3 feet and a maximum depth of 15 feet below proposed pad grade. The horizontal limits of overexcavation should extend to within approximately 1 to 2 feet of property lines and/or the tops and toes of slopes. The actual lots that will require overexcavation and overexcavation depths will have to be determined during grading by the project geotechnical consultant based on actual conditions encountered.

As an alternative to eliminating cut-to-fill transitions through remedial grading as recommended above, it may be feasible to utilize deepened foundations (i.e., deepened conventional footings or caisson/grade beam systems) that extend through the fill and into the underlying bedrock. Appropriate recommendations for deepened foundations will be provided in the forthcoming geotechnical investigation report.

•••• Stability of Temporary Excavations: During remedial grading and construction of the proposed subterranean parking areas and associated improvements, temporary excavations with sidewalls varying up to approximately 13 feet in height are likely to be necessary. It is expected that the excavation sidewalls will expose a combination of artificial fill, terrace deposit and bedrock materials as described previously. Due to the locally loose condition of near-surface materials and the presence of granular, non-cohesive layers within the Monterey Formation bedrock, the proposed temporary excavation sidewalls are not likely to remain

stable at a vertical inclination. Therefore, it should be anticipated that temporary excavation sidewalls will require sloping back at a ratio of approximately 1• :1, horizontal to vertical. Should excessive caving be observed during grading, flatter inclinations may be required locally.

Based on our review of the conceptual site plan, there appears to be sufficient area to lay back the excavation sidewalls at the above configurations along most of the building perimeter areas; however, depending on the actual depths of cut and remedial grading that will be required, it may not be possible to construct temporary excavations along the east side of Buildings I and II (i.e., adjacent to Santa Barbara Drive) and along the southeast side of Building I (adjacent to the existing Marriott tower and appurtenant improvements) at a safe and stable slope ratio without encroaching into the adjacent street right-of-way and/or causing the loss of lateral support of the existing hotel building, the associated buried utilities and other improvements. For this reason, temporary shoring may be required in these areas. Recommendations for design of temporary shoring will be provided in the comprehensive preliminary geotechnical report once grading plans for the site become available for review.

•••• Seepage and Groundwater: As noted previously, seepage was encountered at a depth of 14 feet below the surface during drilling of one of our exploratory borings. The absence of groundwater in any of the other boreholes suggests that this is a localized condition, possibly related to downward percolation of irrigation water from the nearby landscaped areas. Nonetheless, the localized occurrence of seepage should be anticipated during site grading, and may result in the need for dewatering during the grading and construction of the subterranean portions of the proposed structures.

•••• Regional Seismicity: The subject site is located in a seismically active area of southern California; however, the subject site is not considered to be at a particularly greater level of seismic risk than other sites in the area.

## Other Geotechnical Factors

1. Seismically-Induced Liquefaction and Landsliding: The site does not lie within a designated liquefaction or seismically-induced landslide hazard zone as determined by the California Geologic Survey pursuant to the Seismic Hazards Mapping Act. Furthermore, the information obtained during our subsurface investigation indicates that the native terrace deposit and bedrock materials beneath the site exhibit adequate in-place densities to preclude seismically-

induced liquefaction. On this basis, the potential for liquefaction at the site is considered to be remote. This assumes all low-density alluvium and fill materials within the site are removed as part of remedial grading operations and replaced as properly compacted fill.

2. Seismic Design Considerations: The subject site is located in a seismically active area of southern California. The type and magnitude of seismic hazards, which may affect the site, are dependent on both the distance to causative faults and the intensity and duration of the seismic event. Although the probability of primary surface rupture is considered low, ground shaking hazards caused by earthquakes along regional active faults do exist and should be taken into account in the design and construction of the proposed facilities within the subject site.

   Seismic design for the proposed structures should be in accordance with the minimum requirements prescribed by the UBC for Seismic Zone 4. Site-specific seismic design parameters determined in accordance with Section 16 of the 1997 Uniform Building Code (UBC) will be provided in the forthcoming comprehensive geotechnical investigation report.

3. Expansive Soil Considerations: The results of our limited laboratory tests indicate the earth materials that will be exposed at proposed finished grade elevations within the site are likely to exhibit highly variable expansion potentials. A final evaluation of expansion potential should be performed based on sampling and testing during or after completion of rough grading activities.

4. Tentative Building Foundation Design: Based on the results of this due diligence investigation and our experience with other nearby properties with similar soil conditions, it is our opinion that conventional or, alternatively, post-tensioned foundation systems will generally be feasible for the structures provided remedial grading is performed as described herein. However, as described previously, deepened foundation systems may be a desirable alternative to remedial grading in areas where cut-to-fill transitions occur.

5. Soil Corrosivity: Based on limited laboratory testing performed as part of this study, site soils appear to have soluble sulfate and chloride contents which correspond to a negligible exposure to these chemical compounds. This condition should be verified by means of sampling of building pad subgrade soils following grading.
   Near-surface soils sampled and analyzed during our investigation exhibit a "Low" to "Moderate" corrosivity potential with regard to buried ferrous metals. A certified corrosion engineer should be consulted to prepare project-specific

recommendations to protect against corrosion. Additional selective sampling and analysis (soil pH and resistivity) should be performed following grading to more accurately assess soil corrosivity.

## LIMITATIONS

The conclusions and recommendations presented in this report are based solely on our understanding of the proposed site development concept, on the results of our site reconnaissance and subsurface investigation, and on our review of the referenced reports and literature. In the absence of a definitive grading plan for the site, these conclusions and recommendations should be considered as tentative and subject to modification or revision.

This report has been prepared consistent with the level of care being provided by other professionals providing similar services at the same locale and in the same time period. This report provides our professional opinions and, as such, they are not to be considered a guaranty or warranty. In addition, the information contained herein has not been prepared for use by parties or projects other than those named or described herein. It may not contain sufficient information for other parties or other purposes.

This opportunity to be of service is sincerely appreciated. Please call if you have any questions pertaining to this report.

Respectfully submitted,

**PETRA GEOTECHNICAL, INC.**

Scott Winslow
Associate Geologist
CEG 2009

David Hansen
Senior Project Engineer
RCE 56591

SW/DH/tem

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# Appendix D – Traffic Report

KUNZMAN ASSOCIATES

TRAFFIC ENGINEERING AND TRANSPORTATION PLANNING

*OVER 25 YEARS OF EXCELLENT SERVICE*

# CITY OF NEWPORT BEACH

# SANTA BARBARA CONDONMINIUM PROJECT

# TRAFFIC IMPACT ANALYSIS (REVISED)

1111 TOWN & COUNTRY ROAD, SUITE 34
ORANGE, CA 92868-4667
PHONE: (714) 973-8383
FAX: (714) 973-8821
EMAIL: MAIL@TRAFFIC-ENGINEER.COM

# CITY OF NEWPORT BEACH

# SANTA BARBARA CONDOMINIUM PROJECT

# TRAFFIC IMPACT ANALYSIS (REVISED)

**Prepared by:**

**Carl Ballard and**
**William Kunzman, P.E.**

William Kunzman

**February 14, 2005**

KUNZMAN ASSOCIATES
1111 Town & Country Road, Suite 34
Orange, CA 92868-4667
Phone: (714) 973-8383
Fax: (714) 973-8821
Email: mail@traffic-engineer.com
Web: www.traffic-engineer.com

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# City of Newport Beach

# Santa Barbara Condominium Project

# Traffic Impact Analysis (Revised)

This report contains the revised traffic impact analysis for the Santa Barbara Condominium project. The project site is located at 900 Newport Center Drive adjacent to the existing Marriott Hotel. The proposed condominium project is located southerly of Santa Barbara Drive between Jamboree Road and Newport Center Drive. The proposed development consists of 79 condominium dwelling units.

The traffic report contains documentation of existing traffic conditions, traffic generated by the project, distribution of the project traffic to roads outside the project, and an analysis of future traffic conditions. Each of these topics is contained in a separate section of the report. The first section is "Findings", and subsequent sections expand upon the findings. In this way, information on any particular aspect of the study can be easily located by the reader.

Although this is a technical report, every effort has been made to write the report clearly and concisely. To assist the reader with those terms unique to transportation engineering, a glossary of terms is provided in Appendix A.

# 1. Findings

This section summarizes the existing traffic conditions, project traffic impacts, and the proposed mitigation measures.

**Existing Traffic Conditions**

a. The existing use is a tennis club (includes 8 tennis courts) and is an ancillary use to the Marriott Hotel.

b. The project site currently has access to Santa Barbara Drive.

c. Pursuant to discussions with City of Newport Beach staff, the study area includes the following intersections:

Jamboree Road (NS) at:
- Eastbluff Drive/Ford Road (EW)
- San Joaquin Hills Road (EW)
- Santa Barbara Drive (EW)
- Coast Highway (EW)

Santa Cruz Road (NS) at:
- San Joaquin Hills Road (EW)
- San Clemente Drive (EW)

Newport Center Drive (NS) at:
- Santa Barbara Drive (EW)
- Coast Highway (EW)

Santa Rosa Drive/Big Canyon Drive (NS) at:
- San Joaquin Hills Road (EW)

Avocado Avenue (NS) at:
- Coast Highway (EW)

MacArthur Boulevard (NS) at:
- Ford Road (EW)
- San Joaquin Hills Road (EW)
- San Miguel Drive (EW)
- Coast Highway (EW)

## Traffic Impacts

a. The proposed project consists of 79 condominium dwelling units.

b. The proposed development is projected to generate approximately 640 daily vehicle trips, 52 of which will occur during the morning peak hour and 65 of which will occur during the evening peak hour. As shown in Table 1, the proposed development compared to the existing development is projected to generate approximately 330 more daily vehicle trips, 42 more of which will occur during the morning peak hour and 39 more of which will occur during the evening peak hour.

c. The City of Newport Beach staff provided the approved and cumulative projects in the study area. The approved projects consist of development that has been approved but are not fully completed. Cumulative projects are known, but not approved project developments that are reasonably expected to be completed or nearly completed at the same time as the proposed project.

d. The Traffic Phasing Ordinance (TPO) analysis resulted in the following study area intersections exceeding the one-percent threshold and requiring additional analysis:

Jamboree Road (NS) at:
- Eastbluff Drive/Ford Road (EW)
- Santa Barbara Drive (EW)

Santa Cruz Road (NS) at:
- San Joaquin Hills Road (EW)
- San Clemente Drive (EW)

Newport Center Drive (NS) at:
- Santa Barbara Drive (EW)
- Coast Highway (EW)

Santa Rosa Drive/Big Canyon Drive (NS) at:
- San Joaquin Hills Road (EW)

MacArthur Boulevard (NS) at:
- Ford Road (EW)
- San Joaquin Hills Road (EW)

e. The California Environmental Quality Act (CEQA) analysis (this part of the analysis is consistent with CEQA) included analysis of the same study area intersections as the TPO analysis.

f. The GPA analysis included ICU calculations at the following study area intersections:

Jamboree Road (NS) at:
- Eastbluff Drive/Ford Road (EW)
- San Joaquin Hills Road (EW)
- Santa Barbara Drive (EW)
- Coast Highway (EW)

Santa Cruz Road (NS) at:
- San Joaquin Hills Road (EW)

Newport Center Drive (NS) at:
- Coast Highway (EW)

Santa Rosa Drive/Big Canyon Drive (NS) at:
- San Joaquin Hills Road (EW)

MacArthur Boulevard (NS) at:
- Ford Road (EW)
- San Joaquin Hills Road (EW)
- San Miguel Drive (EW)
- Coast Highway (EW)

Comparison of the one-percent increase in the General Plan Buildout ICU between the without project and with project traffic conditions (see Table 7) resulted in no study area intersections exceeding the one-percent threshold.

**Mitigation Measures**

The following measures are recommended to mitigate the impact of the project on traffic circulation:

a. Site-specific circulation and access recommendations are depicted on Figure 27.

b. An existing two-way left turn lane on Santa Barbara Drive provides adequate left turn storage for vehicles desiring to turn left into the project site.

c. On-site parking should be provided to meet City of Newport Beach parking code requirements.

d. Sight distance at the project accesses should be reviewed with respect to Caltrans/City of Newport Beach standards in conjunction with the preparation of final grading, landscape, and street improvement plans.

e. On-site traffic signing and striping should be implemented in conjunction with detailed construction plans for the project.

f. The parking garage design shall meet all City requirements regarding parking stall width, parking stall depth, parking aisle width, parking aisle grade, and parking aisle-turning radii.

g. Each parking level should have large numbers on the pillars or walls designating on which floor level the user has parked. Letters can also be added to designate what area within a parking level the person has parked, such as 2B.

h. The parking garage shall be lighted to meet City code requirements.

i. The project site did not cause a significant impact at the study area intersections (increase of one-percent or more at a study area intersection operating at worse than Level of Service D during the peak hours); therefore, no improvements are recommended at the study area intersections.

j. As is the case for any roadway design, the City of Newport Beach should periodically review traffic operations in the vicinity of the project once the project is constructed to assure that the traffic operations are satisfactory.

# 2. Project Description

This section discusses the project's location, proposed development, and traffic characteristics of such a development. Figure 1 shows the project location map and Figure 2 illustrates the site plan.

## Location

The project site is located at 900 Newport Center Drive adjacent to the existing Marriott Hotel. The existing use is a tennis club (includes 8 tennis courts) and is an ancillary use to the Marriott Hotel. The proposed condominium project is located southerly of Santa Barbara Drive between Jamboree Road and Newport Center Drive.

## Proposed Development

The proposed development consists of 79 condominium dwelling units.

The following describes the proposed land use from a traffic-engineering viewpoint:

Condominiums: The traffic characteristics of this type of development reflect the smaller family sizes generally found in attached dwellings. Fewer trips result per dwelling in the peak hours and daily than would result from detached residential dwellings.

# Figure 1
## Project Location Map

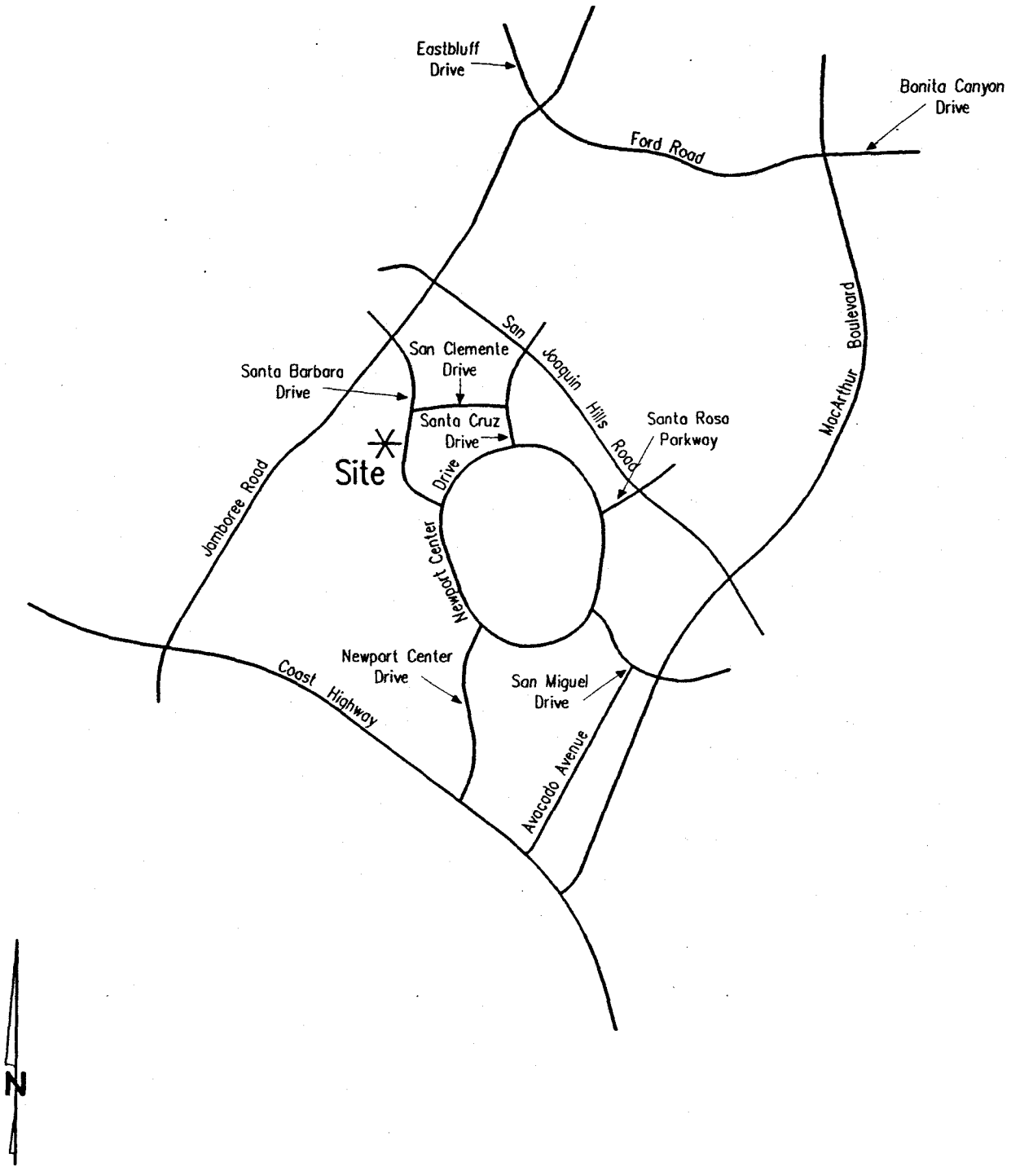


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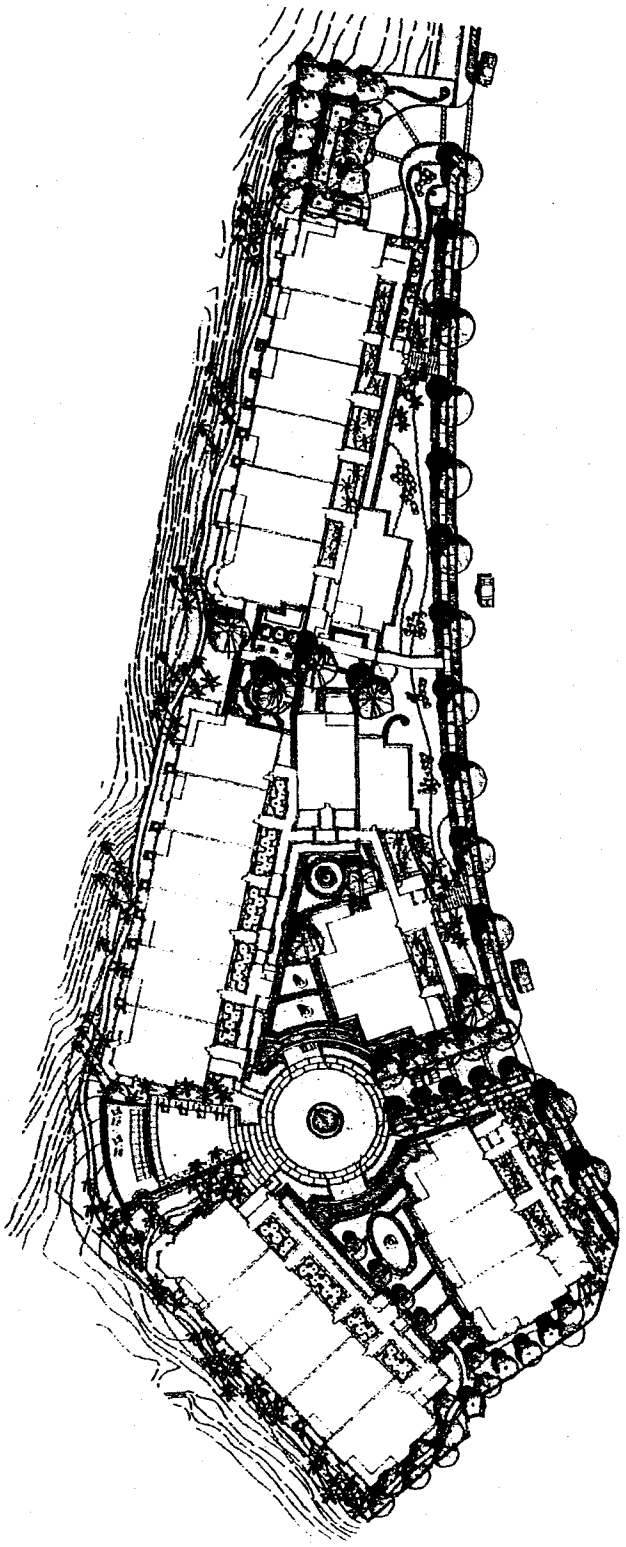
Figure 2
Site Plan



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# 3. Existing Traffic Conditions

The traffic conditions as they exist today are discussed below and illustrated on Figures 3 to 7.

## Study Area Intersections

Pursuant to discussions with City of Newport Beach staff, the study area includes the following intersections:

Jamboree Road (NS) at:
- Eastbluff Drive/Ford Road (EW)
- San Joaquin Hills Road (EW)
- Santa Barbara Drive (EW)
- Coast Highway (EW)

Santa Cruz Road (NS) at:
- San Joaquin Hills Road (EW)
- San Clemente Drive (EW)

Newport Center Drive (NS) at:
- Santa Barbara Drive (EW)
- Coast Highway (EW)

Santa Rosa Drive/Big Canyon Drive (NS) at:
- San Joaquin Hills Road (EW)

Avocado Avenue (NS) at:
- Coast Highway (EW)

MacArthur Boulevard (NS) at:
- Ford Road (EW)
- San Joaquin Hills Road (EW)
- San Miguel Drive (EW)
- Coast Highway (EW)

## Existing Travel Lanes and Intersection Controls

Figure 3 identifies the existing roadway conditions for arterials near the site. The number of through lanes for existing roadways and the existing intersection controls are identified.

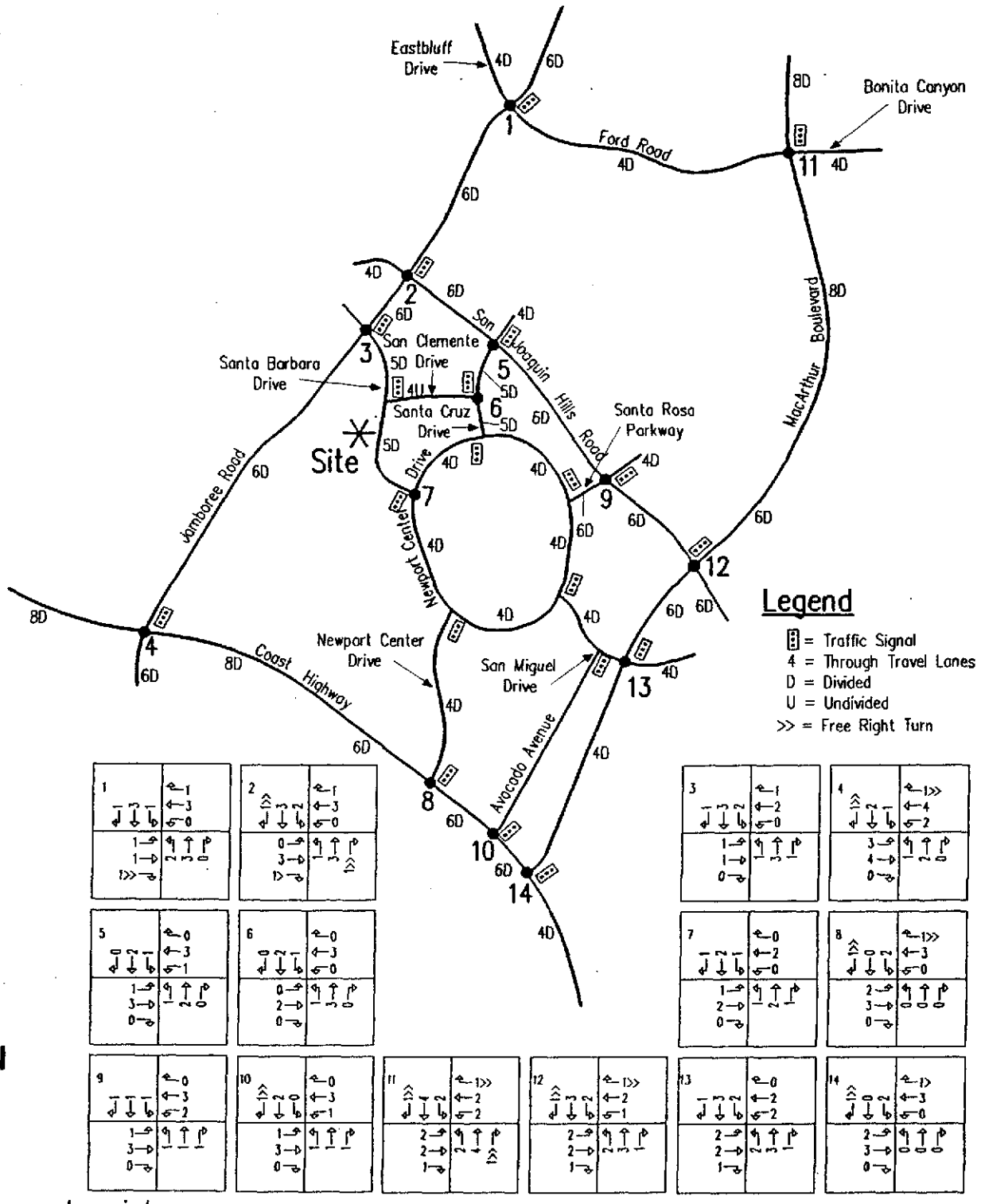
## Existing Master Plan of Arterial Highways

Figure 4 exhibits the current City of Newport Beach General Plan Circulation Element. Both existing and future roadways are included in the Circulation Element of the General Plan and are graphically depicted on Figure 4. This figure shows the nature and extent of arterial highways that are needed to serve adequately the ultimate development depicted by the Land Use Element of the General Plan. Figure 5 shows the City of Newport Beach General Plan roadway cross-sections.

## Existing Traffic Volumes

The City of Newport Beach staff provided the Year 2003/2004 morning and evening peak hour approach volumes at each study area intersection (see Appendix B). Existing morning and evening peak hour intersection turning movement volumes are shown on Figures 6 and 7, respectively.

# Figure 3
## Existing Through Travel Lanes and Intersection Controls

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Intersection reference numbers are in upper left corner of turning movement boxes.

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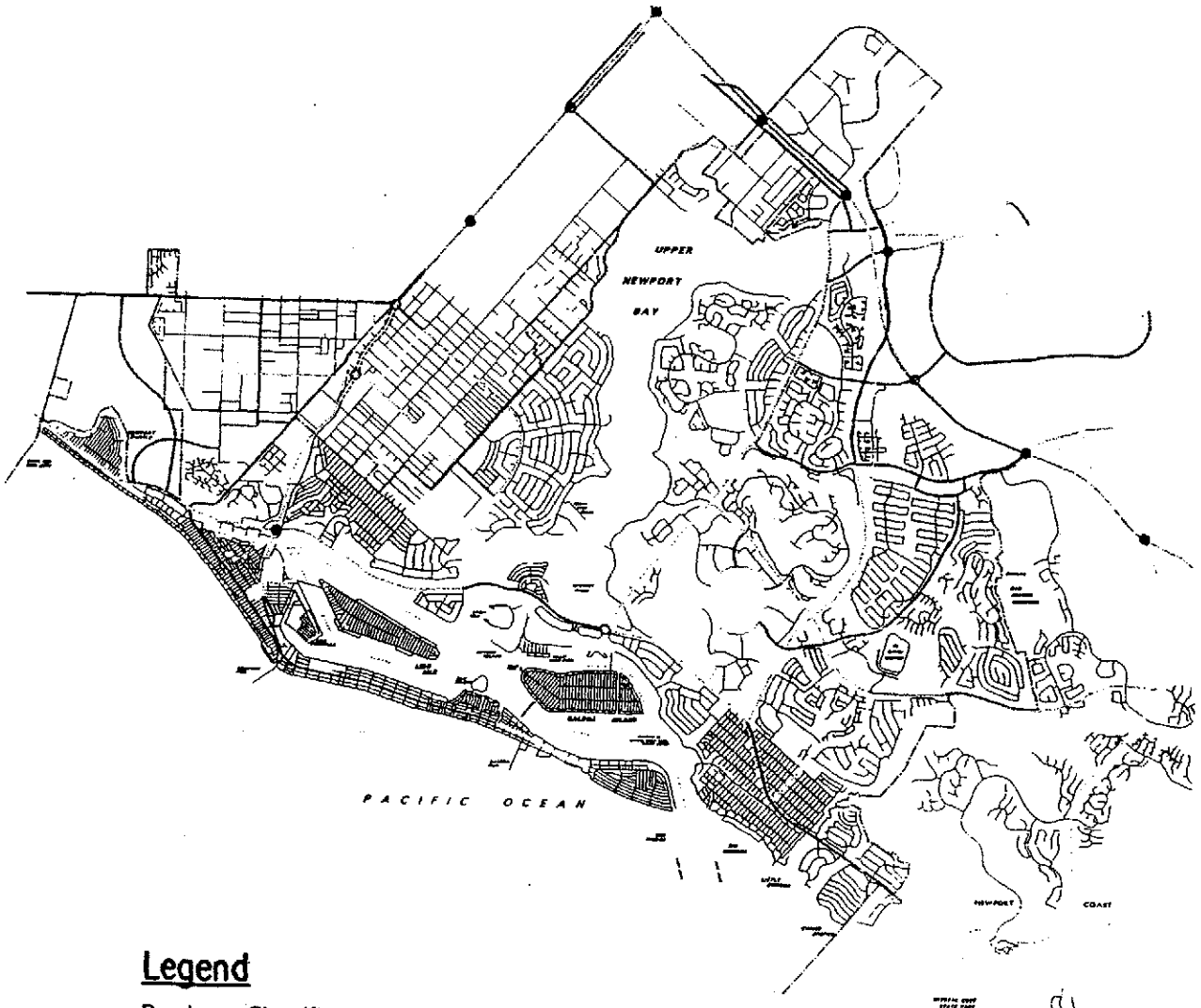
# Figure 4
# City of Newport Beach General Plan Circulation Element




## Legend

**Roadway Classification**

- Commuter Roadway (Two Lane Undivided)
- Secondary Road (Four Lane Undivided)
- Primary Road (Four Lane Divided)
- Primary Augmented Road
- Major Road (Six Lane Divided)
- Major Augmented Road
- Eight Lane Road (Divided)
- San Joaquin Hills Transportation Corridor
- Adopted Freeway Routes
- Future Freeway Extension
- Routes Requiring Further Coordination

**Interchange**

- ● Adopted Interchange
- O Proposed Interchange

- City Boundary
- Newport Beach Sphere of Influence

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Source: City of Newport Beach

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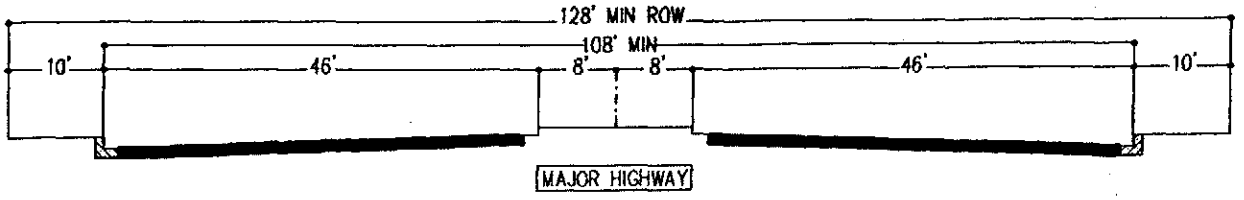
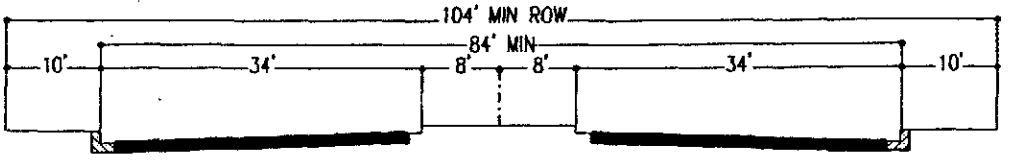
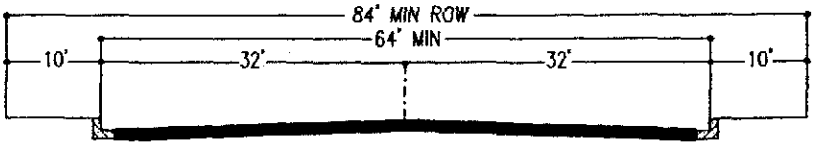
# Figure 5
## City of Newport Beach General Plan Roadway Cross-Sections



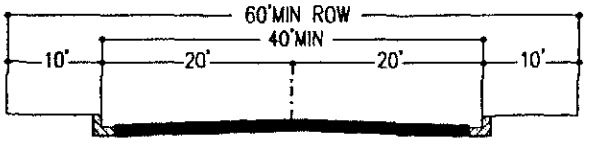

MAJOR HIGHWAY




MAJOR STREET




PRIMARY STREET



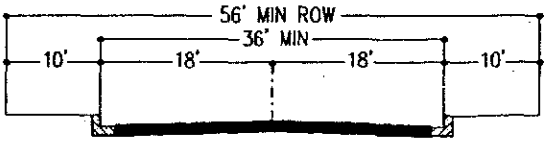

SECONDARY STREET

Notes:

(1) Streets may require special design.

(2) May be reduced t o6 Ft. if no sidewalk is required

(3) Where bicycle trail designated, sidewalk widths shall be adjusted as shown on Std. -120-L.




LOCAL STREET

*Kunzman Associates*

Source: City of Newport Beach

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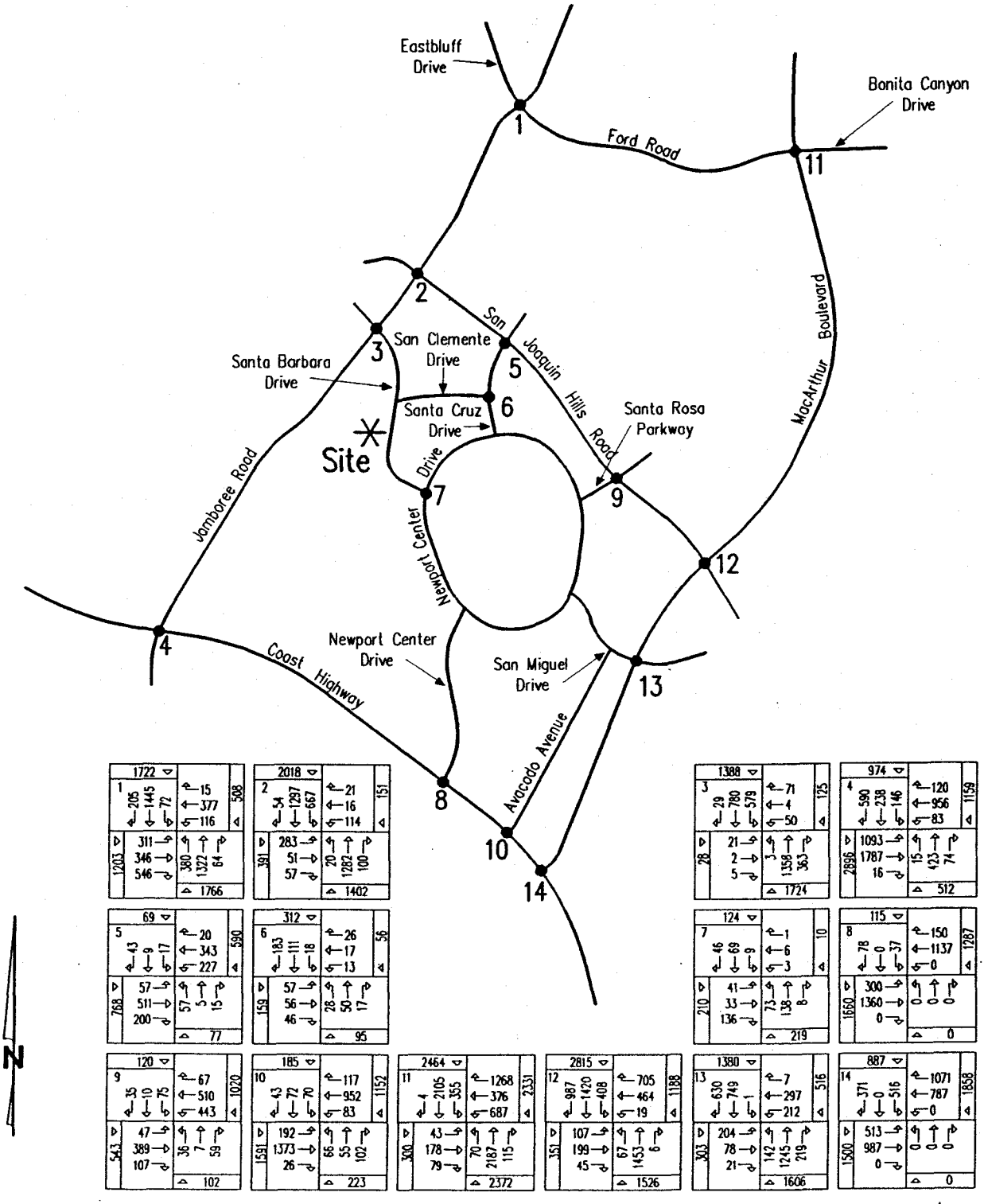
# Figure 6
## Existing Morning Peak Hour Intersection Turning Movement Volumes

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Intersection reference numbers are in upper left corner of turning movement boxes.

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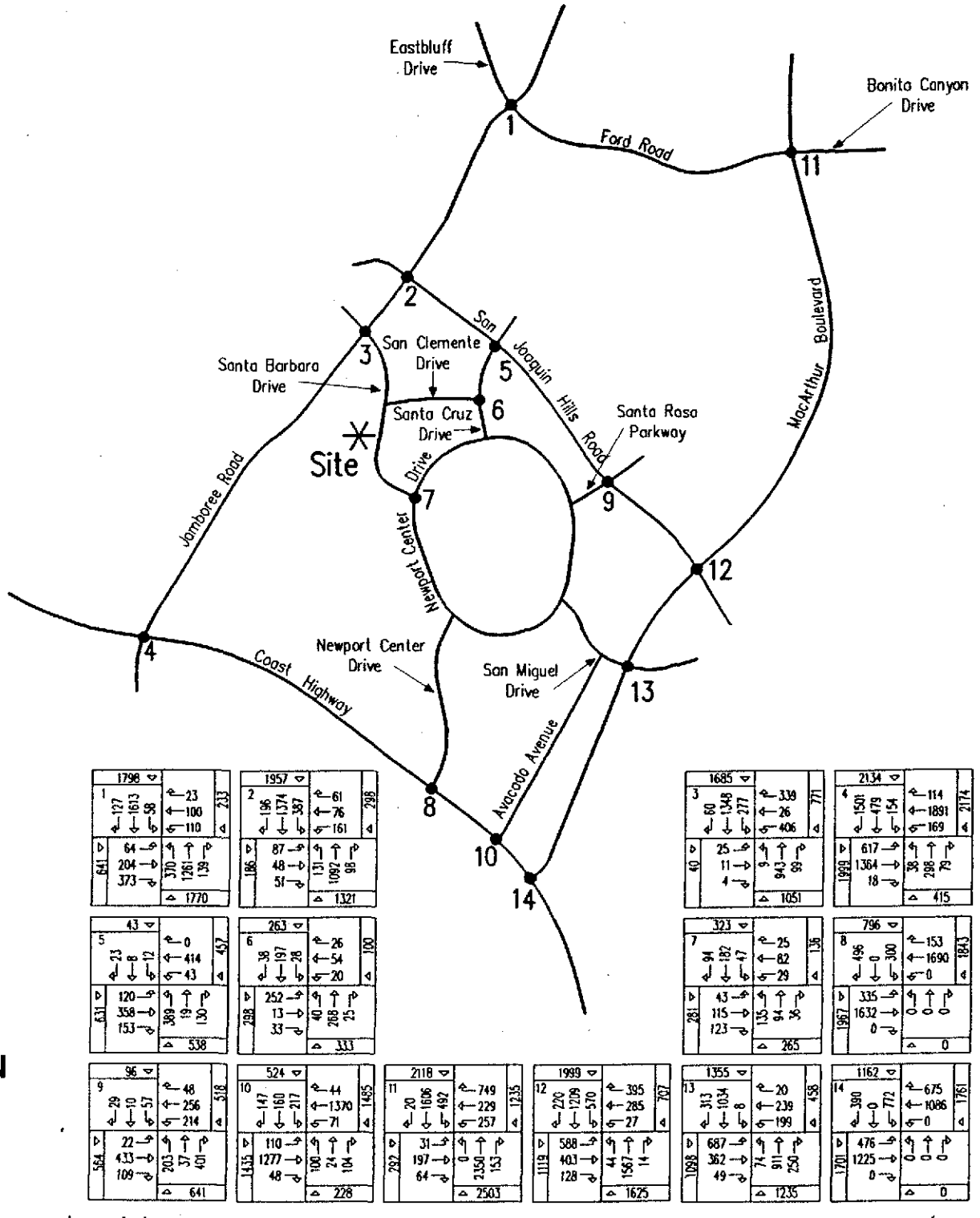
# Figure 7
## Existing Evening Peak Hour Intersection Turning Movement Volumes

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Intersection reference numbers are in upper left corner of turning movement boxes.

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# 4. Project Traffic

The existing use is a tennis club (includes 8 tennis courts) and is an ancillary use to the Marriott Hotel. The proposed development consists of 79 condominium dwelling units. The project site currently has access to Santa Barbara Drive.

## Traffic Generation

The traffic generated by the project is determined by multiplying an appropriate trip generation rate by the quantity of land use. Trip generation rates are predicated on the assumption that energy costs, the availability of vehicles to drive, and our life styles remain similar to what we know today. A major change in these variables may affect trip generation rates.

Trip generation rates were determined for daily traffic, morning peak hour inbound and outbound traffic, and evening peak hour inbound and outbound traffic for the proposed land use. By multiplying the traffic generation rates by the land use quantity, the traffic volumes are determined. Table 1 exhibits the traffic generation rates, project peak hour volumes, and project daily traffic volumes. The trip generation rates are from the Newport Beach Traffic Analysis Model (NBTAM) and Institute of Transportation Engineers (ITE), Trip Generation, 7th Edition, 2003.

The existing development currently generates approximately 310 daily vehicle trips, 10 of which will occur during the morning peak hour and 26 of which will occur during the evening peak hour.

The proposed development is projected to generate approximately 640 daily vehicle trips, 52 of which will occur during the morning peak hour and 65 of which will occur during the evening peak hour.

As shown in Table 1, the proposed development compared to the existing development is projected to generate approximately 330 more daily vehicle trips, 42 more of which will occur during the morning peak hour and 39 more of which will occur during the evening peak hour.

## Traffic Distribution and Assignment

Traffic distribution is the determination of the directional orientation of traffic. It is based on the geographical location of employment centers, commercial centers, recreational areas, or residential area concentrations. The traffic distribution has also been based upon previous traffic studies for the project site.

Traffic assignment is the determination of which specific route development traffic will use, once the generalized traffic distribution is determined. The basic factors affecting route selection are minimum time path and minimum distance path.

Figure 8 contains the directional distribution and assignment of the project traffic for the proposed land use.

**Project-Related Traffic**

Based on the identified traffic generation and distribution, project related morning and evening peak hour intersection turning movement volumes are shown on Figures 9 and 10, respectively.

## Table 1

## Project Traffic Generation

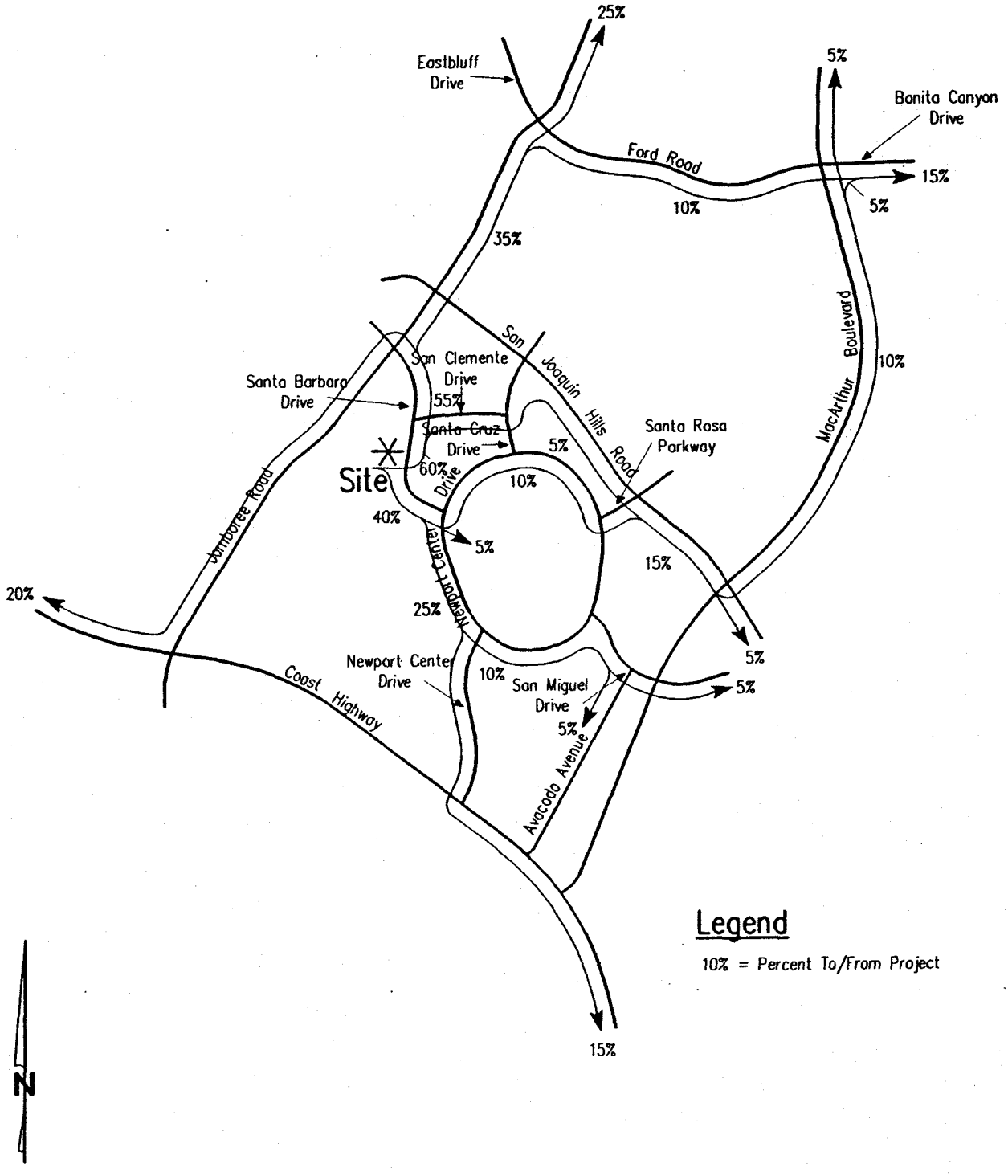
| Land Use | Quantity | Units[1] | Peak Hour | | | | | | Daily |
|---|---|---|---|---|---|---|---|---|---|
| | | | Morning | | | Evening | | | |
| | | | Inbound | Outbound | Total | Inbound | Outbound | Total | |
| Generation Rates | | | | | | | | | |
| Tennis Club[2] | 8 | CT | 0.66 | 0.66 | 1.32 | 1.68 | 1.68 | 3.36 | 38.70 |
| Single-Family Attached[3] | 79 | DU | 0.17 | 0.49 | 0.66 | 0.47 | 0.36 | 0.83 | 8.10 |
| Trips Generated | | | | | | | | | |
| Existing: | | | | | | | | | |
| Tennis Club | 8 | CT | 5 | 5 | 10 | 13 | 13 | 26 | 310 |
| Proposed: | | | | | | | | | |
| Single-Family Attached | 79 | DU | 13 | 39 | 52 | 37 | 28 | 65 | 640 |
| Difference | | | 8 | 34 | 42 | 24 | 15 | 39 | 330 |

[1] CT = Courts; DU = Dwelling Units

[2] Source: NBTAM Trip Generation Rates

[3] Source: Institute of Transportation Engineers (ITE), Trip Generation, 7th Edition, 2003, Land Use Category 490.

# Figure 8
## Project Traffic Distribution

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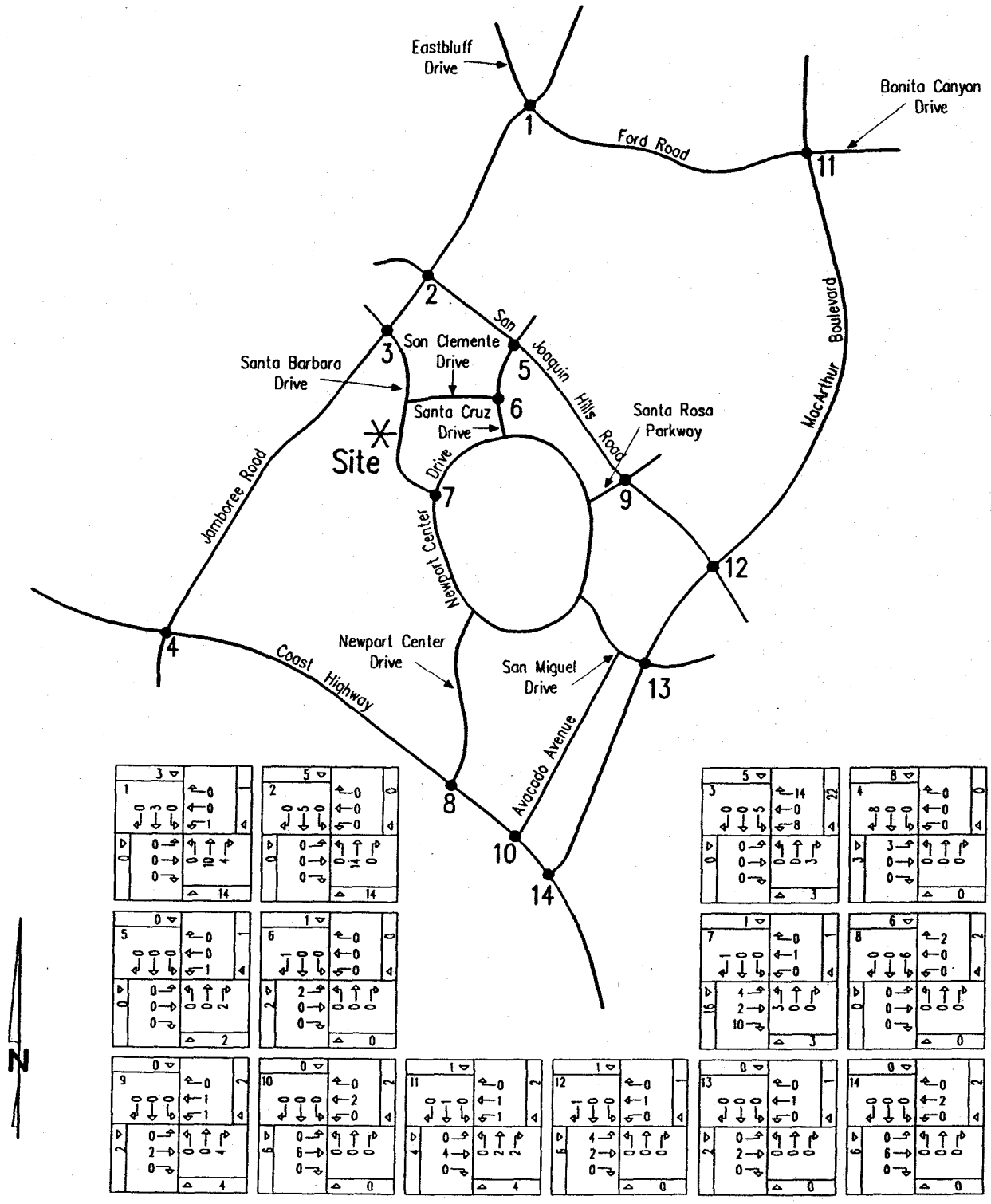
# Figure 9
## Project Morning Peak Hour Intersection Turning Movement Volumes

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Intersection reference numbers are in upper left corner of turning movement boxes.

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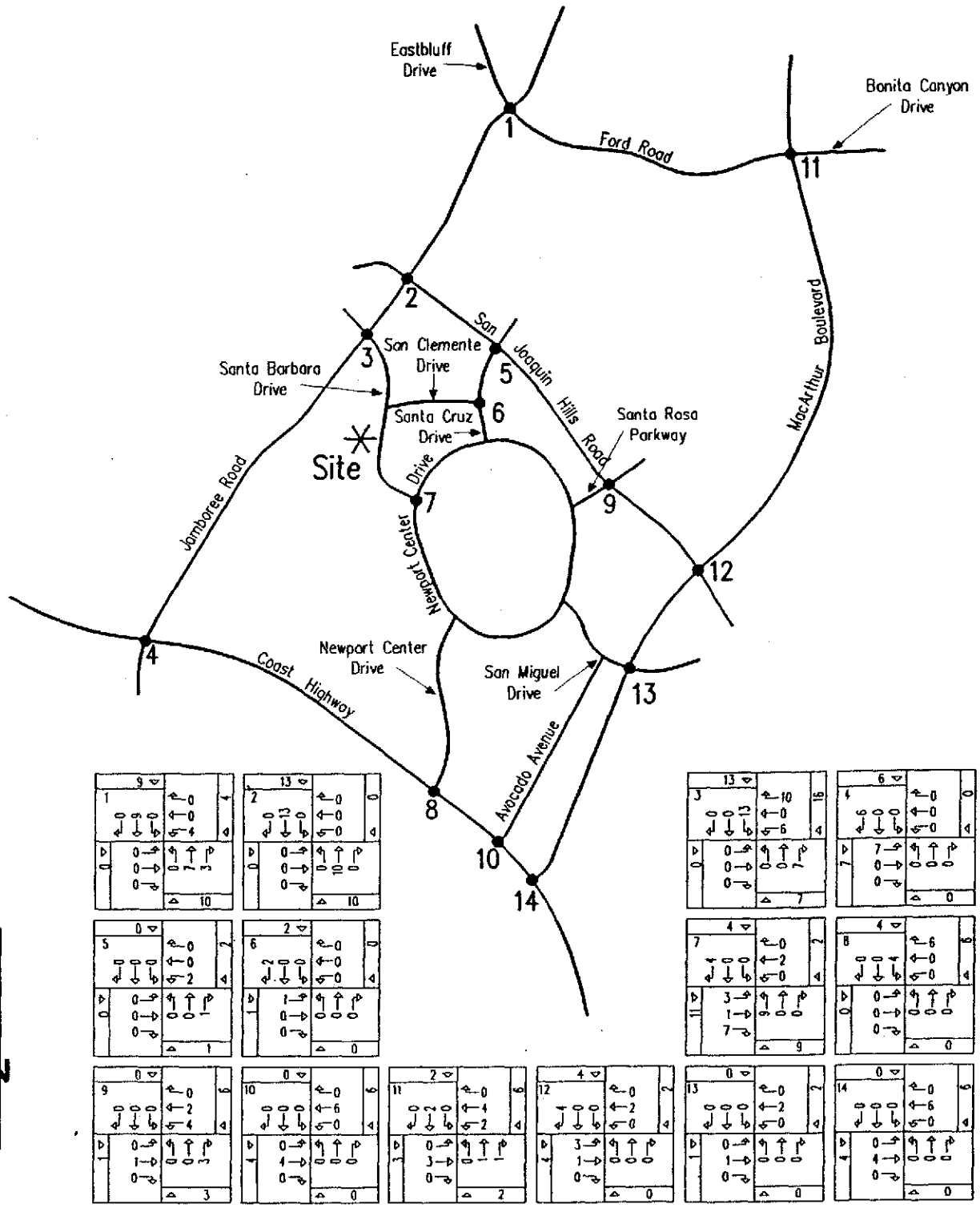
# Figure 10
## Project Evening Peak Hour Intersection Turning Movement Volumes

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Intersection reference numbers are in upper left corner of turning movement boxes.

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# 5. TPO Analysis

## Approved Projects

The City of Newport Beach staff provided the approved projects in the study area for the TPO analysis. The approved projects consist of development that has been approved but are not fully completed (see Table 2 and Appendix C). The approved project morning and evening peak hour intersection turning movement volumes have been calculated and are shown on Figures 11 and 12, respectively.

## Regional Growth

To account for regional growth on roadways, Year 2009 traffic volumes have been calculated based on a 1 percent annual growth rate of existing traffic volumes over a five-year period. The regional growth rate has been obtained from the City of Newport Beach.

Regional growth has been added to peak hour traffic volumes on Jamboree Road, Coast Highway, and MacArthur Boulevard.

## One-Percent Methodology

One-percent of the projected peak hour volumes of each approach of each study area intersection were compared with the peak hour distributed volumes from the proposed project. A summary of this TPO comparison is shown within Appendix D.

If one-percent of the existing + approved projects traffic peak hour volumes of each approach are larger than the peak hour project approach volumes, no further analysis is required. Existing + approved projects morning and evening peak hour intersection turning movement volumes have been calculated and are shown on Figures 13 and 14, respectively. Existing + approved projects + project morning and evening peak hour intersection turning movement volumes have been calculated and are shown on Figures 15 and 16, respectively. If project peak hour approach volumes are higher than one-percent of the projected peak hour volumes on any approach of any intersection, the intersection would require analysis utilizing the Intersection Capacity Utilization (ICU) methodology.

Comparison of the one-percent of the existing + approved projects traffic peak hour approach volumes with the project peak hour approach volumes resulted in the following study area intersections exceeding the one-percent threshold and requiring additional analysis (see Table 3 and Appendix D):

Jamboree Road (NS) at:
Eastbluff Drive/Ford Road (EW)
Santa Barbara Drive (EW)

Santa Cruz Road (NS) at:
San Joaquin Hills Road (EW)
San Clemente Drive (EW)

Newport Center Drive (NS) at:
Santa Barbara Drive (EW)
Coast Highway (EW)

Santa Rosa Drive/Big Canyon Drive (NS) at:
San Joaquin Hills Road (EW)

MacArthur Boulevard (NS) at:
Ford Road (EW)
San Joaquin Hills Road (EW)

**Intersection Capacity Utilization (ICU)**

The technique used to assess the operation of a signalized intersection is known as Intersection Capacity Utilization (ICU). To calculate an ICU value the volume of traffic using the intersection is compared with the capacity of the intersection. An ICU value is usually expressed as a decimal. The decimal represents that portion of the hour required to provide sufficient capacity to accommodate all intersection traffic if all approaches operate at capacity.

The Levels of Service for existing + approved projects traffic conditions have been calculated and are shown in Table 4. Existing + approved projects ICU worksheets are provided in Appendix F. For existing + approved projects traffic conditions, the intersections in the vicinity of the site are projected to operate at Level of Service D or better during the peak hours.

The Levels of Service for existing + approved projects + project traffic conditions have been calculated and are shown in Table 4. Existing + approved projects + project ICU worksheets are provided in Appendix F. For existing + approved projects + project traffic conditions, the intersections in the vicinity of the site are projected to operate at Level of Service D or better during the peak hours.

## Table 2

## Approved Project List

| Project Name |
|---|
| Fashion Island Expansion |
| Temple Bat Yahm Expansion |
| Ford Redevelopment |
| Cannery Lofts Village |
| Hoag Hospital Phase II |
| Ciosa - Irvine Project |
| Newport Dunes |
| 1401 Dove Street |
| Newport Auto Center Expansion |
| Olsen Townhome Project |
| Bayview Landing Senior Housing |
| Birch Bayview Plaza II |
| 494/496 Old Newport Boulevard |
| 401 Old Newport Boulevard |

## Table 3

## TPO Analysis One-Percent Threshold

| Intersection | Peak Hour | Approach Direction[1] | | | |
|---|---|---|---|---|---|
| | | Northbound | Southbound | Eastbound | Westbound |
| Jamboree Road (NS) at: | | | | | |
| Eastbluff Drive/Ford Road (EW) | AM | No | No | No | No |
| | PM | No | No | No | Yes |
| San Joaquin Hills Road (EW) | AM | No | No | No | No |
| | PM | No | No | No | No |
| Santa Barbara Drive (EW) | AM | No | No | No | Yes |
| | PM | No | No | No | Yes |
| Coast Highway (EW) | AM | No | No | No | No |
| | PM | No | No | No | No |
| Santa Cruz Road (NS) at: | | | | | |
| San Joaquin Hills Road (EW) | AM | Yes | No | No | No |
| | PM | No | No | No | No |
| San Clemente Drive (EW) | AM | No | No | Yes | No |
| | PM | No | No | No | No |
| Newport Center Drive (NS) at: | | | | | |
| Santa Barbara Drive (EW) | AM | Yes | Yes | Yes | No |
| | PM | Yes | No | Yes | Yes |
| Coast Highway (EW) | AM | No | Yes | No | No |
| | PM | No | No | No | No |
| Santa Rosa Drive/Big Canyon Drive (NS) at: | | | | | |
| San Joaquin Hills Road (EW) | AM | Yes | No | No | No |
| | PM | No | No | No | No |
| Avocado Avenue (NS) at: | | | | | |
| Coast Highway (EW) | AM | No | No | No | No |
| | PM | No | No | No | No |
| MacArthur Boulevard (NS) at: | | | | | |
| Ford Road (EW) | AM | No | No | Yes | No |
| | PM | No | No | No | No |
| San Joaquin Hills Road (EW) | AM | No | No | Yes | No |
| | PM | No | No | No | No |
| San Miguel Drive (EW) | AM | No | No | No | No |
| | PM | No | No | No | No |
| Hospital Drive (EW) | AM | No | No | No | No |
| | PM | No | No | No | No |

[1] Project Traffic is estimated to be equal to or greater than 1% of projected peak hour traffic. Intersection Capacity Utilization (ICU) analysis is required.

## Table 4

## TPO Analysis Intersection Capacity Utilization (ICU) and Levels of Service (LOS)

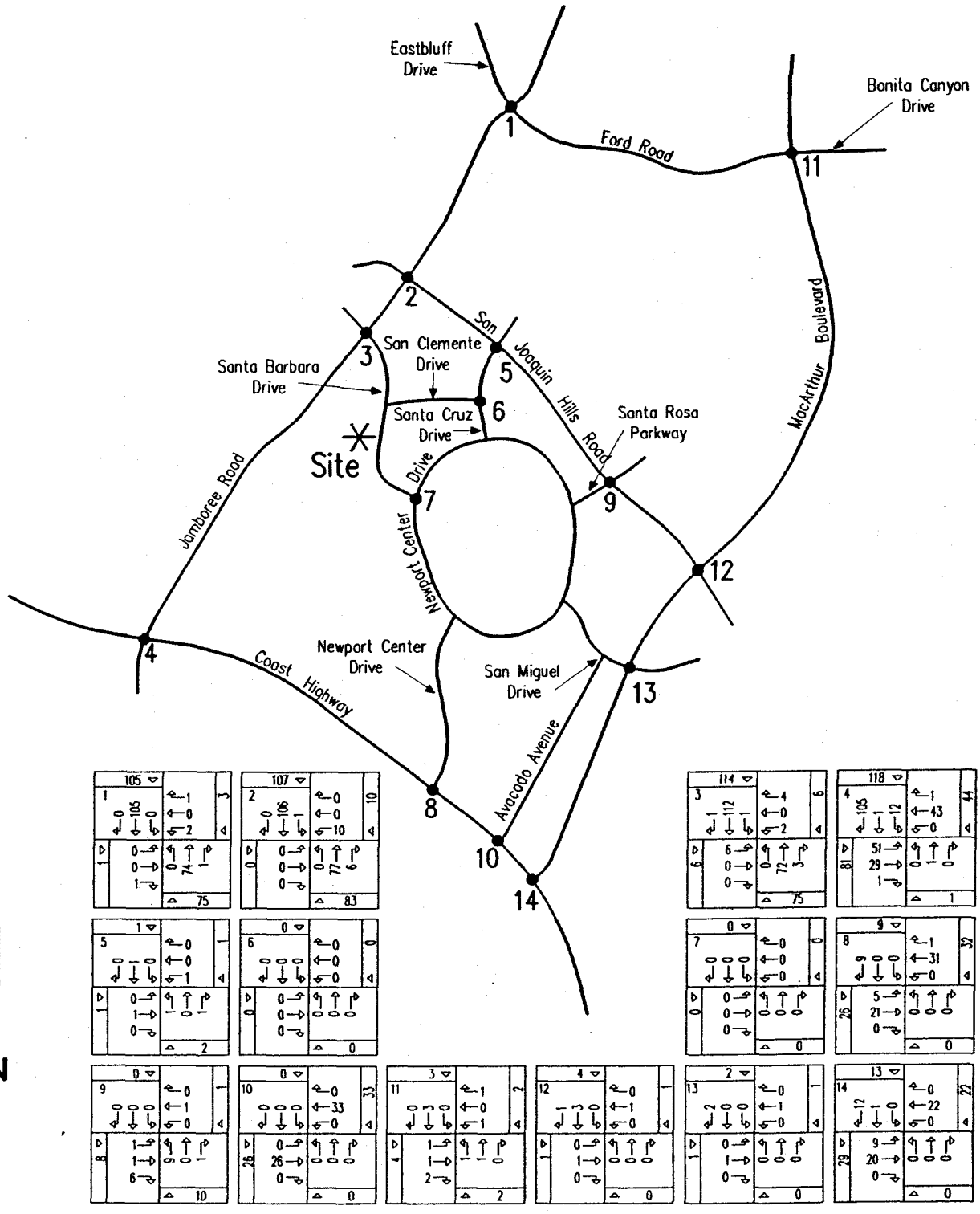
| Intersection | Traffic Control[3] | Intersection Approach Lanes[2] | | | | | | | | | | | | Peak Hour ICU-LOS[1] | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Northbound | | | Southbound | | | Eastbound | | | Westbound | | | Existing + Approved Projects | | Existing + Approved Projects + Project | | ICU Increase | |
| | | L | T | R | L | T | R | L | T | R | L | T | R | Morning | Evening | Morning | Evening | Morning | Evening |
| Jamboree Road (NS) at: | | | | | | | | | | | | | | | | | | | |
| Eastbluff Drive/Ford Road (EW) | TS | 2 | 3 | 0 | 1 | 3 | 1 | 1 | 1 | 1>> | 0 | 3 | 1 | 0.78-C | 0.67-B | 0.78-C | 0.67-B | +0.00 | +0.00 |
| Santa Barbara Drive (EW) | TS | 1 | 3 | 1 | 2 | 3 | 1 | 1 | 1 | 0 | 0 | 2 | 1 | 0.57-A | 0.55-A | 0.57-A | 0.55-A | +0.00 | +0.00 |
| Santa Cruz Road (NS) at: | | | | | | | | | | | | | | | | | | | |
| San Joaquin Hills Road (EW) | TS | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 3 | 0 | 1 | 3 | 0 | 0.34-A | 0.41-A | 0.34-A | 0.41-A | +0.00 | +0.00 |
| San Clemente Drive (EW) | TS | 1 | 3 | 0 | 1 | 2 | 0 | 0 | 2 | 0 | 0 | 3 | 0 | 0.16-A | 0.19-A | 0.16-A | 0.19-A | +0.00 | +0.00 |
| Newport Center Drive (NS) at: | | | | | | | | | | | | | | | | | | | |
| Santa Barbara Drive (EW) | TS | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 0 | 0 | 2 | 0 | 0.12-A | 0.21-A | 0.13-A | 0.22-A | +0.01 | +0.01 |
| Coast Highway (EW) | TS | 0 | 0 | 0 | 2 | 0 | 1>> | 2 | 3 | 0 | 0 | 3 | 1>> | 0.37-A | 0.58-A | 0.37-A | 0.58-A | +0.00 | +0.00 |
| Santa Rosa Drive/Big Canyon Drive (NS) at: | | | | | | | | | | | | | | | | | | | |
| San Joaquin Hills Road (EW) | TS | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 3 | 0 | 2 | 3 | 0 | 0.33-A | 0.48-A | 0.33-A | 0.49-A | +0.00 | +0.01 |
| MacArthur Boulevard (NS) at: | | | | | | | | | | | | | | | | | | | |
| Ford Road (EW) | TS | 2 | 4 | 1>> | 2 | 4 | 1>> | 2 | 2 | 1 | 2 | 2 | 1>> | 0.75-C | 0.69-B | 0.75-C | 0.69-B | +0.00 | +0.00 |
| San Joaquin Hills Road (EW) | TS | 2 | 3 | 1 | 2 | 3 | 1>> | 2 | 2 | 0 | 1 | 2 | 1>> | 0.63-B | 0.81-D | 0.63-B | 0.81-D | +0.00 | +0.00 |

[1] ICU-LOS = Intersection Capacity Utilization - Level of Service

[2] When a right turn lane is designated, the lane can either be striped or unstriped. To function as a right turn lane, there must be sufficient width for right turning vehicles to travel outside the through lanes.
L = Left; T = Through; R = Right; >> = Free Right Turn

[3] TS = Traffic Signal

# Figure 11
## Approved Projects
## Morning Peak Hour Intersection Turning Movement Volumes

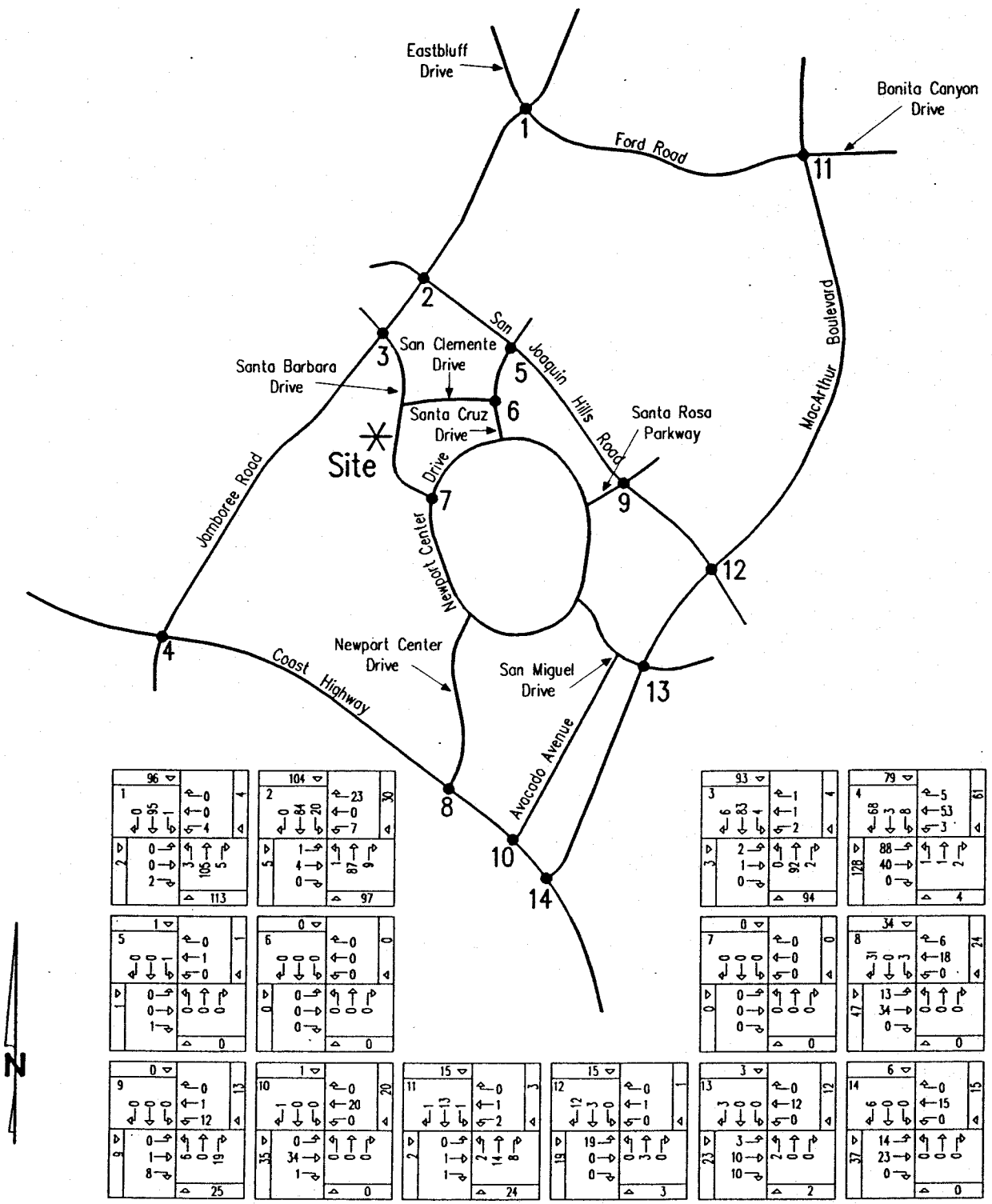



*Kunzman Associates*

Intersection reference numbers are in upper left corner of turning movement boxes.

3124/bbas

# Figure 12
## Approved Projects
## Evening Peak Hour Intersection Turning Movement Volumes

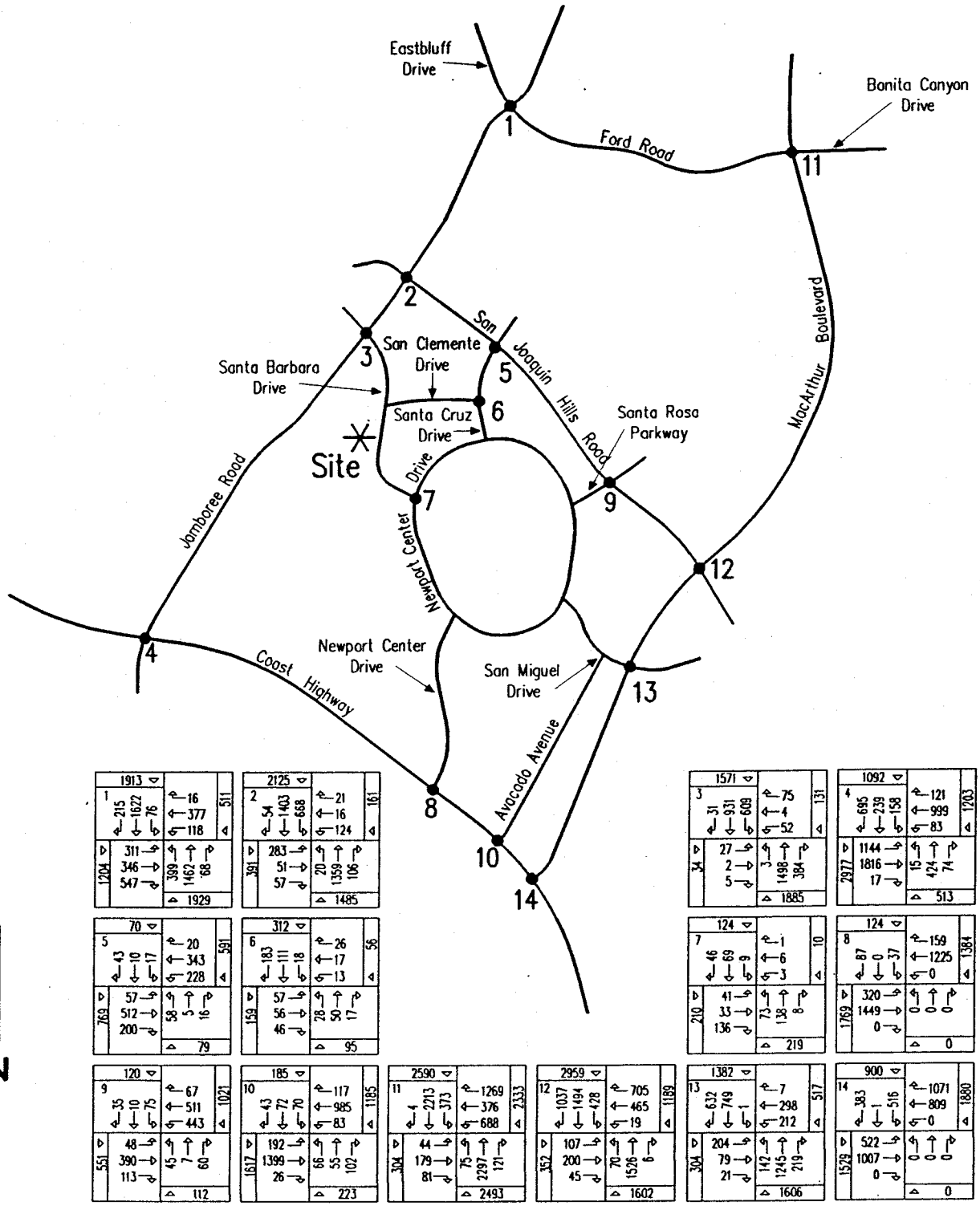



*Kunzman Associates*

Intersection reference numbers are in upper left corner of turning movement boxes.

3124/bbas

# Figure 13
## Existing + Approved Projects
## Morning Peak Hour Intersection Turning Movement Volumes

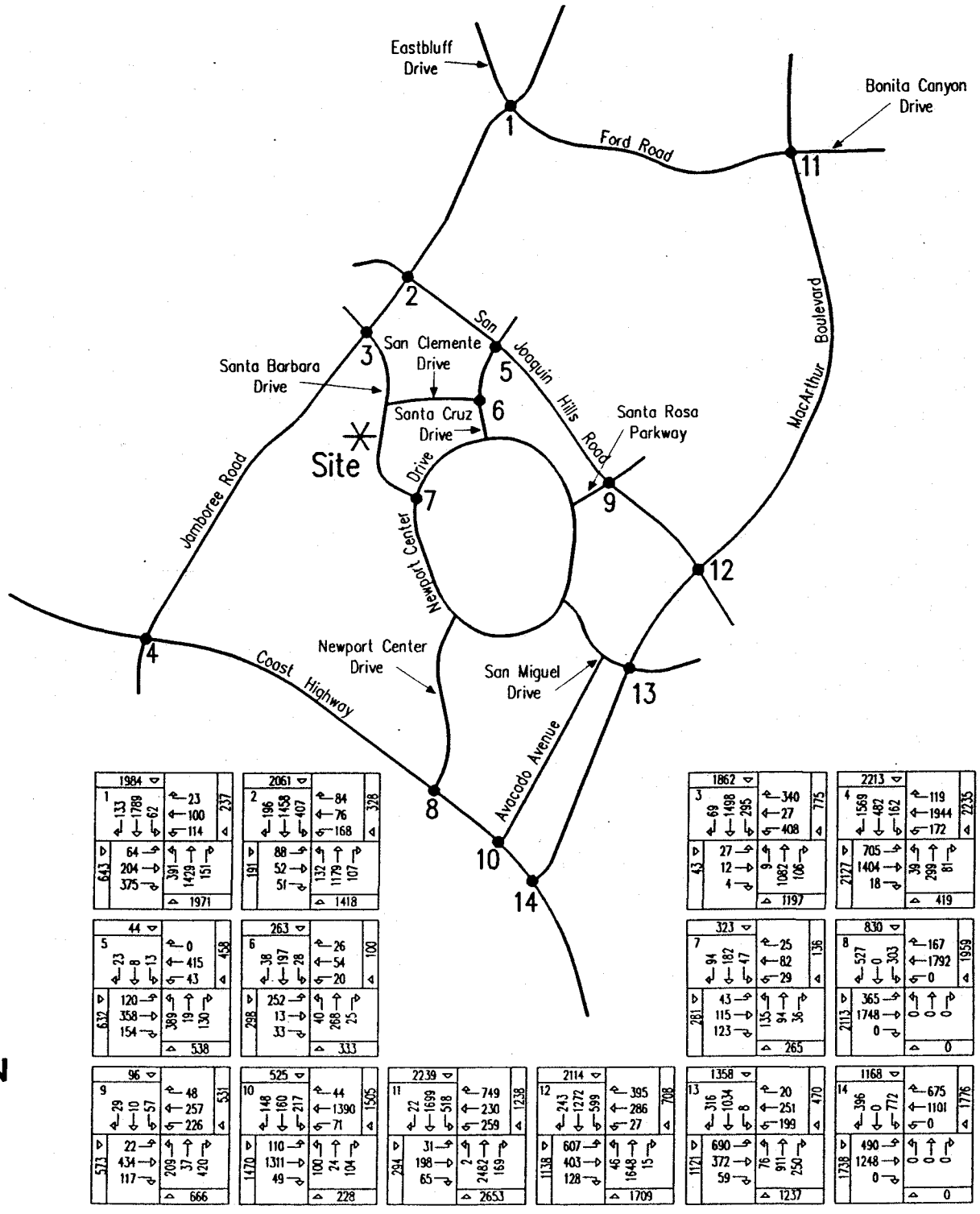



*Kunzman Associates*

Intersection reference numbers are in upper left corner of turning movement boxes.

3124/bbas

# Figure 14
## Existing + Approved Projects
## Evening Peak Hour Intersection Turning Movement Volumes

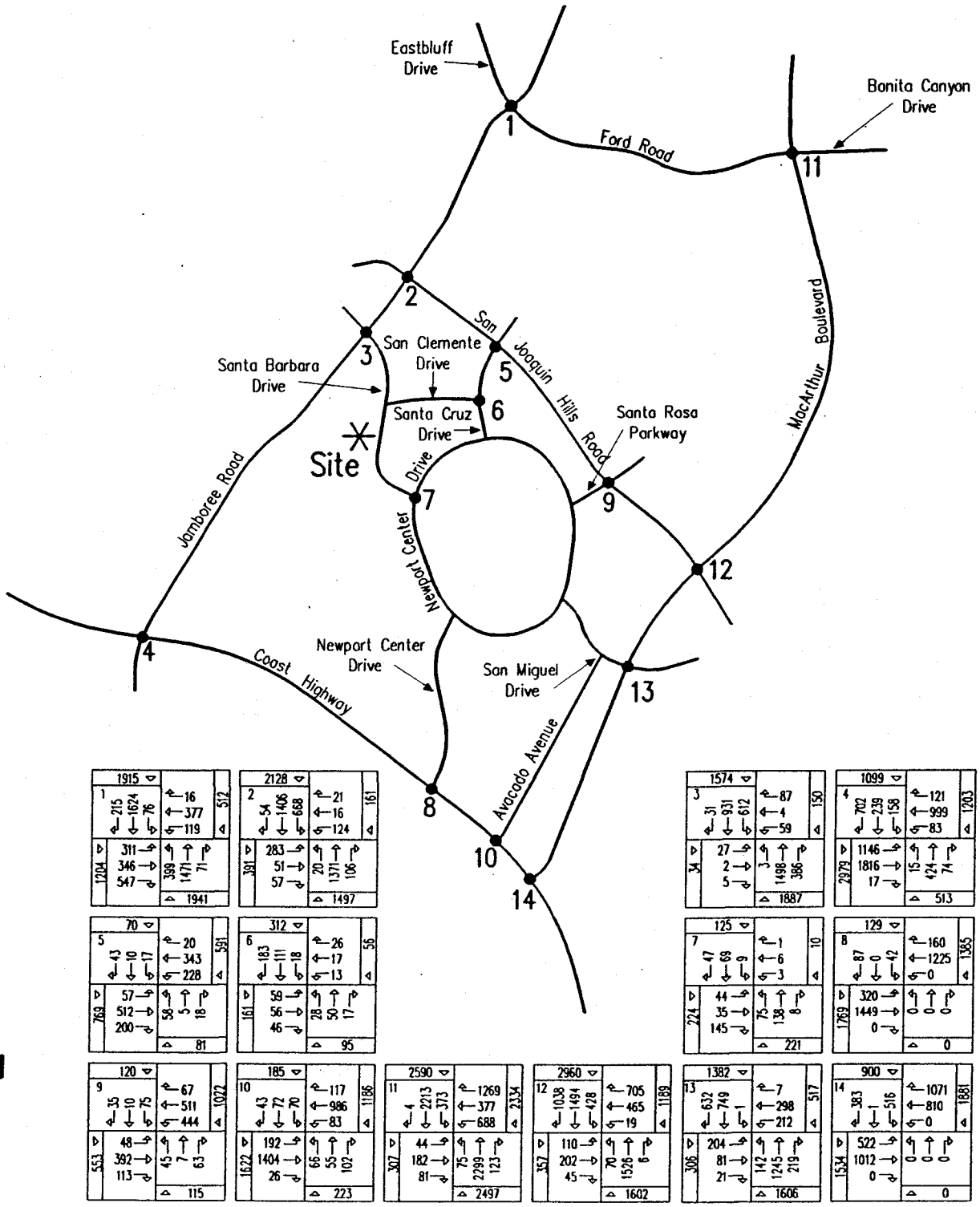



Kunzman Associates

Intersection reference numbers are in upper left corner of turning movement boxes.

3124/bbas

# Figure 15
## Existing + Approved Projects + Project
## Morning Peak Hour Intersection Turning Movement Volumes

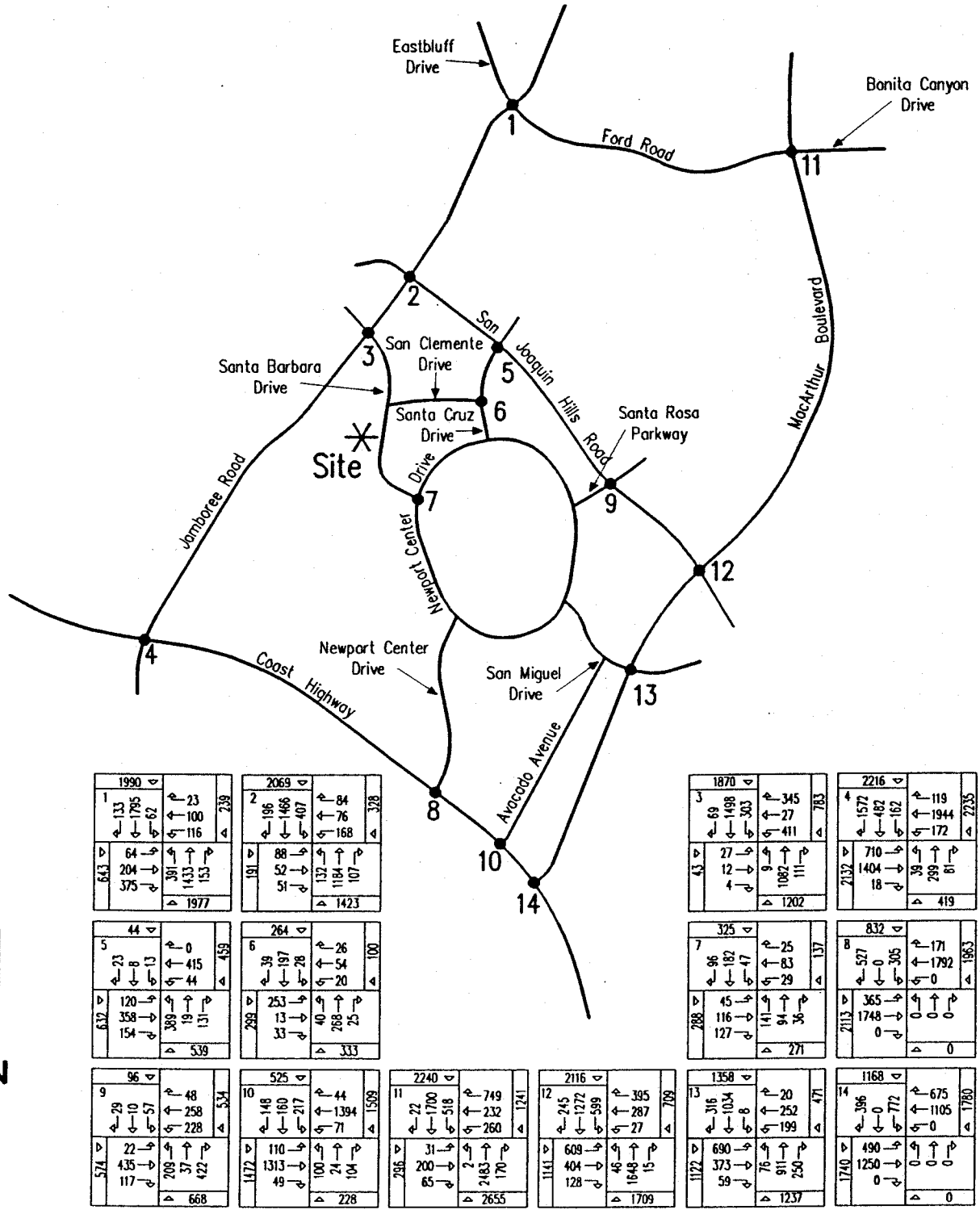



*Kunzman Associates*

Intersection reference numbers are in upper left corner of turning movement boxes.

3124/bbas

# Figure 16
## Existing + Approved Projects + Project
## Evening Peak Hour Intersection Turning Movement Volumes




Kunzman Associates

Intersection reference numbers are in upper left corner of turning movement boxes.

3124/bbas

# 6. CEQA Analysis

The California Environmental Quality Act (CEQA) analysis (this part of the analysis is consistent with CEQA) included analysis of the same study area intersections as the TPO analysis.

## Cumulative Projects

The City of Newport Beach staff provided the cumulative projects in the study area for the CEQA analysis. Cumulative projects are known, but not approved project developments that are reasonably expected to be completed or nearly completed at the same time as the proposed project. The cumulative project list is shown in Table 5 and the cumulative project traffic generation is included in Appendix E. Appendix E contains the directional distribution of the cumulative project traffic. The cumulative project morning and evening peak hour intersection turning movement volumes have been calculated and are shown on Figures 17 and 18, respectively.

The CEQA traffic volumes were obtained by adding the cumulative projects traffic volumes to the TPO traffic volumes.

## Intersection Capacity Utilization (ICU)

The technique used to assess the operation of a signalized intersection is known as Intersection Capacity Utilization (ICU). To calculate an ICU value the volume of traffic using the intersection is compared with the capacity of the intersection. An ICU value is usually expressed as a decimal. The decimal represents that portion of the hour required to provide sufficient capacity to accommodate all intersection traffic if all approaches operate at capacity.

The Levels of Service for existing + approved projects + cumulative projects traffic conditions have been calculated and are shown in Table 6. Existing + approved projects + cumulative projects morning and evening peak hour intersection turning movement volumes have been calculated and are shown on Figures 19 and 20, respectively. Existing + approved projects + cumulative projects ICU worksheets are provided in Appendix F. For existing + approved projects + cumulative projects traffic conditions, the intersections in the vicinity of the site are projected to operate at Level of Service D or better during the peak hours.

The Levels of Service for existing + approved projects + cumulative projects + project traffic conditions have been calculated and are shown in Table 6. Existing + approved projects + cumulative projects + project morning and evening peak hour intersection turning movement volumes have been calculated and are shown

on Figures 21 and 22, respectively. Existing + approved projects + cumulative projects + project ICU worksheets are provided in Appendix F. For existing + approved projects + cumulative projects + project traffic conditions, the intersections in the vicinity of the site are projected to operate at Level of Service D or better during the peak hours.

## Table 5

## Cumulative Project List

| Project Name |
|---|
| South Coast Shipyard |
| Morman Temple |
| Saint Mark Presbyterian |
| Our Lady Queen of Angels |
| St. Andrews Church |
| Mariners Church |
| Exodus Community Center |
| Newport Coast - TAZ 1 |
| Newport Coast - TAZ 2 |
| Newport Coast - TAZ 3 |
| Newport Coast - TAZ 4 |
| Newport Ridge - TAZ 1 |
| Newport Ridge - TAZ 2 |
| Newport Ridge - TAZ 3 |
| Bonita Canyon - Residential |

## Table 6

### CEQA Analysis Intersection Capacity Utilization (ICU) and Levels of Service (LOS)

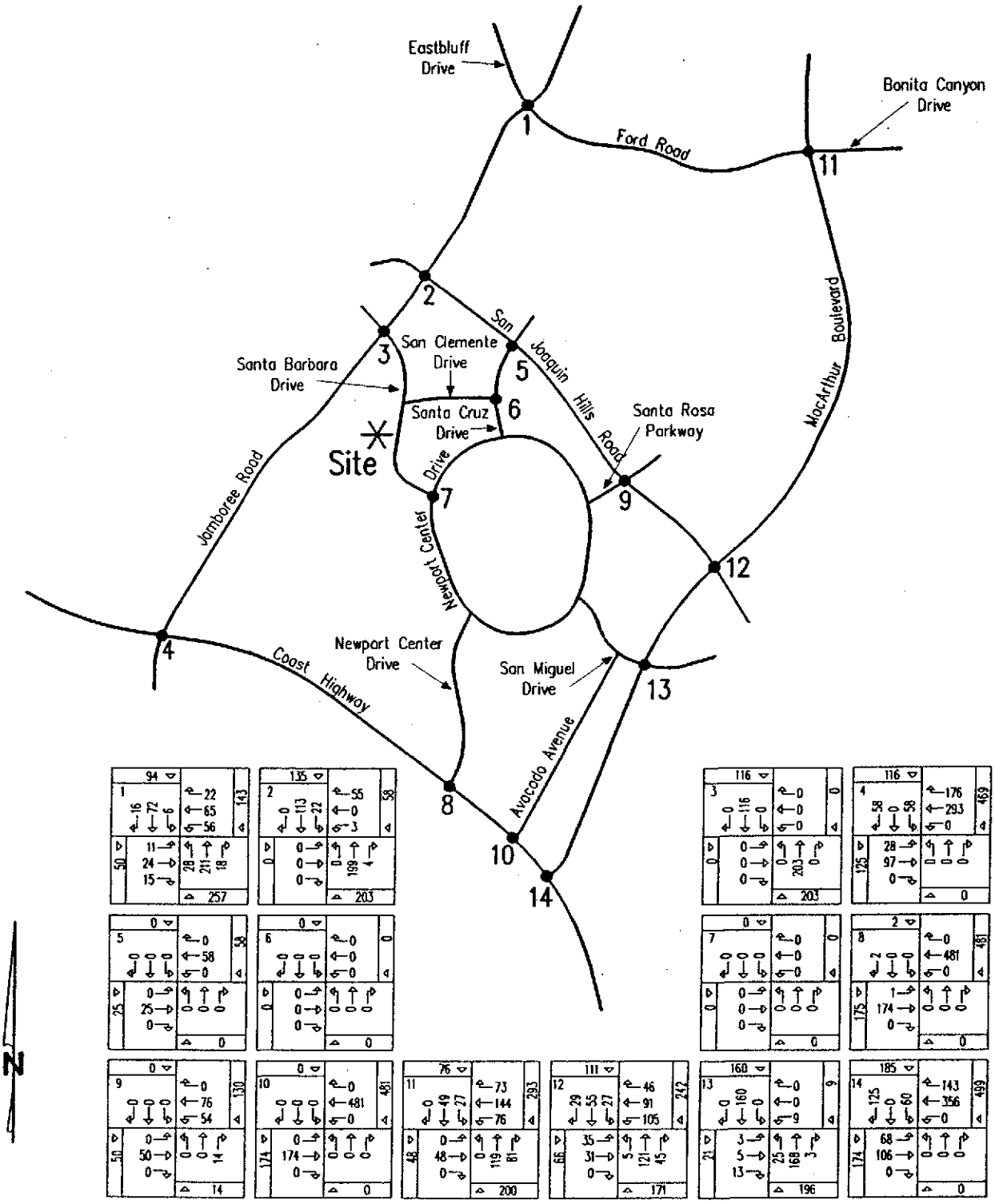
| Intersection | Traffic Control[3] | Intersection Approach Lanes[2] | | | | | | | | | | | | Peak Hour ICU-LOS[1] | | | | ICU Increase | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Northbound | | | Southbound | | | Eastbound | | | Westbound | | | Existing + Approved Projects + Cumulative Projects | | Existing + Approved Projects + Cumulative Projects + Project | | | |
| | | L | T | R | L | T | R | L | T | R | L | T | R | Morning | Evening | Morning | Evening | Morning | Evening |
| Jamboree Road (NS) at: | | | | | | | | | | | | | | | | | | | |
| Eastbluff Drive/Ford Road (EW) | TS | 2 | 3 | 0 | 1 | 3 | 1 | 1 | 1 | 1>> | 0 | 3 | 1 | 0.85-D | 0.78-C | 0.85-D | 0.78-C | +0.00 | +0.00 |
| Santa Barbara Drive (EW) | TS | 1 | 3 | 1 | 2 | 3 | 1 | 1 | 1 | 0 | 0 | 2 | 1 | 0.61-B | 0.60-A | 0.62-B | 0.60-A | +0.01 | +0.00 |
| Santa Cruz Road (NS) at: | | | | | | | | | | | | | | | | | | | |
| San Joaquin Hills Road (EW) | TS | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 3 | 0 | 1 | 3 | 0 | 0.35-A | 0.42-A | 0.35-A | 0.42-A | +0.00 | +0.00 |
| San Clemente Drive (EW) | TS | 1 | 3 | 0 | 1 | 2 | 0 | 0 | 2 | 0 | 0 | 3 | 0 | 0.16-A | 0.19-A | 0.16-A | 0.19-A | +0.00 | +0.00 |
| Newport Center Drive (NS) at: | | | | | | | | | | | | | | | | | | | |
| Santa Barbara Drive (EW) | TS | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 0 | 0 | 2 | 0 | 0.12-A | 0.21-A | 0.13-A | 0.22-A | +0.01 | +0.01 |
| Coast Highway (EW) | TS | 0 | 0 | 0 | 2 | 0 | 1>> | 2 | 3 | 0 | 0 | 3 | 1>> | 0.47-A | 0.66-B | 0.47-A | 0.66-B | +0.00 | +0.00 |
| Santa Rosa Drive/Big Canyon Drive (NS) at: | | | | | | | | | | | | | | | | | | | |
| San Joaquin Hills Road (EW) | TS | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 3 | 0 | 2 | 3 | 0 | 0.36-A | 0.55-A | 0.37-A | 0.55-A | +0.01 | +0.00 |
| MacArthur Boulevard (NS) at: | | | | | | | | | | | | | | | | | | | |
| Ford Road (EW) | TS | 2 | 4 | 1>> | 2 | 4 | 1>> | 2 | 2 | 1 | 2 | 2 | 1>> | 0.81-D | 0.80-C | 0.81-D | 0.81-D | +0.00 | +0.01 |
| San Joaquin Hills Road (EW) | TS | 2 | 3 | 1 | 2 | 3 | 1>> | 2 | 2 | 0 | 1 | 2 | 1>> | 0.70-B | 0.88-D | 0.70-B | 0.88-D | +0.00 | +0.00 |

[1] ICU-LOS = Intersection Capacity Utilization - Level of Service

[2] When a right turn lane is designated, the lane can either be striped or unstriped. To function as a right turn lane, there must be sufficient width for right turning vehicles to travel outside the through lanes.
L = Left; T = Through; R = Right; >> = Free Right Turn

[3] TS = Traffic Signal

# Figure 17
## Cumulative Projects
## Morning Peak Hour Intersection Turning Movement Volumes

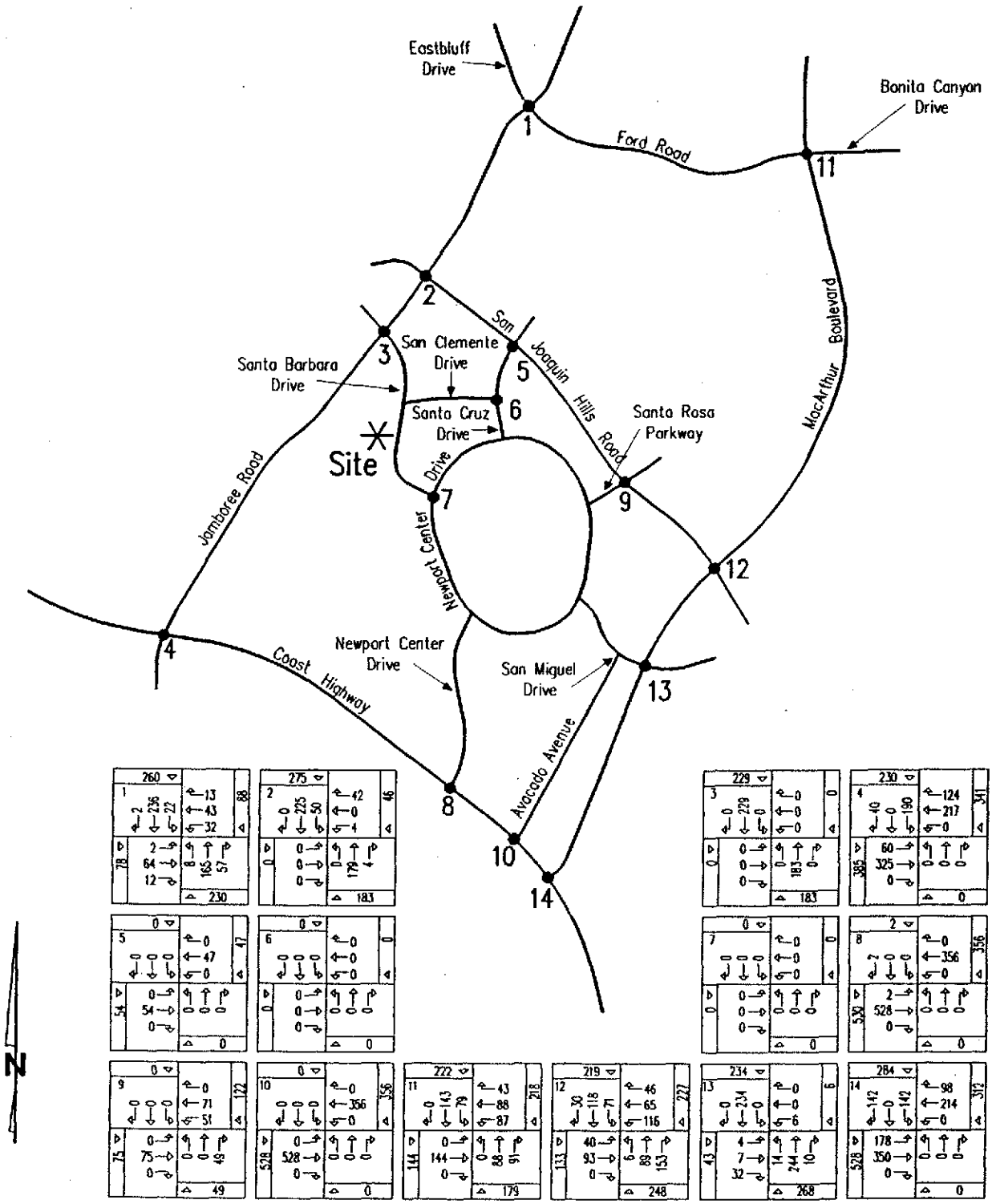



*Kunzman Associates*

Intersection reference numbers are in upper left corner of turning movement boxes.

3124/bbas

# Figure 18
## Cumulative Projects
## Evening Peak Hour Intersection Turning Movement Volumes

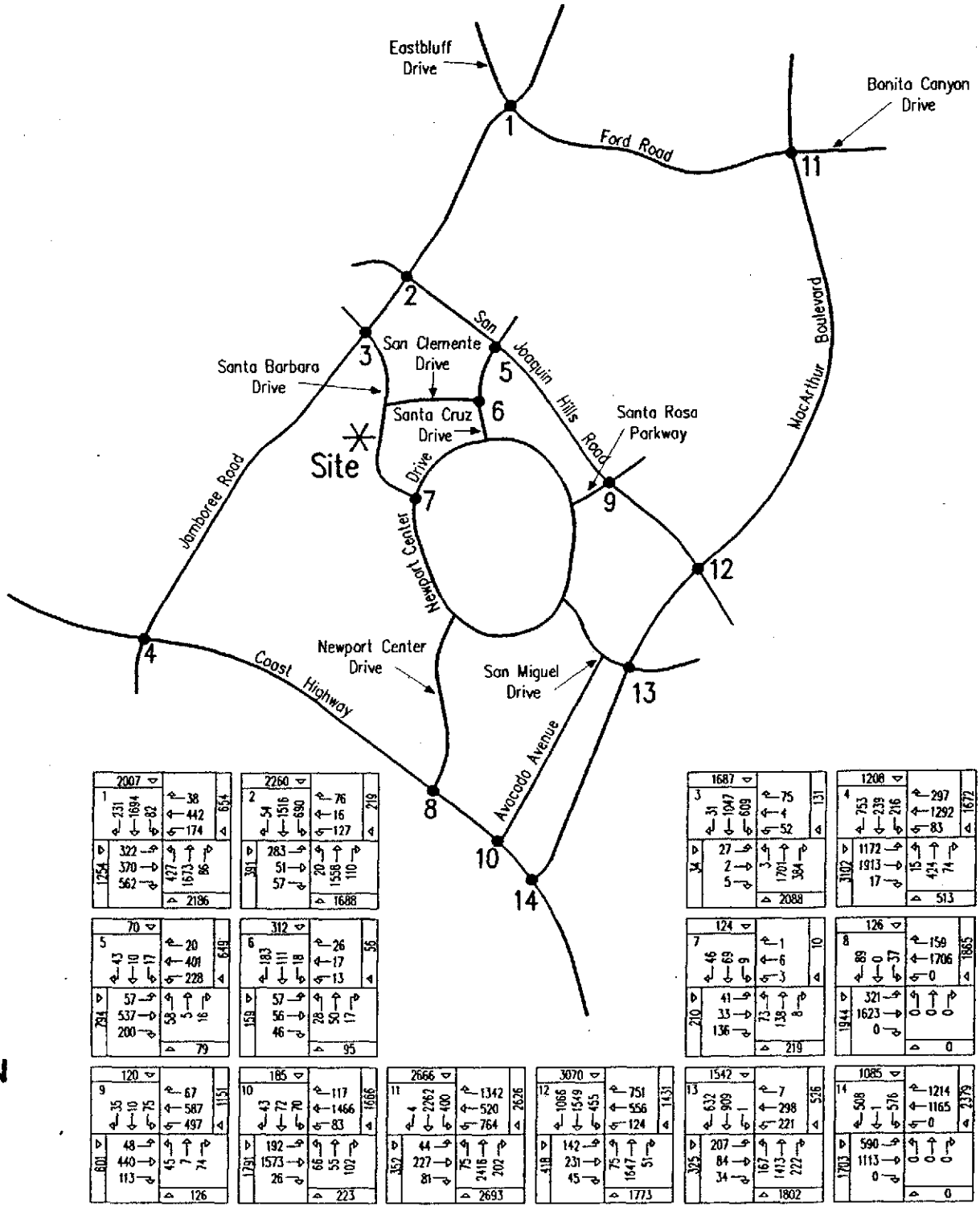



Kunzman Associates

Intersection reference numbers are in upper left corner of turning movement boxes.

3124/bbas

# Figure 19
## Existing + Approved Projects + Cumulative Projects
## Morning Peak Hour Intersection Turning Movement Volumes

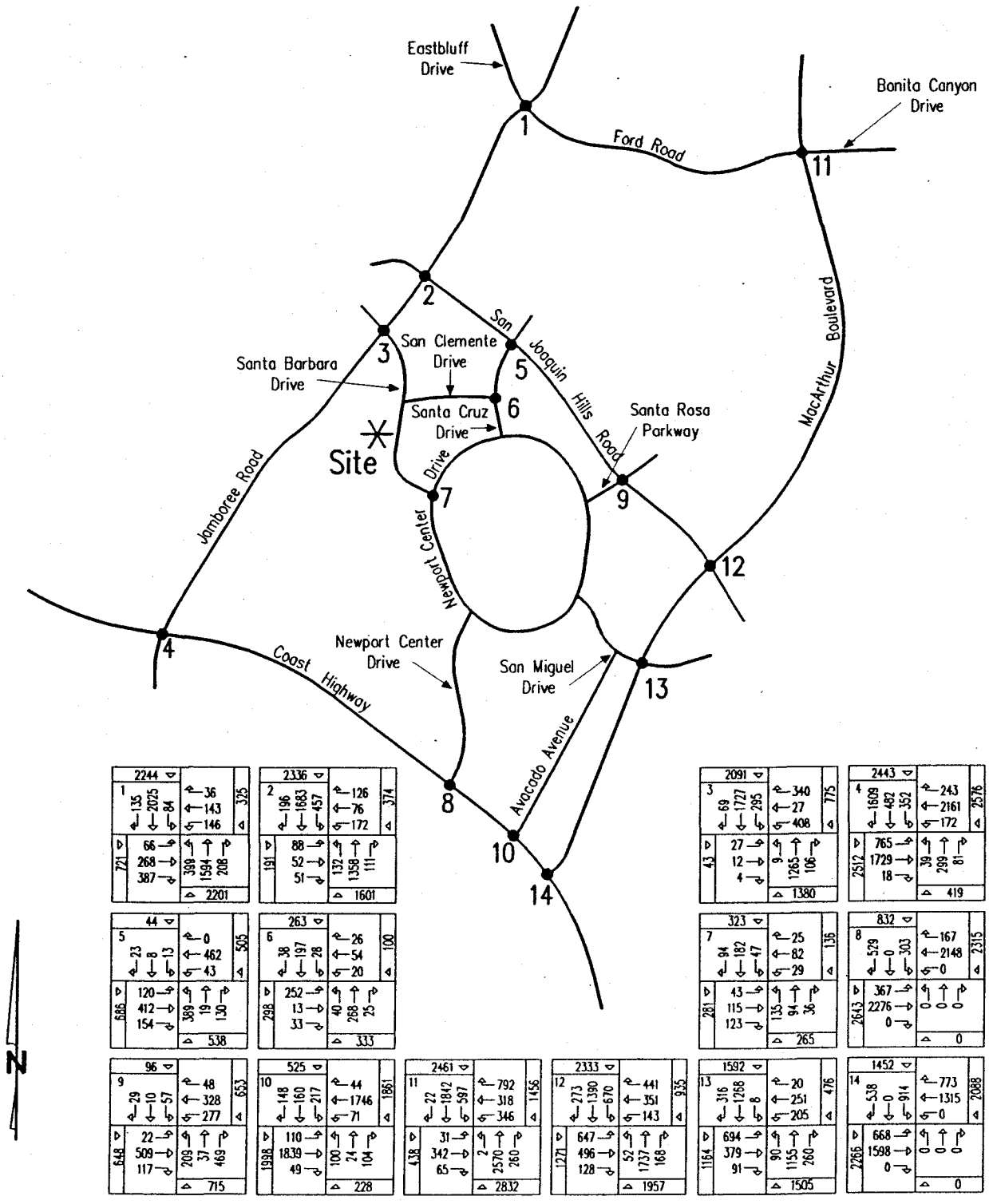



*Kunzman Associates*

Intersection reference numbers are in upper left corner of turning movement boxes.

3124/bbas

# Figure 20
## Existing + Approved Projects + Cumulative Projects
## Evening Peak Hour Intersection Turning Movement Volumes

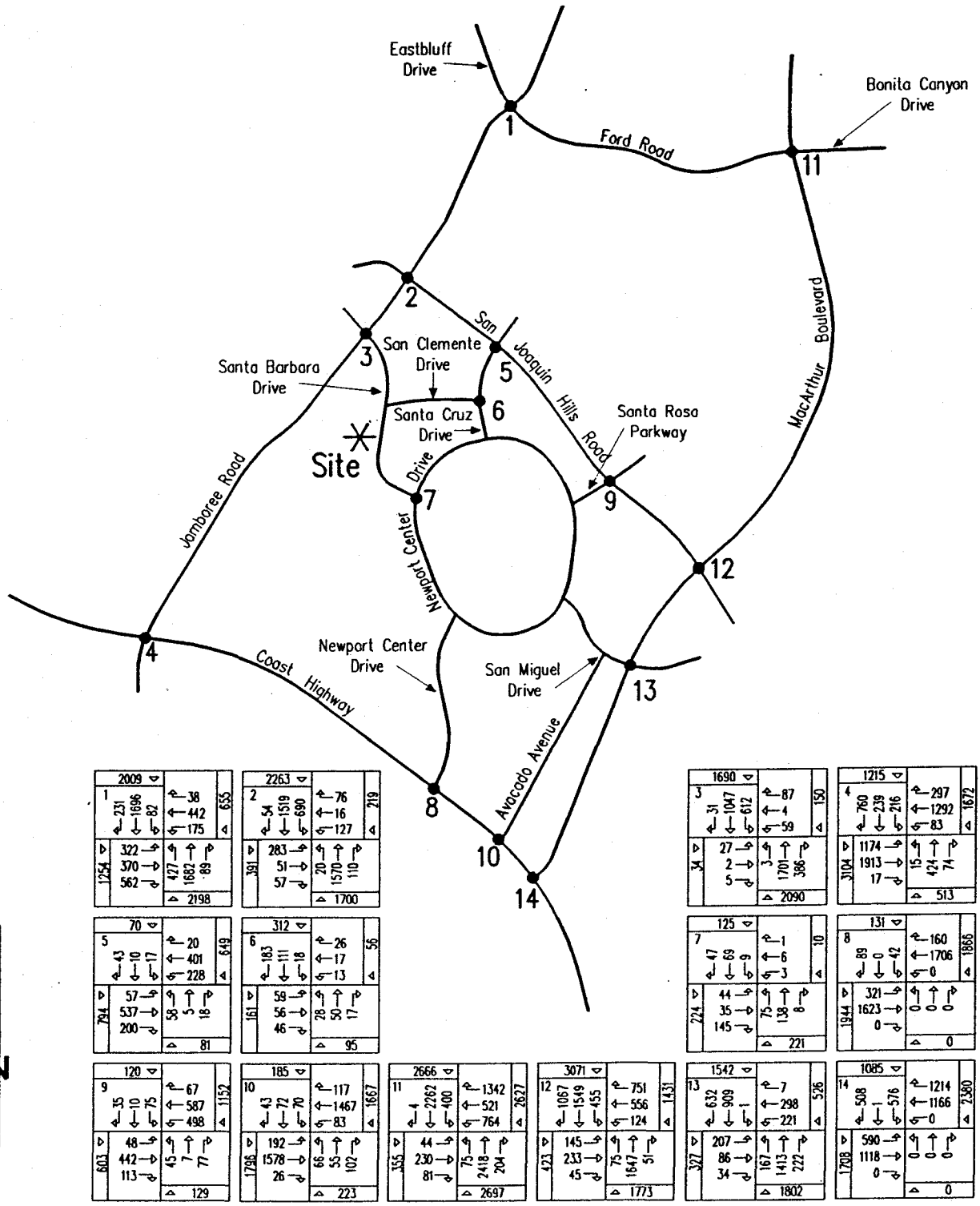



Kunzman Associates

Intersection reference numbers are in upper left corner of turning movement boxes.

3124/bbas

# Figure 21
## Existing + Approved Projects + Cumulative Projects + Project Morning Peak Hour Intersection Turning Movement Volumes

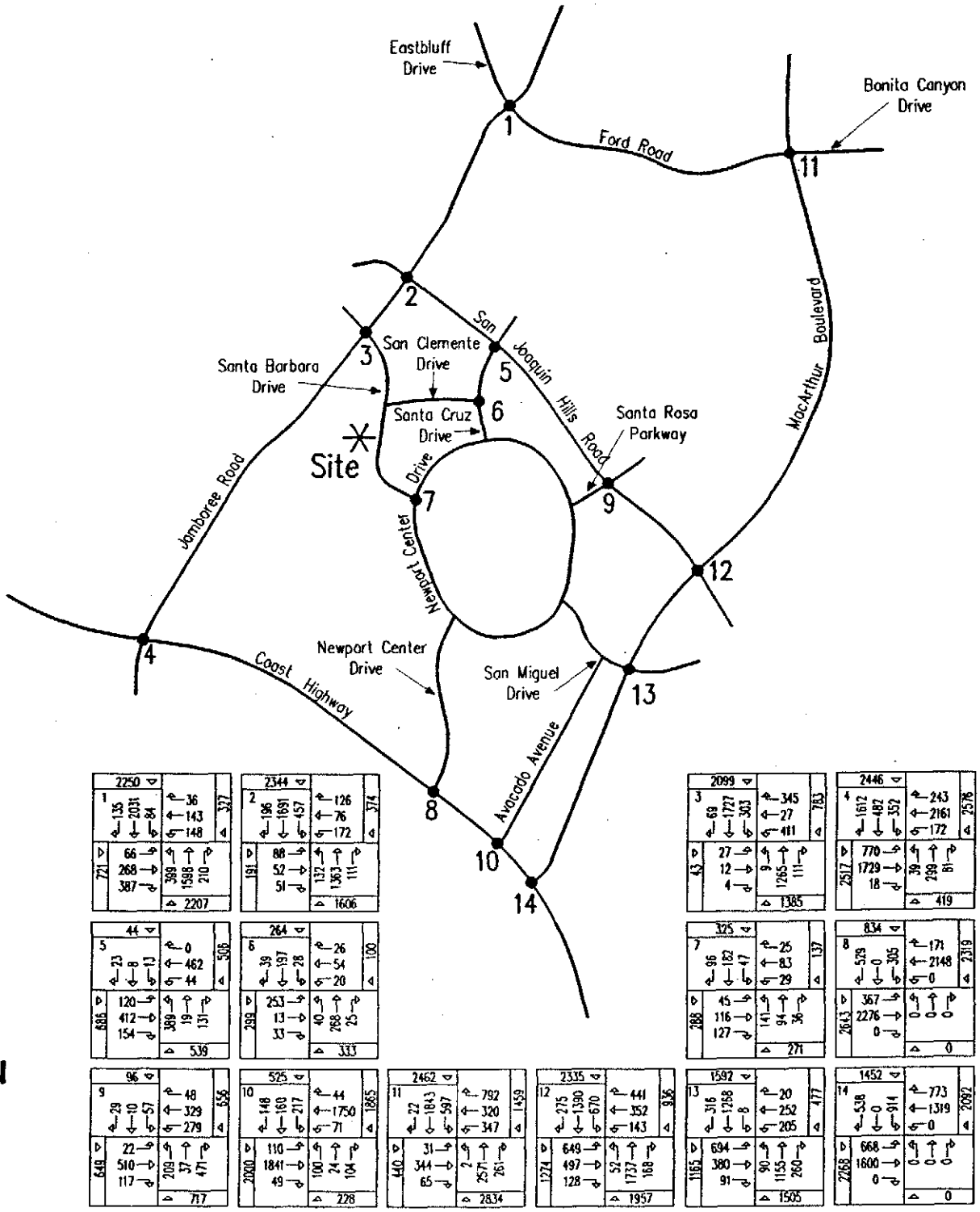



Kunzman Associates

Intersection reference numbers are in upper left corner of turning movement boxes.

3124/bbas

# Figure 22
## Existing + Approved Projects + Cumulative Projects + Project Evening Peak Hour Intersection Turning Movement Volumes




Kunzman Associates

Intersection reference numbers are in upper left corner of turning movement boxes.

3124/bbas

# 7. GPA Analysis

The GPA analysis traffic volumes have been obtained from the City of Newport Beach. The GPA analysis does not take into account any trip credits for the site. Since, under General Plan Buildout traffic conditions, all entitlement for the site is shifted to the adjacent hotel.

**Intersection Capacity Utilization (ICU)**

The technique used to assess the operation of a signalized intersection is known as Intersection Capacity Utilization (ICU). To calculate an ICU value the volume of traffic using the intersection is compared with the capacity of the intersection. An ICU value is usually expressed as a decimal. The decimal represents that portion of the hour required to provide sufficient capacity to accommodate all intersection traffic if all approaches operate at capacity.

The Levels of Service for General Plan Buildout without project traffic conditions have been calculated and are shown in Table 7. General Plan Buildout without project morning and evening peak hour intersection turning movement volumes have been calculated and are shown on Figures 23 and 24, respectively General Plan Buildout without project ICU worksheets are provided in Appendix F. For General Plan Buildout without project traffic conditions, the intersections in the vicinity of the site are projected to operate at Level of Service D or better during the peak hours, except for the following study area intersections that are projected to operate at Level of Service E/F during the evening peak hour:

MacArthur Boulevard (NS) at:
- Ford Road (EW)
- San Joaquin Hills Road (EW)

The Levels of Service for General Plan Buildout with project traffic conditions have been calculated and are shown in Table 7. General Plan Buildout with project morning and evening peak hour intersection turning movement volumes have been calculated and are shown on Figures 25 and 26, respectively General Plan Buildout with project ICU worksheets are provided in Appendix F. For General Plan Buildout with project traffic conditions, the intersections in the vicinity of the site are projected to operate at Level of Service D or better during the peak hours, except for the following study area intersections that are projected to operate at Level of Service E/F during the evening peak hour:

MacArthur Boulevard (NS) at:
- Ford Road (EW)
- San Joaquin Hills Road (EW)

Comparison of the one-percent increase in the General Plan Buildout ICU between the without project and with project traffic conditions (see Table 7) resulted in no study area intersections exceeding the one-percent threshold.

## Table 7

## GPA Analysis Intersection Capacity Utilization (ICU) and Levels of Service (LOS)

| Intersection | Traffic Control[3] | Intersection Approach Lanes[2] | | | | | | | | | | | | Peak Hour ICU-LOS[1] | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Northbound | | | Southbound | | | Eastbound | | | Westbound | | | Existing + Approved Projects + Cumulative Projects | | Existing + Approved Projects + Cumulative Projects + Project | | ICU Increase | |
| | | L | T | R | L | T | R | L | T | R | L | T | R | Morning | Evening | Morning | Evening | Morning | Evening |
| Jamboree Road (NS) at: | | | | | | | | | | | | | | | | | | | |
| Eastbluff Drive/Ford Road (EW) | TS | 2 | 3 | 0 | 1 | 3 | 1 | 1 | 1 | 1>> | 0 | 3 | 1 | 0.74-C | 0.70-B | 0.74-C | 0.70-B | +0.00 | +0.00 |
| San Joaquin Hills Road (EW) | TS | 1 | 3 | 1>> | 2 | 3 | 1>> | 0 | 3 | 1>> | 0 | 3 | 1 | 0.61-B | 0.63-B | 0.61-B | 0.63-B | +0.00 | +0.00 |
| Santa Barbara Drive (EW) | TS | 1 | 3 | 1 | 2 | 3 | 1 | 1 | 1 | 0 | 0 | 2 | 1 | 0.52-A | 0.69-B | 0.53-A | 0.71-C | +0.01 | +0.02 |
| Coast Highway (EW) | TS | 1 | 2 | 0 | 1 | 2 | 1>> | 3 | 4 | 0 | 2 | 4 | 1>> | 0.84-D | 0.87-D | 0.84-D | 0.87-D | +0.00 | +0.00 |
| Santa Cruz Road (NS) at: | | | | | | | | | | | | | | | | | | | |
| San Joaquin Hills Road (EW) | TS | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 3 | 0 | 1 | 3 | 0 | 0.38-A | 0.51-A | 0.38-A | 0.51-A | +0.00 | +0.00 |
| Newport Center Drive (NS) at: | | | | | | | | | | | | | | | | | | | |
| Coast Highway (EW) | TS | 0 | 0 | 0 | 2 | 0 | 1>> | 2 | 3 | 0 | 0 | 3 | 1>> | 0.51-A | 0.62-B | 0.51-A | 0.62-B | +0.00 | +0.00 |
| Santa Rosa Drive/Big Canyon Drive (NS) at: | | | | | | | | | | | | | | | | | | | |
| San Joaquin Hills Road (EW) | TS | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 3 | 0 | 2 | 3 | 0 | 0.34-A | 0.66-B | 0.34-A | 0.66-B | +0.00 | +0.00 |
| MacArthur Boulevard (NS) at: | | | | | | | | | | | | | | | | | | | |
| Ford Road (EW) | TS | 2 | 4 | 1>> | 2 | 4 | 1>> | 2 | 2 | 1 | 2 | 2 | 1>> | 0.76-C | 1.07-F | 0.77-C | 1.08-F | +0.01 | +0.01[4] |
| San Joaquin Hills Road (EW) | TS | 2 | 3 | 1 | 2 | 3 | 1>> | 2 | 2 | 0 | 1 | 2 | 1>> | 0.71-C | 0.96-E | 0.71-C | 0.97-E | +0.00 | +0.01[4] |
| San Miguel Drive (EW) | TS | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 2 | 1 | 2 | 2 | 0 | 0.58-A | 0.72-C | 0.58-A | 0.72-C | +0.00 | +0.00 |
| Coast Highway (EW) | TS | 0 | 0 | 0 | 2 | 0 | 1>> | 2 | 3 | 0 | 0 | 3 | 1>> | 0.72-C | 0.81-D | 0.72-C | 0.81-D | +0.00 | +0.00 |

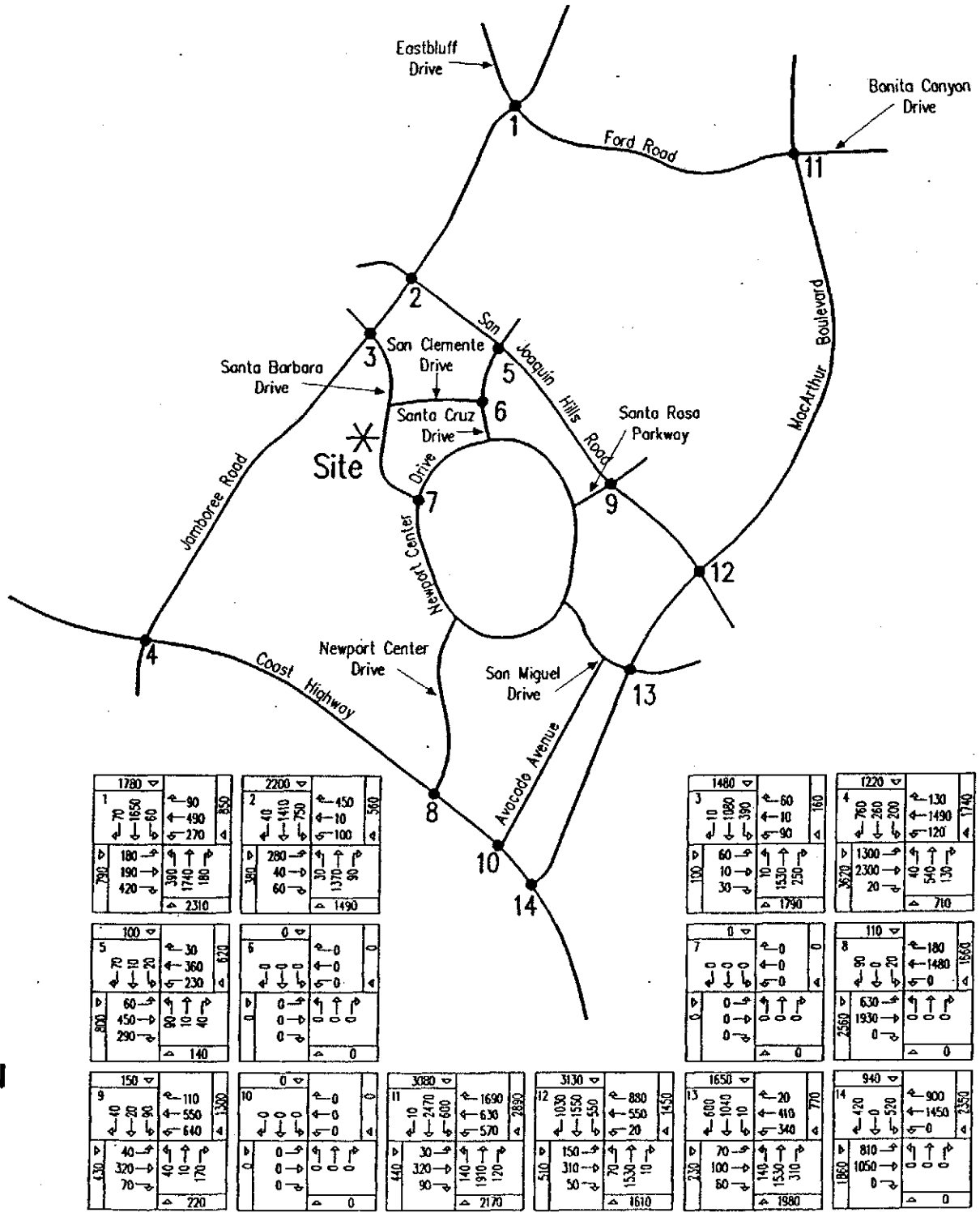
[1] ICU-LOS = Intersection Capacity Utilization - Level of Service

[2] When a right turn lane is designated, the lane can either be striped or unstriped. To function as a right turn lane, there must be sufficient width for right turning vehicles to travel outside the through lanes.
L = Left; T = Through; R = Right; >> = Free Right Turn

[3] TS = Traffic Signal

[4] Less than one-percent increase when carried to 3 decimal places.

# Figure 23
## General Plan Buildout Without Project
## Morning Peak Hour Intersection Turning Movement Volumes

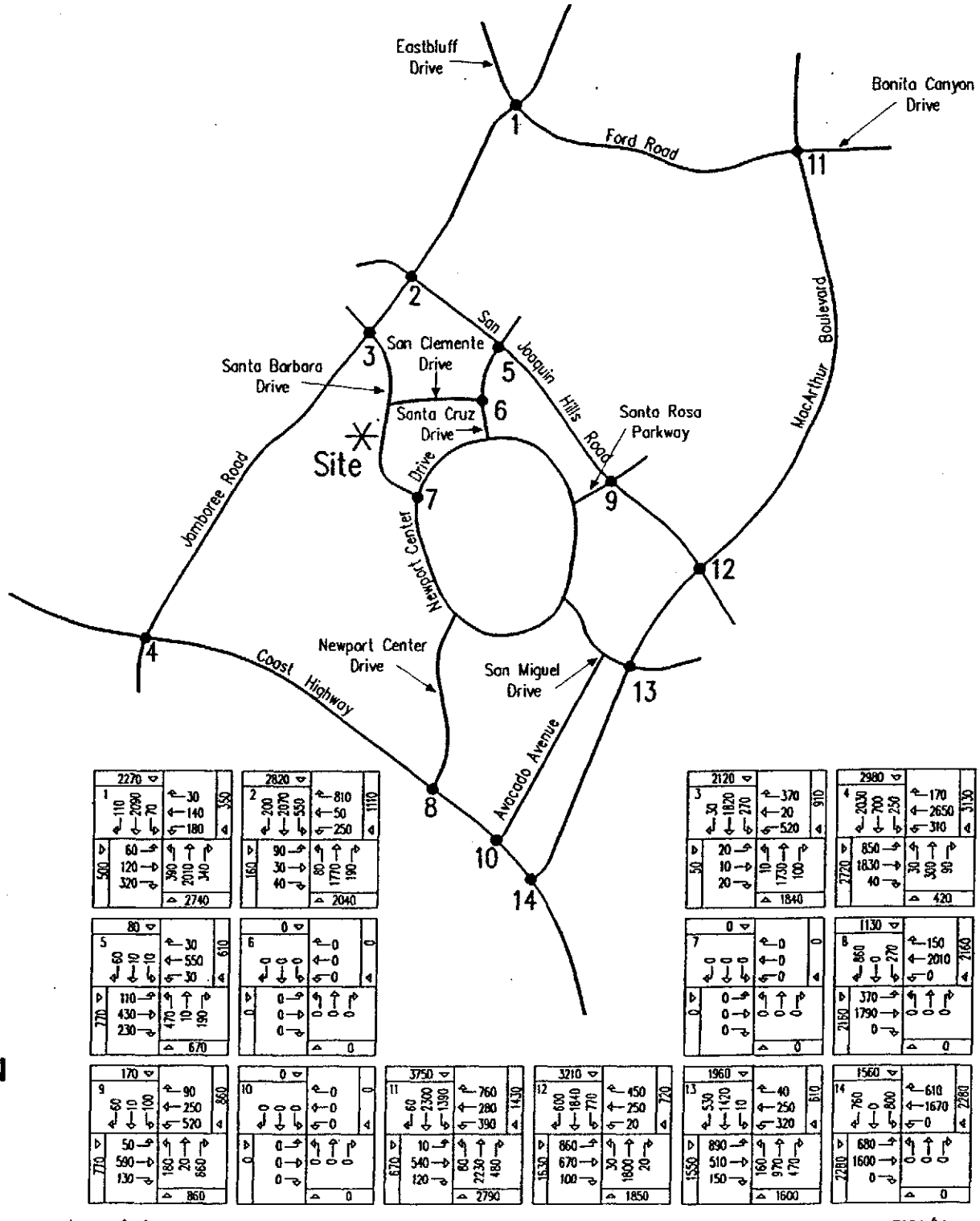



Kunzman Associates

Intersection reference numbers are in upper left corner of turning movement boxes.

3124/bbas

# Figure 24
## General Plan Buildout Without Project
## Evening Peak Hour Intersection Turning Movement Volumes

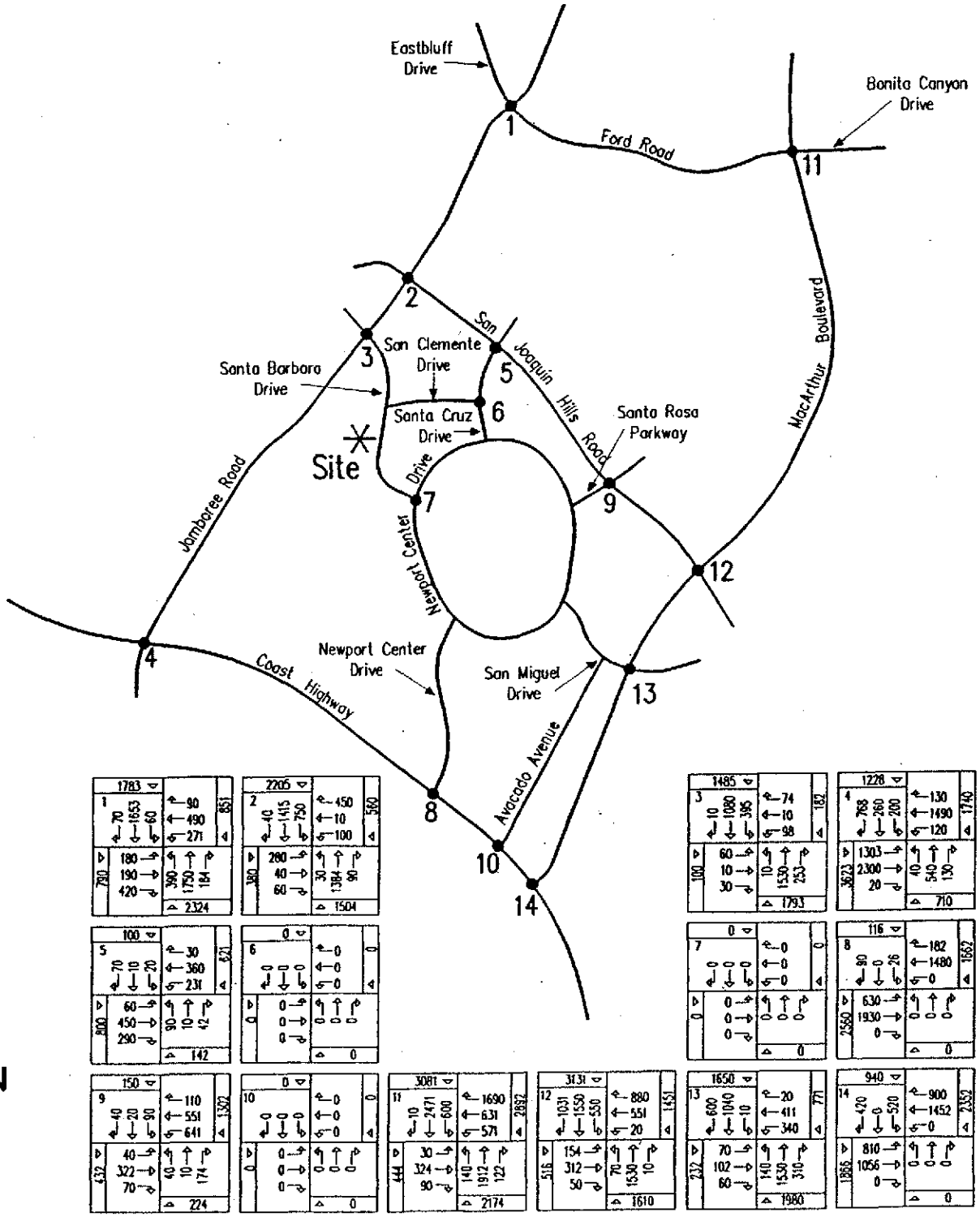



*Kunzman Associates*

Intersection reference numbers are in upper left corner of turning movement boxes.

3124/bbas

# Figure 25
## General Plan Buildout With Project
## Morning Peak Hour Intersection Turning Movement Volumes

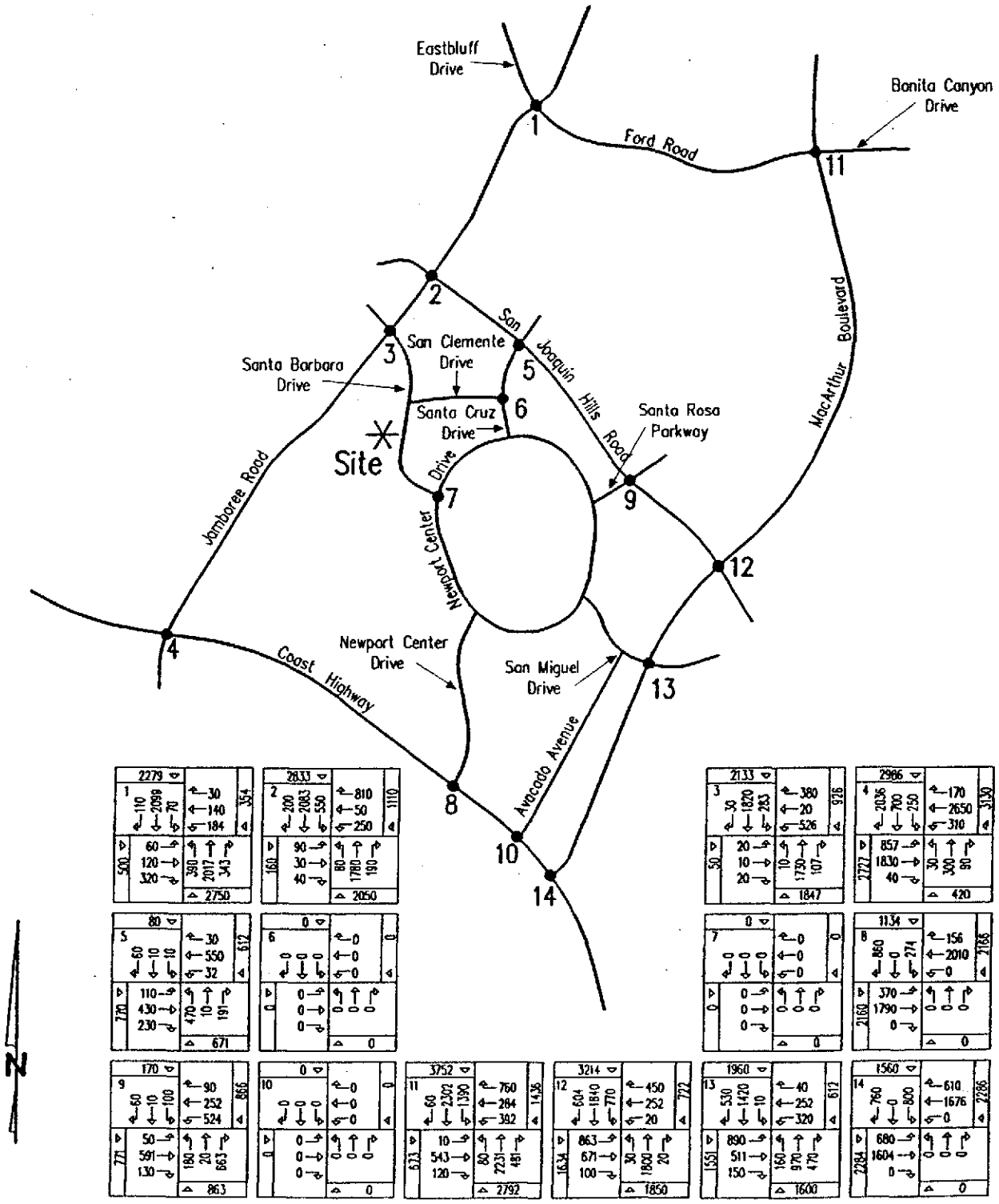



*Kunzman Associates*

Intersection reference numbers are in upper left corner of turning movement boxes.

3124/bbas

# Figure 26
## General Plan Buildout With Project
## Evening Peak Hour Intersection Turning Movement Volumes




*Kunzman Associates*

Intersection reference numbers are in upper left corner of turning movement boxes.

3124/bbas

# 8. Conclusions

This section summarizes the existing traffic conditions, project traffic impacts, and the proposed mitigation measures.

**Existing Traffic Conditions**

a. The existing use is a tennis club (includes 8 tennis courts) and is an ancillary use to the Marriott Hotel.

b. The project site currently has access to Santa Barbara Drive.

c. Pursuant to discussions with City of Newport Beach staff, the study area includes the following intersections:

Jamboree Road (NS) at:
- Eastbluff Drive/Ford Road (EW)
- San Joaquin Hills Road (EW)
- Santa Barbara Drive (EW)
- Coast Highway (EW)

Santa Cruz Road (NS) at:
- San Joaquin Hills Road (EW)
- San Clemente Drive (EW)

Newport Center Drive (NS) at:
- Santa Barbara Drive (EW)
- Coast Highway (EW)

Santa Rosa Drive/Big Canyon Drive (NS) at:
- San Joaquin Hills Road (EW)

Avocado Avenue (NS) at:
- Coast Highway (EW)

MacArthur Boulevard (NS) at:
- Ford Road (EW)
- San Joaquin Hills Road (EW)
- San Miguel Drive (EW)

## Traffic Impacts

a. The proposed project consists of 79 condominium dwelling units.

b. The proposed development is projected to generate approximately 640 daily vehicle trips, 52 of which will occur during the morning peak hour and 65 of which will occur during the evening peak hour. As shown in Table 1, the proposed development compared to the existing development is projected to generate approximately 330 more daily vehicle trips, 42 more of which will occur during the morning peak hour and 39 more of which will occur during the evening peak hour.

c. The City of Newport Beach staff provided the approved and cumulative projects in the study area. The approved projects consist of development that has been approved but are not fully completed. Cumulative projects are known, but not approved project developments that are reasonably expected to be completed or nearly completed at the same time as the proposed project.

d. The TPO analysis resulted in the following study area intersections exceeding the one-percent threshold and requiring additional analysis:

Jamboree Road (NS) at:
- Eastbluff Drive/Ford Road (EW)
- Santa Barbara Drive (EW)

Santa Cruz Road (NS) at:
- San Joaquin Hills Road (EW)
- San Clemente Drive (EW)

Newport Center Drive (NS) at:
- Santa Barbara Drive (EW)
- Coast Highway (EW)

Santa Rosa Drive/Big Canyon Drive (NS) at:
- San Joaquin Hills Road (EW)

MacArthur Boulevard (NS) at:
- Ford Road (EW)
- San Joaquin Hills Road (EW)

e. The California Environmental Quality Act (CEQA) analysis (this part of the analysis is consistent with CEQA) included analysis of the same study area intersections as the TPO analysis.

f. The GPA analysis included ICU calculations at the following study area intersections:

Jamboree Road (NS) at:
- Eastbluff Drive/Ford Road (EW)
- San Joaquin Hills Road (EW)
- Santa Barbara Drive (EW)
- Coast Highway (EW)

Santa Cruz Road (NS) at:
- San Joaquin Hills Road (EW)

Newport Center Drive (NS) at:
- Coast Highway (EW)

Santa Rosa Drive/Big Canyon Drive (NS) at:
- San Joaquin Hills Road (EW)

MacArthur Boulevard (NS) at:
- Ford Road (EW)
- San Joaquin Hills Road (EW)
- San Miguel Drive (EW)
- Coast Highway (EW)

Comparison of the one-percent increase in the General Plan Buildout ICU between the without project and with project traffic conditions (see Table 7) resulted in no study area intersections exceeding the one-percent threshold.

**Mitigation Measures**

The following measures are recommended to mitigate the impact of the project on traffic circulation:

a. Site-specific circulation and access recommendations are depicted on Figure 27.

b. An existing two-way left turn lane on Santa Barbara Drive provides adequate left turn storage for vehicles desiring to turn left into the project site.

c. On-site parking should be provided to meet City of Newport Beach parking code requirements.

d. Sight distance at the project accesses should be reviewed with respect to Caltrans/City of Newport Beach standards in conjunction with the preparation of final grading, landscape, and street improvement plans.

e. On-site traffic signing and striping should be implemented in conjunction with detailed construction plans for the project.

f. The parking garage design shall meet all City requirements regarding parking stall width, parking stall depth, parking aisle width, parking aisle grade, and parking aisle-turning radii.

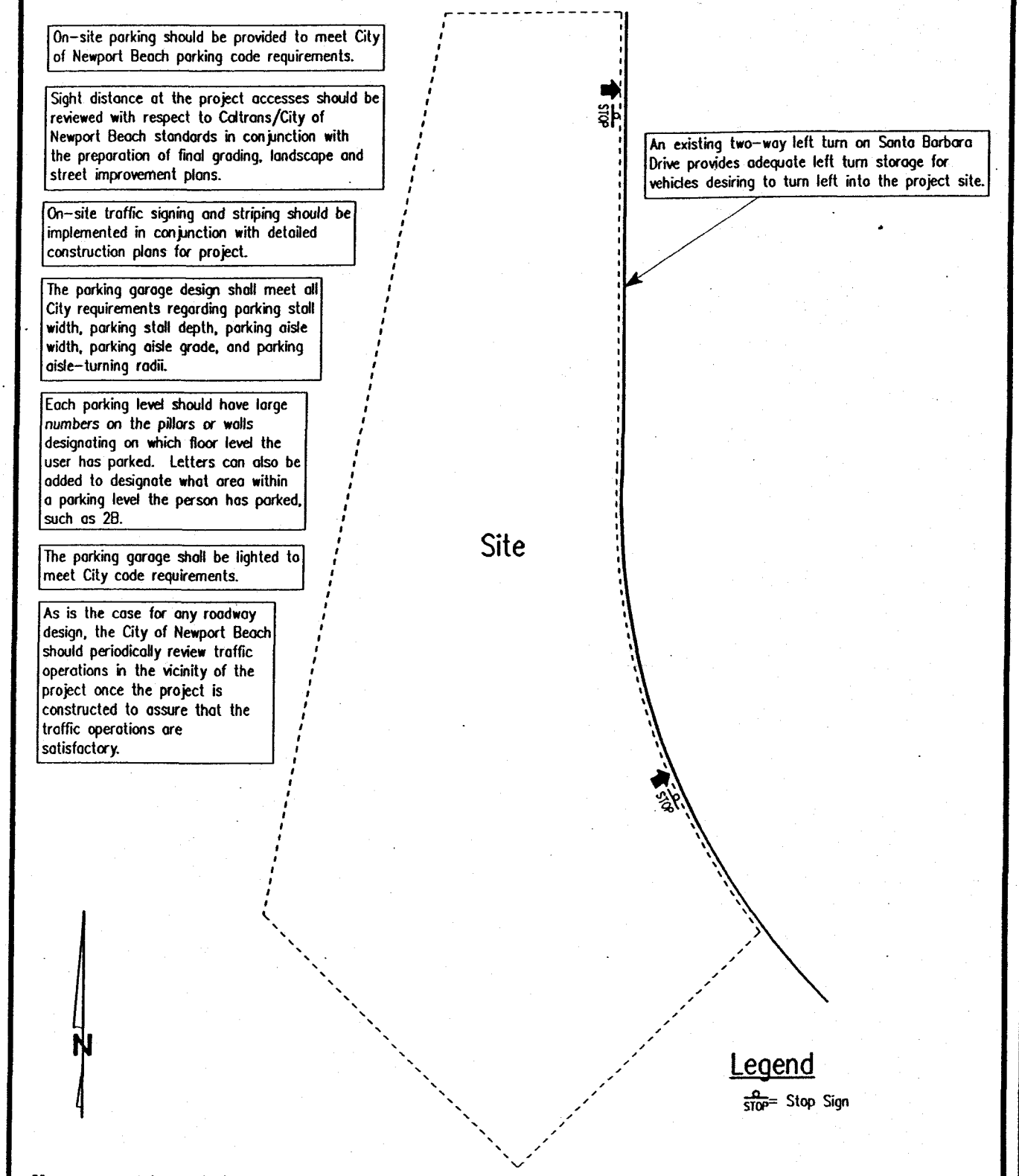
g. Each parking level should have large numbers on the pillars or walls designating on which floor level the user has parked. Letters can also be added to designate what area within a parking level the person has parked, such as 2B.

h. The parking garage shall be lighted to meet City code requirements.

i. The project site did not cause a significant impact at the study area intersections (increase of one-percent or more at a study area intersection operating at worse than Level of Service D during the peak hours); therefore, no improvements are recommended at the study area intersections.

j. As is the case for any roadway design, the City of Newport Beach should periodically review traffic operations in the vicinity of the project once the project is constructed to assure that the traffic operations are satisfactory.

# Figure 27
## Circulation Recommendations




*Kunzman Associates*

3124/27

# Appendices

| | |
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| Appendix A | Glossary of Transportation Terms |
| Appendix B | Year 2003/2004 Worksheets |
| Appendix C | Approved Project Data |
| Appendix D | TPO One-Percent Analysis Calculation Worksheets |
| Appendix E | Cumulative Project Data |
| Appendix F | Explanation and Calculation of Intersection Capacity Utilization (ICU) |

# APPENDIX A

## Glossary of Transportation Terms

## GLOSSARY OF TRANSPORTATION TERMS

### COMMON ABBREVIATIONS

| | |
|---|---|
| AC: | Acres |
| ADT: | Average Daily Traffic |
| Caltrans: | California Department of Transportation |
| DU: | Dwelling Unit |
| ICU: | Intersection Capacity Utilization |
| LOS: | Level of Service |
| TSF: | Thousand Square Feet |
| V/C | Volume/Capacity |
| VMT: | Vehicle Miles Traveled |

### TERMS

**AVERAGE DAILY TRAFFIC**: The total volume during a year divided by the number of days in a year. Usually only weekdays are included.

**BANDWIDTH:** The number of seconds of green time available for through traffic in a signal progression.

**BOTTLENECK**: A constriction along a travelway that limits the amount of traffic that can proceed downstream from its location.

**CAPACITY**: The maximum number of vehicles which can be reasonably expected to pass over a given section of a lane or a roadway in a given time period.

**CHANNELIZATION:** The separation or regulation of conflicting traffic movements into definite paths of travel by the use of pavement markings, raised islands, or other suitable means to facilitate the safe and orderly movements of both vehicles and pedestrians.

**CLEARANCE INTERVAL**: Nearly same as yellow time. If there is an all red interval after the end of a yellow, then that is also added into the clearance interval.

**CORDON**: An imaginary line around an area across which vehicles, persons, or other items are counted (in and out).

**CYCLE LENGTH**: The time period in seconds required for one complete signal cycle.

**CUL-DE-SAC STREET**: A local street open at one end only, and with special provisions for turning around.

**DAILY CAPACITY**: The daily volume of traffic that will result in a volume during the peak hour equal to the capacity of the roadway.

**DAILY TRAFFIC**: Same as average daily traffic.

**DELAY:** The time consumed while traffic is impeded in its movement by some element over which it has no control, usually expressed in seconds per vehicle.

**DEMAND RESPONSIVE SIGNAL**: Same as traffic-actuated signal.

**DENSITY**: The number of vehicles occupying in a unit length of the through traffic lanes of a roadway at any given instant. Usually expressed in vehicles per mile.

**DETECTOR:** A device that responds to a physical stimulus and transmits a resulting impulse to the signal controller.

**DESIGN SPEED**: A speed selected for purposes of design. Features of a highway, such as curvature, superelevation, and sight distance (upon which the safe operation of vehicles is dependent) are correlated to design speed.

**DIRECTIONAL SPLIT**: The percent of traffic in the peak direction at any point in time.

**DIVERSION:** The rerouting of peak hour traffic to avoid congestion.

**FIXED TIME SIGNAL**: Same as pretimed signal.

**FORCED FLOW**: Opposite of free flow.

**FREE FLOW**: Volumes are well below capacity. Vehicles can maneuver freely and travel is unimpeded by other traffic.

**GAP:** Time or distance between successive vehicles in a traffic stream, rear bumper to front bumper.

**HEADWAY:** Time or distance spacing between successive vehicles in a traffic stream, front bumper to front bumper.

**INTERCONNECTED SIGNAL SYSTEM**: A number of intersections that are connected to achieve signal progression.

**LEVEL OF SERVICE**: A qualitative measure of a number of factors, which include speed and travel time, traffic interruptions, freedom to maneuver, safety, driving comfort and convenience, and operating costs.

**LOOP DETECTOR**: A vehicle detector consisting of a loop of wire embedded in the roadway, energized by alternating current and producing an output circuit closure when passed over by a vehicle.

**MINIMUM ACCEPTABLE GAP**: Smallest time headway between successive vehicles in a traffic stream into which another vehicle is willing and able to cross or merge.

**MULTI-MODAL**: More than one mode; such as automobile, bus transit, rail rapid transit, and bicycle transportation modes.

**OFFSET**: The time interval in seconds between the beginning of green at one intersection and the beginning of green at an adjacent intersection.

**PLATOON:** A closely grouped component of traffic that is composed of several vehicles moving, or standing ready to move, with clear spaces ahead and behind.

**ORIGIN-DESTINATION SURVEY**: A survey to determine the point of origin and the point of destination for a given vehicle trip.

**PASSENGER CAR EQUIVALENTS (PCE)**: One car is one Passenger Car Equivalent. A truck is equal to 2 or 3 Passenger Car Equivalents in that a truck requires longer to start, goes slower, and accelerates slower. Loaded trucks have a higher Passenger Car Equivalent than empty trucks.

**PRETIMED SIGNAL**: A type of traffic signal that directs traffic to stop and go on a predetermined time schedule without regard to traffic conditions.

**PROGRESSION**: A term used to describe the progressive movement of traffic through several signalized intersections.

**SCREEN-LINE**: An imaginary line or physical feature across which all trips are counted, normally to verify the validity of mathematical traffic models.

**SIGNAL CYCLE**: The time period in seconds required for one complete sequence of signal indications.

**SIGNAL PHASE**: The part of the signal cycle allocated to one or more traffic movements.

**STARTING DELAY**: The delay experienced in initiating the movement of queued traffic from a stop to an average running speed through a signalized intersection.

**TRAFFIC-ACTUATED SIGNAL**: A type of traffic signal that directs traffic to stop and go in accordance with the demands of traffic, as registered by the actuation of detectors.

**TRIP:** The movement of a person or vehicle from one location (origin) to another (destination). For example, from home to store to home is two trips, not one.

**TRIP-END**: One end of a trip at either the origin or destination; i.e. each trip has two trip-ends. A trip-end occurs when a person, object, or message is transferred to or from a vehicle.

**TRIP GENERATION RATE:** The quality of trips produced and/or attracted by a specific land use stated in terms of units such as per dwelling, per acre, and per 1,000 square feet of floor space.

**TRUCK:** A vehicle having dual tires on one or more axles, or having more than two axles.

**UNBALANCED FLOW:** Heavier traffic flow in one direction than the other. On a daily basis, most facilities have balanced flow. During the peak hours, flow is seldom balanced in an urban area.

**VEHICLE MILES OF TRAVEL**: A measure of the amount of usage of a section of highway, obtained by multiplying the average daily traffic by length of facility in miles.

# APPENDIX B

## Year 2003/2004 Worksheets

## *1% TRAFFIC VOLUME ANALYSIS*

***INTERSECTION:*** JAMBOREE ROAD & EASTBLUFF DRIVE/FORD ROAD 4980

***(Existing Traffic Volumes Based on Average Daily Traffic 2003 AM)***

| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
|---|---|---|---|---|---|---|
| Northbound | 1766 | | | | | |
| Southbound | 1722 | | | | | |
| Eastbound | 1203 | | | | | |
| Westbound | 508 | | | | | |

☐ Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

☐ Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

## *1% TRAFFIC VOLUME ANALYSIS*

***INTERSECTION:*** JAMBOREE ROAD & EASTBLUFF DRIVE/FORD ROAD 4980

***(Existing Traffic Volumes Based on Average Daily Traffic 2003 PM)***

| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
|---|---|---|---|---|---|---|
| Northbound | 1770 | | | | | |
| Southbound | 1798 | | | | | |
| Eastbound | 641 | | | | | |
| Westbound | 233 | | | | | |

☐ Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

☐ Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

JA4980AM

INTERSECTION CAPACITY UTILIZATION ANALYSIS

INTERSECTION: JAMBOREE ROAD & EASTBLUFF DRIVE/FORD ROAD 4980
EXISTING TRAFFIC VOLUMES BASED ON AVERAGE DAILY TRAFFIC

2003 AM

| Movement | EXISTING Lanes Capacity | PROPOSED Lanes Capacity | EXISTING PK HR Volume | EXISTING V/C Ratio | REGIONAL GROWTH Volume | COMMITTED PROJECT Volume | PROJECTED V/C Ratio w/o Project Volume | PROJECT Volume | PROJECT V/C Ratio |
|---|---|---|---|---|---|---|---|---|---|
| NL | 3200 | | 380 | 0.119 * | | | | | |
| NT | 4800 | | 1322 | 0.289 | | | | | |
| NR | | | 64 | | | | | | |
| SL | 1600 | | 72 | 0.045 | | | | | |
| ST | 4800 | | 1445 | 0.301 * | | | | | |
| SR | 1600 | | 205 | 0.128 | | | | | |
| EL | 1600 | | 311 | 0.194 | | | | | |
| ET | 1600 | | 346 | 0.216 * | | | | | |
| ER | N.S. | | 546 | | | | | | |
| WL | 4800 | | 116 | 0.103 * | | | | | |
| WT | | | 377 | | | | | | |
| WR | 1600 | | 15 | 0.009 | | | | | |
| EXISTING I.C.U. | | | | 0.739 | | | | | |
| EXISTING + REG GROWTH + COMMITTED W/PROPOSED IMPROVEMENTS I.C.U. | | | | | | | | | |
| EXISTING + COMMITTED + REGIONAL GROWTH + PROJECT I.C.U. | | | | | | | | | |

**Split Phase E/W direction**

☐ Projected + project traffic I.C.U. will be less than or equal to 0.90

☐ Projected + project traffic I.C.U. will be greater than 0.90

☐ Projected + project traffic I.C.U. w/systems improvement will be less than or equal to 0.90

☐ Projected + project traffic I.C.U. with project improvements will be less than I.C.U. without project

Description of system improvement:

PROJECT
JA4980AM

FORM II

INTERSECTION CAPACITY UTILIZATION ANALYSIS

INTERSECTION: JAMBOREE ROAD & EASTBLUFF DRIVE/FORD ROAD 4980
EXISTING TRAFFIC VOLUMES BASED ON AVERAGE DAILY TRAFFIC 2003 PM

| Movement | EXISTING Lanes Capacity | PROPOSED Lanes Capacity | EXISTING PK HR Volume | EXISTING V/C Ratio | REGIONAL GROWTH Volume | COMMITTED PROJECT Volume | PROJECTED V/C Ratio w/o Project Volume | PROJECT Volume | PROJECT V/C Ratio |
|---|---|---|---|---|---|---|---|---|---|
| NL | 3200 | | 370 | 0.116 * | | | | | |
| NT | 4800 | | 1261 | 0.292 | | | | | |
| NR | | | 139 | | | | | | |
| SL | 1600 | | 58 | 0.036 | | | | | |
| ST | 4800 | | 1613 | 0.336 * | | | | | |
| SR | 1600 | | 127 | 0.079 | | | | | |
| EL | 1600 | | 64 | 0.040 | | | | | |
| ET | 1600 | | 204 | 0.128 * | | | | | |
| ER | N.S. | | 373 | | | | | | |
| WL | 4800 | | 110 | 0.044 * | | | | | |
| WT | | | 100 | | | | | | |
| WR | 1600 | | 23 | 0.014 | | | | | |
| EXISTING I.C.U. | | | | 0.624 | | | | | |
| EXISTING + REG GROWTH + COMMITTED W/PROPOSED IMPROVEMENTS I.C.U. | | | | | | | | | |
| EXISTING + COMMITTED + REGIONAL GROWTH + PROJECT I.C.U. | | | | | | | | | |

**Split Phase E/W direction**

☐ Projected + project traffic I.C.U. will be less than or equal to 0.90

☐ Projected + project traffic I.C.U. will be greater than 0.90

☐ Projected + project traffic I.C.U. w/systems improvement will be less than or equal to 0.90

☐ Projected + project traffic I.C.U. with project improvements will be less than I.C.U. without project

Description of system improvement:

## *1% TRAFFIC VOLUME ANALYSIS*

***INTERSECTION:*** JAMBOREE ROAD & SAN JOAQUIN HILLS ROAD 5045

***(Existing Traffic Volumes Based on Average Daily Traffic 2003 AM)***

| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
|---|---|---|---|---|---|---|
| Northbound | 1402 | | | | | |
| Southbound | 2018 | | | | | |
| Eastbound | 391 | | | | | |
| Westbound | 151 | | | | | |

☐ Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

☐ Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

## *1% TRAFFIC VOLUME ANALYSIS*

***INTERSECTION:*** JAMBOREE ROAD & SAN JOAQUIN HILLS ROAD 5045

***(Existing Traffic Volumes Based on Average Daily Traffic 2003 PM)***

| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
|---|---|---|---|---|---|---|
| Northbound | 1321 | | | | | |
| Southbound | 1957 | | | | | |
| Eastbound | 186 | | | | | |
| Westbound | 298 | | | | | |

☐ Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

☐ Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

JA5045AM

INTERSECTION CAPACITY UTILIZATION ANALYSIS

INTERSECTION: JAMBOREE ROAD & SAN JOAQUIN HILLS ROAD 5045
EXISTING TRAFFIC VOLUMES BASED ON AVERAGE DAILY TRAFFIC

2003 AM

| Movement | EXISTING Lanes Capacity | PROPOSED Lanes Capacity | EXISTING PK HR Volume | EXISTING V/C Ratio | REGIONAL GROWTH Volume | COMMITTED PROJECT Volume | PROJECTED V/C Ratio w/o Project Volume | PROJECT Volume | PROJECT V/C Ratio |
|---|---|---|---|---|---|---|---|---|---|
| NL | 1600 | | 20 | 0.013 | | | | | |
| NT | 4800 | | 1282 | 0.267 * | | | | | |
| NR | N.S. | | 100 | | | | | | |
| SL | 3200 | | 667 | 0.208 * | | | | | |
| ST | 4800 | | 1297 | 0.270 | | | | | |
| SR | N.S. | | 54 | | | | | | |
| EL | 4800 | | 283 | 0.070 * | | | | | |
| ET | | | 51 | | | | | | |
| ER | N.S. | | 57 | | | | | | |
| WL | 4800 | | 114 | 0.027 * | | | | | |
| WT | | | 16 | | | | | | |
| WR | 1600 | | 21 | 0.013 | | | | | |
| EXISTING I.C.U. | | | | 0.572 | | | | | |
| EXISTING + REGIONAL GROWTH + COMMITTED W/PROPOSED IMPROVEMENTS I.C.U. | | | | | | | | | |
| EXISTING + COMMITTED + REGIONAL GROWTH + PROJECT I.C.U. | | | | | | | | | |

**Split Phase E/W direction**

_ Projected + project traffic I.C.U. will be less than or equal to 0.90

_ Projected + project traffic I.C.U. will be greater than 0.90

_ Projected + project traffic I.C.U. w/systems improvement will be less than or equal to 0.90

_ Projected + project traffic I.C.U. with project improvements will be less than I.C.U. Without project

Description of system improvement:

JA5045PM

INTERSECTION CAPACITY UTILIZATION ANALYSIS

INTERSECTION: JAMBOREE ROAD & SAN JOAQUIN HILLS ROAD 5045
EXISTING TRAFFIC VOLUMES BASED ON AVERAGE DAILY TRAFFIC

2003 PM

| Movement | EXISTING Lanes Capacity | PROPOSED Lanes Capacity | EXISTING PK HR Volume | EXISTING V/C Ratio | REGIONAL GROWTH Volume | COMMITTED PROJECT Volume | PROJECTED V/C Ratio w/o Project Volume | PROJECT Volume | PROJECT V/C Ratio |
|---|---|---|---|---|---|---|---|---|---|
| NL | 1600 | | 131 | 0.082 * | | | | | |
| NT | 4800 | | 1092 | 0.228 | | | | | |
| NR | N.S. | | 98 | | | | | | |
| SL | 3200 | | 387 | 0.121 | | | | | |
| ST | 4800 | | 1374 | 0.286 * | | | | | |
| SR | N.S. | | 196 | | | | | | |
| EL | 4800 | | 87 | 0.028 * | | | | | |
| ET | | | 48 | | | | | | |
| ER | N.S. | | 51 | | | | | | |
| WL | 4800 | | 161 | 0.049 * | | | | | |
| WT | | | 76 | | | | | | |
| WR | 1600 | | 61 | 0.038 | | | | | |
| EXISTING I.C.U. | | | | 0.445 | | | | | |
| EXISTING + REGIONAL GROWTH + COMMITTED W/PROPOSED IMPROVEMENTS I.C.U. | | | | | | | | | |
| EXISTING + COMMITTED + REGIONAL GROWTH + PROJECT I.C.U. | | | | | | | | | |

**Split Phase E/W direction**

[ ] Projected + project traffic I.C.U. will be less than or equal to 0.90

[ ] Projected + project traffic I.C.U. will be greater than 0.90

[ ] Projected + project traffic I.C.U. w/systems improvement will be less than or equal to 0.90

[ ] Projected + project traffic I.C.U. with project improvements will be less than I.C.U. Without project

Description of system improvement:

PROJECT
JA5045AM

FORM II

## *1% TRAFFIC VOLUME ANALYSIS*

***INTERSECTION:*** JAMBOREE ROAD & SANTA BARBARA DRIVE 5310

***(Existing Traffic Volumes Based on Average Daily Traffic 2003 AM)***

| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
|---|---|---|---|---|---|---|
| Northbound | 1724 | | | | | |
| Southbound | 1388 | | | | | |
| Eastbound | 28 | | | | | |
| Westbound | 125 | | | | | |

☐ Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

☐ Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

## *1% TRAFFIC VOLUME ANALYSIS*

***INTERSECTION:*** JAMBOREE ROAD & SANTA BARBARA DRIVE 5310

***(Existing Traffic Volumes Based on Average Daily Traffic 2003 PM)***

| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
|---|---|---|---|---|---|---|
| Northbound | 1051 | | | | | |
| Southbound | 1685 | | | | | |
| Eastbound | 40 | | | | | |
| Westbound | 771 | | | | | |

☐ Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

☐ Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

***PROJECT:*** ***DATE:***

JA5310AM

INTERSECTION CAPACITY UTILIZATION ANALYSIS

INTERSECTION: JAMBOREE ROAD & SANTA BARBARA DRIVE 5310
EXISTING TRAFFIC VOLUMES BASED ON AVERAGE DAILY TRAFFIC

2003 AM

| Movement | EXISTING Lanes Capacity | PROPOSED Lanes Capacity | EXISTING PK HR Volume | EXISTING V/C Ratio | REGIONAL GROWTH Volume | COMMITTED PROJECT Volume | PROJECTED V/C Ratio w/o Project Volume | PROJECT Volume | PROJECT V/C Ratio |
|---|---|---|---|---|---|---|---|---|---|
| NL | 1600 | | 3 | 0.002 | | | | | |
| NT | 4800 | | 1358 | 0.283 * | | | | | |
| NR | 1600 | | 363 | 0.227 | | | | | |
| SL | 3200 | | 579 | 0.181 * | | | | | |
| ST | 4800 | | 780 | 0.163 | | | | | |
| SR | 1600 | | 29 | 0.018 | | | | | |
| EL | 1600 | | 21 | 0.013 * | | | | | |
| ET | 1600 | | 2 | 0.004 | | | | | |
| ER | | | 5 | | | | | | |
| WL | 3200 | | 50 | 0.017 | | | | | |
| WT | | | 4 | | | | | | |
| WR | 1600 | | 71 | 0.044 * | | | | | |
| EXISTING I.C.U. | | | | 0.521 | | | | | |
| EXISTING + REGIONAL GROWTH + COMMITTED W/PROPOSED IMPROVEMENTS I.C.U. | | | | | | | | | |
| EXISTING + COMMITTED + REGIONAL GROWTH + PROJECT I.C.U. | | | | | | | | | |

**Split Phase E/W direction**

☐ Projected + project traffic I.C.U. will be less than or equal to 0.90

☐ Projected + project traffic I.C.U. will be greater than 0.90

☐ Projected + project traffic I.C.U. w/systems improvement will be less than or equal to 0.90

☐ Projected + project traffic I.C.U. with project improvements will be less than I.C.U. without project

Description of system improvement:

JA5310PM

INTERSECTION CAPACITY UTILIZATION ANALYSIS

INTERSECTION: JAMBOREE ROAD & SANTA BARBARA DRIVE 5310
EXISTING TRAFFIC VOLUMES BASED ON AVERAGE DAILY TRAFFIC

2003 PM

| Movement | EXISTING Lanes Capacity | PROPOSED Lanes Capacity | EXISTING PK HR Volume | EXISTING V/C Ratio | REGIONAL GROWTH Volume | COMMITTED PROJECT Volume | PROJECTED V/C Ratio w/o Project Volume | PROJECT Volume | PROJECT V/C Ratio |
|---|---|---|---|---|---|---|---|---|---|
| NL | 1600 | | 9 | 0.006 * | | | | | |
| NT | 4800 | | 943 | 0.196 | | | | | |
| NR | 1600 | | 99 | 0.062 | | | | | |
| SL | 3200 | | 277 | 0.087 | | | | | |
| ST | 4800 | | 1348 | 0.281 * | | | | | |
| SR | 1600 | | 60 | 0.038 | | | | | |
| EL | 1600 | | 25 | 0.016 * | | | | | |
| ET | 1600 | | 11 | 0.009 | | | | | |
| ER | | | 4 | | | | | | |
| WL | 3200 | | 406 | 0.135 | | | | | |
| WT | | | 26 | | | | | | |
| WR | 1600 | | 339 | 0.212 * | | | | | |
| EXISTING I.C.U. | | | | 0.515 | | | | | |
| EXISTING + REGIONAL GROWTH + COMMITTED W/PROPOSED IMPROVEMENTS I.C.U. | | | | | | | | | |
| EXISTING + COMMITTED + REGIONAL GROWTH + PROJECT I.C.U. | | | | | | | | | |

***Split Phase E/W direction***

[ ] Projected + project traffic I.C.U. will be less than or equal to 0.90

[ ] Projected + project traffic I.C.U. will be greater than 0.90

[ ] Projected + project traffic I.C.U. w/systems improvement will be less than or equal to 0.90

[ ] Projected + project traffic I.C.U. with project improvements will be less than I.C.U. without project

Description of system improvement:

PROJECT
JA5310PM

FORM II

## *1% TRAFFIC VOLUME ANALYSIS*

***INTERSECTION:*** COAST HIGHWAY & JAMBOREE ROAD 5055

***(Existing Traffic Volumes Based on Average Daily Traffic 2004 AM***

| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
|---|---|---|---|---|---|---|
| Northbound | 512 | | | | | |
| Southbound | 974 | | | | | |
| Eastbound | 2896 | | | | | |
| Westbound | 1159 | | | | | |

☐ Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

☐ Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

## *1% TRAFFIC VOLUME ANALYSIS*

***INTERSECTION:*** COAST HIGHWAY & JAMBOREE ROAD 5055

***(Existing Traffic Volumes Based on Average Daily Traffic 2004 PM***

| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
|---|---|---|---|---|---|---|
| Northbound | 415 | | | | | |
| Southbound | 2134 | | | | | |
| Eastbound | 1999 | | | | | |
| Westbound | 2174 | | | | | |

☐ Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

☐ Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

***PROJECT:*** ***DATE:***

CH5055AM

INTERSECTION CAPACITY UTILIZATION ANALYSIS

INTERSECTION: COAST HIGHWAY & JAMBOREE ROAD 5055
EXISTING TRAFFIC VOLUMES BASED ON AVERAGE DAILY TRAFFIC

2004 AM

| Movement | EXISTING Lanes Capacity | PROPOSED Lanes Capacity | EXISTING PK HR Volume | EXISTING V/C Ratio | REGIONAL GROWTH Volume | COMMITTED PROJECT Volume | PROJECTED V/C Ratio w/o Project Volume | PROJECT Volume | PROJECT V/C Ratio |
|---|---|---|---|---|---|---|---|---|---|
| NL | 1600 | | 15 | 0.009 | | | | | |
| NT | 3200 | | 423 | 0.155 * | | | | | |
| NR | | | 74 | | | | | | |
| SL | 1600 | | 146 | 0.091 * | | | | | |
| ST | 3200 | | 238 | 0.074 | | | | | |
| SR | N.S. | | 590 | | | | | | |
| EL | 4800 | | 1093 | 0.228 * | | | | | |
| ET | 6400 | | 1787 | 0.282 | | | | | |
| ER | | | 16 | | | | | | |
| WL | 3200 | | 83 | 0.026 | | | | | |
| WT | 6400 | | 956 | 0.149 * | | | | | |
| WR | N.S. | | 120 | | | | | | |
| EXISTING I.C.U. | | | | 0.623 | | | | | |
| EXISTING + REGIONAL GROWTH + COMMITTED W/PROPOSED IMPROVEMENTS I.C.U. | | | | | | | | | |
| EXISTING + COMMITTED + REGIONAL GROWTH + PROJECT I.C.U. | | | | | | | | | |

[ ] Projected + project traffic I.C.U. will be less than or equal to 0.90

[ ] Projected + project traffic I.C.U. will be greater than 0.90

[ ] Projected + project traffic I.C.U. w/systems improvement will be less than or equal to 0.90

[ ] Projected + project traffic I.C.U. with project improvements will be less than I.C.U. without project

Description of system improvement:

INTERSECTION CAPACITY UTILIZATION ANALYSIS

INTERSECTION: COAST HIGHWAY & JAMBOREE ROAD 5055
EXISTING TRAFFIC VOLUMES BASED ON AVERAGE DAILY TRAFFIC

2004 PM

| Movement | EXISTING Lanes Capacity | PROPOSED Lanes Capacity | EXISTING PK HR Volume | EXISTING V/C Ratio | REGIONAL GROWTH Volume | COMMITTED PROJECT Volume | PROJECTED V/C Ratio w/o Project Volume | PROJECT Volume | PROJECT V/C Ratio |
|---|---|---|---|---|---|---|---|---|---|
| NL | 1600 | | 38 | 0.024 | | | | | |
| NT | 3200 | | 298 | 0.118 * | | | | | |
| NR | | | 79 | | | | | | |
| SL | 1600 | | 154 | 0.096 * | | | | | |
| ST | 3200 | | 479 | 0.150 | | | | | |
| SR | N.S. | | 1501 | | | | | | |
| EL | 4800 | | 617 | 0.129 * | | | | | |
| ET | 6400 | | 1364 | 0.216 | | | | | |
| ER | | | 18 | | | | | | |
| WL | 3200 | | 169 | 0.053 | | | | | |
| WT | 6400 | | 1891 | 0.295 * | | | | | |
| WR | N.S. | | 114 | | | | | | |
| EXISTING I.C.U. | | | | 0.638 | | | | | |
| EXISTING + REGIONAL GROWTH + COMMITTED W/PROPOSED IMPROVEMENTS I.C.U. | | | | | | | | | |
| EXISTING + COMMITTED + REGIONAL GROWTH + PROJECT I.C.U. | | | | | | | | | |

☐ Projected + project traffic I.C.U. will be less than or equal to 0.90

☐ Projected + project traffic I.C.U. will be greater than 0.90

☐ Projected + project traffic I.C.U. w/systems improvement will be less than or equal to 0.90

☐ Projected + project traffic I.C.U. with project improvements will be less than I.C.U. without project

Description of system improvement:

## *1% TRAFFIC VOLUME ANALYSIS*

***INTERSECTION:*** SANTA CRUZ & SAN JOAQUIN HILLS RD 5060

***(Existing Traffic Volumes Based on Average Daily Traffic 2003 AM)***

| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
|---|---|---|---|---|---|---|
| Northbound | 77 | | | | | |
| Southbound | 69 | | | | | |
| Eastbound | 768 | | | | | |
| Westbound | 590 | | | | | |

☐ Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

☐ Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

## *1% TRAFFIC VOLUME ANALYSIS*

***INTERSECTION:*** SANTA CRUZ & SAN JOAQUIN HILLS RD 5060

***(Existing Traffic Volumes Based on Average Daily Traffic 2003 PM)***

| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
|---|---|---|---|---|---|---|
| Northbound | 538 | | | | | |
| Southbound | 43 | | | | | |
| Eastbound | 631 | | | | | |
| Westbound | 457 | | | | | |

☐ Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

☐ Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

***PROJECT:*** ***DATE:***

INTERSECTION CAPACITY UTILIZATION ANALYSIS

INTERSECTION: SANTA CRUZ & SAN JOAQUIN HILLS RD 5060
EXISTING TRAFFIC VOLUMES BASED ON AVERAGE DAILY TRAFFIC

2003 AM

| Movement | EXISTING Lanes Capacity | PROPOSED Lanes Capacity | EXISTING PK HR Volume | EXISTING V/C Ratio | REGIONAL GROWTH Volume | COMMITTED PROJECT Volume | PROJECTED V/C Ratio w/o Project Volume | PROJECT Volume | PROJECT V/C Ratio |
|---|---|---|---|---|---|---|---|---|---|
| NL | 1600 | | 57 | 0.036 * | | | | | |
| NT | 3200 | | 5 | 0.006 | | | | | |
| NR | | | 15 | | | | | | |
| SL | 1600 | | 17 | 0.011 | | | | | |
| ST | 3200 | | 9 | 0.016 * | | | | | |
| SR | | | 43 | | | | | | |
| EL | 1600 | | 57 | 0.036 | | | | | |
| ET | 4800 | | 511 | 0.148 * | | | | | |
| ER | | | 200 | | | | | | |
| WL | 1600 | | 227 | 0.142 * | | | | | |
| WT | 4800 | | 343 | 0.076 | | | | | |
| WR | | | 20 | | | | | | |
| EXISTING I.C.U. | | | | 0.342 | | | | | |
| EXISTING + REG GROWTH + COMMITTED W/PROPOSED IMPROVEMENTS I.C.U. | | | | | | | | | |
| EXISTING + COMMITTED + REGIONAL GROWTH + PROJECT I.C.U. | | | | | | | | | |

☐ Projected + project traffic I.C.U. will be less than or equal to 0.90

☐ Projected + project traffic I.C.U. will be greater than 0.90

☐ Projected + project traffic I.C.U. w/systems improvement will be less than or equal to 0.90

☐ Projected + project traffic I.C.U. with project improvements will be less than I.C.U. without project

Description of system improvement:

SJ5060PM

INTERSECTION CAPACITY UTILIZATION ANALYSIS

INTERSECTION: SANTA CRUZ & SAN JOAQUIN HILLS RD 5060
EXISTING TRAFFIC VOLUMES BASED ON AVERAGE DAILY TRAFFIC 2003 PM

| Movement | EXISTING Lanes Capacity | PROPOSED Lanes Capacity | EXISTING PK HR Volume | EXISTING V/C Ratio | REGIONAL GROWTH Volume | COMMITTED PROJECT Volume | PROJECTED V/C Ratio w/o Project Volume | PROJECT Volume | PROJECT V/C Ratio |
|---|---|---|---|---|---|---|---|---|---|
| NL | 1600 | | 389 | 0.243 * | | | | | |
| NT | 3200 | | 19 | 0.047 | | | | | |
| NR | | | 130 | | | | | | |
| SL | 1600 | | 12 | 0.008 | | | | | |
| ST | 3200 | | 8 | 0.010 * | | | | | |
| SR | | | 23 | | | | | | |
| EL | 1600 | | 120 | 0.075 * | | | | | |
| ET | 4800 | | 358 | 0.106 | | | | | |
| ER | | | 153 | | | | | | |
| WL | 1600 | | 43 | 0.027 | | | | | |
| WT | 4800 | | 414 | 0.086 * | | | | | |
| WR | | | 0 | | | | | | |
| EXISTING I.C.U. | | | | 0.414 | | | | | |
| EXISTING + REG GROWTH + COMMITTED W/PROPOSED IMPROVEMENTS I.C.U. | | | | | | | | | |
| EXISTING + COMMITTED + REGIONAL GROWTH + PROJECT I.C.U. | | | | | | | | | |

☐ Projected + project traffic I.C.U. will be less than or equal to 0.90

☐ Projected + project traffic I.C.U. will be greater than 0.90

☐ Projected + project traffic I.C.U. w/systems improvement will be less than or equal to 0.90

☐ Projected + project traffic I.C.U. with project improvements will be less than I.C.U. without project

Description of system improvement:

## *1% TRAFFIC VOLUME ANALYSIS*

***INTERSECTION:*** SAN CLEMENTE DRIVE & SANTA CRUZ DRIVE 5277

***(Existing Traffic Volumes Based on Average Daily Traffic 2003 AM)***

| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
|---|---|---|---|---|---|---|
| Northbound | 95 | | | | | |
| Southbound | 312 | | | | | |
| Eastbound | 159 | | | | | |
| Westbound | 56 | | | | | |

☐ Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

☐ Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

## *1% TRAFFIC VOLUME ANALYSIS*

***INTERSECTION:*** SAN CLEMENTE DRIVE & SANTA CRUZ DRIVE 5277

***(Existing Traffic Volumes Based on Average Daily Traffic 2003 PM)***

| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
|---|---|---|---|---|---|---|
| Northbound | 333 | | | | | |
| Southbound | 263 | | | | | |
| Eastbound | 298 | | | | | |
| Westbound | 100 | | | | | |

☐ Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

☐ Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

***PROJECT:*** ***DATE:***

SC5277AM

INTERSECTION CAPACITY UTILIZATION ANALYSIS

INTERSECTION: SAN CLEMENTE DRIVE & SANTA CRUZ DRIVE 5277
EXISTING TRAFFIC VOLUMES BASED ON AVERAGE DAILY TRAFFIC 2003 AM

| Movement | EXISTING Lanes Capacity | PROPOSED Lanes Capacity | EXISTING PK HR Volume | EXISTING V/C Ratio | REGIONAL GROWTH Volume | COMMITTED PROJECT Volume | PROJECTED V/C Ratio w/o Project Volume | PROJECT Volume | PROJECT V/C Ratio |
|---|---|---|---|---|---|---|---|---|---|
| NL | 1600 | | 28 | 0.018 * | | | | | |
| NT | 4800 | | 50 | 0.014 | | | | | |
| NR | | | 17 | | | | | | |
| SL | 1600 | | 18 | 0.011 | | | | | |
| ST | 3200 | | 111 | 0.092 * | | | | | |
| SR | | | 183 | | | | | | |
| EL | 3200 | | 57 | 0.050 * | | | | | |
| ET | | | 56 | | | | | | |
| ER | | | 46 | | | | | | |
| WL | 4800 | | 13 | 0.012 | | | | | |
| WT | | | 17 | | | | | | |
| WR | | | 26 | | | | | | |
| EXISTING I.C.U. | | | | 0.160 | | | | | |
| EXISTING + REG GROWTH + COMMITTED W/PROPOSED IMPROVEMENTS I.C.U. | | | | | | | | | |
| EXISTING + COMMITTED + REGIONAL GROWTH + PROJECT I.C.U. | | | | | | | | | |

[ ] Projected + project traffic I.C.U. will be less than or equal to 0.90

[ ] Projected + project traffic I.C.U. will be greater than 0.90

[ ] Projected + project traffic I.C.U. w/systems improvement will be less than or equal to 0.90

[ ] Projected + project traffic I.C.U. with project improvements will be less than I.C.U. without project

*Description of system improvement:*

PROJECT
SC5277AM

FORM II

INTERSECTION CAPACITY UTILIZATION ANALYSIS

INTERSECTION: SAN CLEMENTE DRIVE & SANTA CRUZ DRIVE 5277
EXISTING TRAFFIC VOLUMES BASED ON AVERAGE DAILY TRAFFIC

2003 PM

| Movement | EXISTING Lanes Capacity | PROPOSED Lanes Capacity | EXISTING PK HR Volume | EXISTING V/C Ratio | REGIONAL GROWTH Volume | COMMITTED PROJECT Volume | PROJECTED V/C Ratio w/o Project Volume | PROJECT Volume | PROJECT V/C Ratio |
|---|---|---|---|---|---|---|---|---|---|
| NL | 1600 | | 40 | 0.025 * | | | | | |
| NT | 4800 | | 268 | 0.061 | | | | | |
| NR | | | 25 | | | | | | |
| SL | 1600 | | 28 | 0.018 | | | | | |
| ST | 3200 | | 197 | 0.073 * | | | | | |
| SR | | | 38 | | | | | | |
| EL | 3200 | | 252 | 0.093 * | | | | | |
| ET | | | 13 | | | | | | |
| ER | | | 33 | | | | | | |
| WL | 4800 | | 20 | 0.021 | | | | | |
| WT | | | 54 | | | | | | |
| WR | | | 26 | | | | | | |
| EXISTING I.C.U. | | | | 0.191 | | | | | |
| EXISTING + REG GROWTH + COMMITTED W/PROPOSED IMPROVEMENTS I.C.U. | | | | | | | | | |
| EXISTING + COMMITTED + REGIONAL GROWTH + PROJECT I.C.U. | | | | | | | | | |

☐ Projected + project traffic I.C.U. will be less than or equal to 0.90

☐ Projected + project traffic I.C.U. will be greater than 0.90

☐ Projected + project traffic I.C.U. w/systems improvement will be less than or equal to 0.90

☐ Projected + project traffic I.C.U. with project improvements will be less than I.C.U. without project

Description of system improvement:

## *1% TRAFFIC VOLUME ANALYSIS*

***INTERSECTION:*** NEWPORT CENTER DRIVE & SANTA BARBARA DRIVE 5280

***(Existing Traffic Volumes Based on Average Daily Traffic 2003 AM)***

| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
|---|---|---|---|---|---|---|
| Northbound | 219 | | | | | |
| Southbound | 124 | | | | | |
| Eastbound | 210 | | | | | |
| Westbound | 10 | | | | | |

☐ Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

☐ Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

## *1% TRAFFIC VOLUME ANALYSIS*

***INTERSECTION:*** NEWPORT CENTER DRIVE & SANTA BARBARA DRIVE 5280

***(Existing Traffic Volumes Based on Average Daily Traffic 2003 PM)***

| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
|---|---|---|---|---|---|---|
| Northbound | 265 | | | | | |
| Southbound | 323 | | | | | |
| Eastbound | 281 | | | | | |
| Westbound | 136 | | | | | |

☐ Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

☐ Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

***PROJECT:*** ***DATE:***

INTERSECTION CAPACITY UTILIZATION ANALYSIS

INTERSECTION: NEWPORT CENTER DRIVE & SANTA BARBARA DRIVE 5280
EXISTING TRAFFIC VOLUMES BASED ON AVERAGE DAILY TRAFFIC 2003 AM

| Movement | EXISTING Lanes Capacity | PROPOSED Lanes Capacity | EXISTING PK HR Volume | EXISTING V/C Ratio | REGIONAL GROWTH Volume | COMMITTED PROJECT Volume | PROJECTED V/C Ratio w/o Project Volume | PROJECT Volume | PROJECT V/C Ratio |
|---|---|---|---|---|---|---|---|---|---|
| NL | 1600 | | 73 | 0.046 * | | | | | |
| NT | 3200 | | 138 | 0.043 | | | | | |
| NR | 1600 | | 8 | 0.005 | | | | | |
| SL | 1600 | | 9 | 0.006 | | | | | |
| ST | 3200 | | 69 | 0.022 * | | | | | |
| SR | 1600 | | 46 | 0.029 | | | | | |
| EL | 1600 | | 41 | 0.026 | | | | | |
| ET | 3200 | | 33 | 0.053 * | | | | | |
| ER | | | 136 | | | | | | |
| WL | 3200 | | 3 | 0.003 | | | | | |
| WT | | | 6 | | | | | | |
| WR | | | 1 | | | | | | |
| EXISTING I.C.U. | | | | 0.121 | | | | | |
| EXISTING + REG GROWTH + COMMITTED W/PROPOSED IMPROVEMENTS I.C.U. | | | | | | | | | |
| EXISTING + COMMITTED + REGIONAL GROWTH + PROJECT I.C.U. | | | | | | | | | |

☐ Projected + project traffic I.C.U. will be less than or equal to 0.90

☐ Projected + project traffic I.C.U. will be greater than 0.90

☐ Projected + project traffic I.C.U. w/systems improvement will be less than or equal to 0.90

☐ Projected + project traffic I.C.U. with project improvements will be less than I.C.U. without project

Description of system improvement:

NC5280PM

INTERSECTION CAPACITY UTILIZATION ANALYSIS

INTERSECTION: NEWPORT CENTER DRIVE & SANTA BARBARA DRIVE 5280
EXISTING TRAFFIC VOLUMES BASED ON AVERAGE DAILY TRAFFIC 2003 PM

| Movement | EXISTING Lanes Capacity | PROPOSED Lanes Capacity | EXISTING PK HR Volume | EXISTING V/C Ratio | REGIONAL GROWTH Volume | COMMITTED PROJECT Volume | PROJECTED V/C Ratio w/o Project Volume | PROJECT Volume | PROJECT V/C Ratio |
|---|---|---|---|---|---|---|---|---|---|
| NL | 1600 | | 135 | 0.084 * | | | | | |
| NT | 3200 | | 94 | 0.029 | | | | | |
| NR | 1600 | | 36 | 0.023 | | | | | |
| SL | 1600 | | 47 | 0.029 | | | | | |
| ST | 3200 | | 182 | 0.057 * | | | | | |
| SR | 1600 | | 94 | 0.059 | | | | | |
| EL | 1600 | | 43 | 0.027 | | | | | |
| ET | 3200 | | 115 | 0.074 * | | | | | |
| ER | | | 123 | | | | | | |
| WL | 3200 | | 29 | 0.043 | | | | | |
| WT | | | 82 | | | | | | |
| WR | | | 25 | | | | | | |
| EXISTING I.C.U. | | | | 0.215 | | | | | |
| EXISTING + REG GROWTH + COMMITTED W/PROPOSED IMPROVEMENTS I.C.U. | | | | | | | | | |
| EXISTING + COMMITTED + REGIONAL GROWTH + PROJECT I.C.U. | | | | | | | | | |

_] Projected + project traffic I.C.U. will be less than or equal to 0.90

_] Projected + project traffic I.C.U. will be greater than 0.90

_] Projected + project traffic I.C.U. w/systems improvement will be less than or equal to 0.90

_] Projected + project traffic I.C.U. with project improvements will be less than I.C.U. without project

Description of system improvement:

PROJECT
NC5280PM

FORM II

## *1% TRAFFIC VOLUME ANALYSIS*

***INTERSECTION:*** COAST HIGHWAY & NEWPORT CENTER DRIVE 5330

***(Existing Traffic Volumes Based on Average Daily Traffic 2003 AM)***

| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
|---|---|---|---|---|---|---|
| Northbound | 0 | | | | | |
| Southbound | 115 | | | | | |
| Eastbound | 1660 | | | | | |
| Westbound | 1287 | | | | | |

☐ Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

☐ Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

## *1% TRAFFIC VOLUME ANALYSIS*

***INTERSECTION:*** COAST HIGHWAY & NEWPORT CENTER DRIVE 5330

***(Existing Traffic Volumes Based on Average Daily Traffic 2003 PM)***

| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
|---|---|---|---|---|---|---|
| Northbound | 0 | | | | | |
| Southbound | 796 | | | | | |
| Eastbound | 1967 | | | | | |
| Westbound | 1843 | | | | | |

☐ Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

☐ Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

***PROJECT:*** ***DATE:***

INTERSECTION CAPACITY UTILIZATION ANALYSIS

INTERSECTION: COAST HIGHWAY & NEWPORT CENTER DRIVE 5330
EXISTING TRAFFIC VOLUMES BASED ON AVERAGE DAILY TRAFFIC 2003 AM

| Movement | EXISTING Lanes Capacity | PROPOSED Lanes Capacity | EXISTING PK HR Volume | EXISTING V/C Ratio | REGIONAL GROWTH Volume | COMMITTED PROJECT Volume | PROJECTED V/C Ratio w/o Project Volume | PROJECT Volume | PROJECT V/C Ratio |
|---|---|---|---|---|---|---|---|---|---|
| NL | | | | | | | | | |
| NT | | | | | | | | | |
| NR | | | | | | | | | |
| SL | 3200 | | 37 | 0.012 * | | | | | |
| ST | | | | | | | | | |
| SR | N.S. | | 78 | | | | | | |
| EL | 3200 | | 300 | 0.094 * | | | | | |
| ET | 4800 | | 1360 | 0.283 | | | | | |
| ER | | | | | | | | | |
| WL | | | | | | | | | |
| WT | 4800 | | 1137 | 0.237 * | | | | | |
| WR | N.S. | | 150 | | | | | | |
| EXISTING I.C.U. | | | | 0.343 | | | | | |
| EXISTING + REG GROWTH + COMMITTED W/PROPOSED IMPROVEMENTS I.C.U. | | | | | | | | | |
| EXISTING + COMMITTED + REGIONAL GROWTH + PROJECT I.C.U. | | | | | | | | | |

☐ Projected + project traffic I.C.U. will be less than or equal to 0.90

☐ Projected + project traffic I.C.U. will be greater than 0.90

☐ Projected + project traffic I.C.U. w/systems improvement will be less than or equal to 0.90

☐ Projected + project traffic I.C.U. with project improvements will be less than I.C.U. without project

Description of system improvement:

## INTERSECTION CAPACITY UTILIZATION ANALYSIS

INTERSECTION: COAST HIGHWAY & NEWPORT CENTER DRIVE 5330
EXISTING TRAFFIC VOLUMES BASED ON AVERAGE DAILY TRAFFIC 2003 PM

| Movement | EXISTING Lanes Capacity | PROPOSED Lanes Capacity | EXISTING PK HR Volume | EXISTING V/C Ratio | REGIONAL GROWTH Volume | COMMITTED PROJECT Volume | PROJECTED V/C Ratio w/o Project Volume | PROJECT Volume | PROJECT V/C Ratio |
|---|---|---|---|---|---|---|---|---|---|
| NL | | | | | | | | | |
| NT | | | | | | | | | |
| NR | | | | | | | | | |
| SL | 3200 | | 300 | 0.094 * | | | | | |
| ST | | | | | | | | | |
| SR | N.S. | | 496 | | | | | | |
| EL | 3200 | | 335 | 0.105 * | | | | | |
| ET | 4800 | | 1632 | 0.340 | | | | | |
| ER | | | | | | | | | |
| WL | | | | | | | | | |
| WT | 4800 | | 1690 | 0.352 * | | | | | |
| WR | N.S. | | 153 | | | | | | |
| EXISTING I.C.U. | | | | 0.551 | | | | | |
| EXISTING + REG GROWTH + COMMITTED W/PROPOSED IMPROVEMENTS I.C.U. | | | | | | | | | |
| EXISTING + COMMITTED + REGIONAL GROWTH + PROJECT I.C.U. | | | | | | | | | |

[ ] Projected + project traffic I.C.U. will be less than or equal to 0.90

[ ] Projected + project traffic I.C.U. will be greater than 0.90

[ ] Projected + project traffic I.C.U. w/systems improvement will be less than or equal to 0.90

[ ] Projected + project traffic I.C.U. with project improvements will be less than I.C.U. without project

Description of system improvement:

## *1% TRAFFIC VOLUME ANALYSIS*

***INTERSECTION:*** SAN JOAQUIN HILLS ROAD & SANTA ROSA DR / BIG CANYON 5065

***(Existing Traffic Volumes Based on Average Daily Traffic 2003 AM)***

| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
|---|---|---|---|---|---|---|
| Northbound | 102 | | | | | |
| Southbound | 120 | | | | | |
| Eastbound | 543 | | | | | |
| Westbound | 1020 | | | | | |

☐ Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

☐ Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

## *1% TRAFFIC VOLUME ANALYSIS*

***INTERSECTION:*** SAN JOAQUIN HILLS ROAD & SANTA ROSA DR / BIG CANYON 5065

***(Existing Traffic Volumes Based on Average Daily Traffic 2003 PM)***

| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
|---|---|---|---|---|---|---|
| Northbound | 641 | | | | | |
| Southbound | 96 | | | | | |
| Eastbound | 564 | | | | | |
| Westbound | 518 | | | | | |

☐ Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

☐ Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

***PROJECT:*** ***DATE:***

SJ5065AM

INTERSECTION CAPACITY UTILIZATION ANALYSIS

INTERSECTION: SAN JOAQUIN HILLS ROAD & SANTA ROSA DRIVE / BIG CANYON 5065
EXISTING TRAFFIC VOLUMES BASED ON AVERAGE DAILY TRAFFIC 2003 AM

| Movement | EXISTING Lanes Capacity | PROPOSED Lanes Capacity | EXISTING PK HR Volume | EXISTING V/C Ratio | REGIONAL GROWTH Volume | COMMITTED PROJECT Volume | PROJECTED V/C Ratio w/o Project Volume | PROJECT Volume | PROJECT V/C Ratio |
|---|---|---|---|---|---|---|---|---|---|
| NL | 1600 | | 36 | 0.023 | | | | | |
| NT | 1600 | | 7 | 0.004 | | | | | |
| NR | 1600 | | 59 | 0.037 * | | | | | |
| SL | 1600 | | 75 | 0.047 * | | | | | |
| ST | 1600 | | 10 | 0.006 | | | | | |
| SR | 1600 | | 35 | 0.022 | | | | | |
| EL | 1600 | | 47 | 0.029 | | | | | |
| ET | 4800 | | 389 | 0.103 * | | | | | |
| ER | | | 107 | | | | | | |
| WL | 3200 | | 443 | 0.138 * | | | | | |
| WT | 4800 | | 510 | 0.120 | | | | | |
| WR | | | 67 | | | | | | |
| EXISTING I.C.U. | | | | 0.325 | | | | | |
| EXISTING + REG GROWTH + COMMITTED W/PROPOSED IMPROVEMENTS I.C.U. | | | | | | | | | |
| EXISTING + COMMITTED + REGIONAL GROWTH + PROJECT I.C.U. | | | | | | | | | |

**Split Phase N/S Direction**

☐ Projected + project traffic I.C.U. will be less than or equal to 0.90

☐ Projected + project traffic I.C.U. will be greater than 0.90

☐ Projected + project traffic I.C.U. w/systems improvement will be less than or equal to 0.90

☐ Projected + project traffic I.C.U. with project improvements will be less than I.C.U. without project

Description of system improvement:

INTERSECTION CAPACITY UTILIZATION ANALYSIS

INTERSECTION: SAN JOAQUIN HILLS ROAD & SANTA ROSA DRIVE / BIG CANYON 5065
EXISTING TRAFFIC VOLUMES BASED ON AVERAGE DAILY TRAFFIC 2003 PM

| Movement | EXISTING Lanes Capacity | PROPOSED Lanes Capacity | EXISTING PK HR Volume | EXISTING V/C Ratio | | REGIONAL GROWTH Volume | COMMITTED PROJECT Volume | PROJECTED V/C Ratio w/o Project Volume | PROJECT Volume | PROJECT V/C Ratio |
|---|---|---|---|---|---|---|---|---|---|---|
| NL | 1600 | | 203 | 0.127 | | | | | | |
| NT | 1600 | | 37 | 0.023 | | | | | | |
| NR | 1600 | | 401 | 0.251 | * | | | | | |
| SL | 1600 | | 57 | 0.036 | * | | | | | |
| ST | 1600 | | 10 | 0.006 | | | | | | |
| SR | 1600 | | 29 | 0.018 | | | | | | |
| EL | 1600 | | 22 | 0.014 | | | | | | |
| ET | 4800 | | 433 | 0.113 | * | | | | | |
| ER | | | 109 | | | | | | | |
| WL | 3200 | | 214 | 0.067 | * | | | | | |
| WT | 4800 | | 256 | 0.063 | | | | | | |
| WR | | | 48 | | | | | | | |
| EXISTING I.C.U. | | | | 0.467 | | | | | | |
| EXISTING + REG GROWTH + COMMITTED W/PROPOSED IMPROVEMENTS I.C.U. | | | | | | | | | | |
| EXISTING + COMMITTED + REGIONAL GROWTH + PROJECT I.C.U. | | | | | | | | | | |

**Split Phase N/S Direction**
** Assumed WBL included in NBR.

☐ Projected + project traffic I.C.U. will be less than or equal to 0.90

☐ Projected + project traffic I.C.U. will be greater than 0.90

☐ Projected + project traffic I.C.U. w/systems improvement will be less than or equal to 0.90

☐ Projected + project traffic I.C.U. with project improvements will be less than I.C.U. without project

Description of system improvement:

## *1% TRAFFIC VOLUME ANALYSIS*

***INTERSECTION:*** COAST HIGHWAY & AVOCADO AVENUE 6085

***(Existing Traffic Volumes Based on Average Daily Traffic 2004 AM)***

| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
|---|---|---|---|---|---|---|
| Northbound | 223 | | | | | |
| Southbound | 185 | | | | | |
| Eastbound | 1591 | | | | | |
| Westbound | 1152 | | | | | |

☐ Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

☐ Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

## *1% TRAFFIC VOLUME ANALYSIS*

***INTERSECTION:*** COAST HIGHWAY & AVOCADO AVENUE 6085

***(Existing Traffic Volumes Based on Average Daily Traffic 2004 PM)***

| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
|---|---|---|---|---|---|---|
| Northbound | 228 | | | | | |
| Southbound | 524 | | | | | |
| Eastbound | 1435 | | | | | |
| Westbound | 1485 | | | | | |

☐ Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

☐ Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

***PROJECT:*** ***DATE:***

INTERSECTION CAPACITY UTILIZATION ANALYSIS

INTERSECTION: COAST HIGHWAY & AVOCADO AVENUE 6085
EXISTING TRAFFIC VOLUMES BASED ON AVERAGE DAILY TRAFFIC

2004 AM

| Movement | EXISTING Lanes Capacity | PROPOSED Lanes Capacity | EXISTING PK HR Volume | EXISTING V/C Ratio | REGIONAL GROWTH Volume | COMMITTED PROJECT Volume | PROJECTED V/C Ratio w/o Project Volume | PROJECT Volume | PROJECT V/C Ratio |
|---|---|---|---|---|---|---|---|---|---|
| NL | 1600 | | 66 | 0.041 * | | | | | |
| NT | 1600 | | 55 | 0.034 | | | | | |
| NR | 1600 | | 102 | 0.064 | | | | | |
| SL | 3200 | | 70 | 0.044 * | | | | | |
| ST | | | 72 | | | | | | |
| SR | N.S. | | 43 | | | | | | |
| EL | 1600 | | 192 | 0.120 * | | | | | |
| ET | 4800 | | 1373 | 0.291 | | | | | |
| ER | | | 26 | | | | | | |
| WL | 1600 | | 83 | 0.052 | | | | | |
| WT | 4800 | | 952 | 0.223 * | | | | | |
| WR | | | 117 | | | | | | |
| EXISTING I.C.U. | | | | 0.428 | | | | | |
| EXISTING + REG GROWTH + COMMITTED W/PROPOSED IMPROVEMENTS I.C.U. | | | | | | | | | |
| EXISTING + COMMITTED + REGIONAL GROWTH + PROJECT I.C.U. | | | | | | | | | |

**Split Phase N/S Direction**

☐ Projected + project traffic I.C.U. will be less than or equal to 0.90

☐ Projected + project traffic I.C.U. will be greater than 0.90

☐ Projected + project traffic I.C.U. w/systems improvement will be less than or equal to 0.90

☐ Projected + project traffic I.C.U. with project improvements will be less than I.C.U. without project

Description of system improvement:

INTERSECTION CAPACITY UTILIZATION ANALYSIS

INTERSECTION: COAST HIGHWAY & AVOCADO AVENUE 6085
EXISTING TRAFFIC VOLUMES BASED ON AVERAGE DAILY TRAFFIC

2004 PM

| Movement | EXISTING Lanes Capacity | PROPOSED Lanes Capacity | EXISTING PK HR Volume | EXISTING V/C Ratio | REGIONAL GROWTH Volume | COMMITTED PROJECT Volume | PROJECTED V/C Ratio w/o Project Volume | PROJECT Volume | PROJECT V/C Ratio |
|---|---|---|---|---|---|---|---|---|---|
| NL | 1600 | | 100 | 0.063 * | | | | | |
| NT | 1600 | | 24 | 0.015 | | | | | |
| NR | 1600 | | 104 | 0.065 | | | | | |
| SL | 3200 | | 217 | 0.118 * | | | | | |
| ST | | | 160 | | | | | | |
| SR | N.S. | | 147 | | | | | | |
| EL | 1600 | | 110 | 0.069 * | | | | | |
| ET | 4800 | | 1277 | 0.276 | | | | | |
| ER | | | 48 | | | | | | |
| WL | 1600 | | 71 | 0.044 | | | | | |
| WT | 4800 | | 1370 | 0.295 * | | | | | |
| WR | | | 44 | | | | | | |
| EXISTING I.C.U. | | | | 0.545 | | | | | |
| EXISTING + REG GROWTH + COMMITTED W/PROPOSED IMPROVEMENTS I.C.U. | | | | | | | | | |
| EXISTING + COMMITTED + REGIONAL GROWTH + PROJECT I.C.U. | | | | | | | | | |

**Split Phase N/S Direction**

[ ] Projected + project traffic I.C.U. will be less than or equal to 0.90

[ ] Projected + project traffic I.C.U. will be greater than 0.90

[ ] Projected + project traffic I.C.U. w/systems improvement will be less than or equal to 0.90

[ ] Projected + project traffic I.C.U. with project improvements will be less than I.C.U. without project

Description of system improvement:

## *1% TRAFFIC VOLUME ANALYSIS*

***INTERSECTION:*** MACARTHUR BOULEVARD & FORD ROAD 4985

***(Existing Traffic Volumes Based on Average Daily Traffic 2003 AM)***

| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
|---|---|---|---|---|---|---|
| Northbound | 2372 | | | | | |
| Southbound | 2464 | | | | | |
| Eastbound | 300 | | | | | |
| Westbound | 2331 | | | | | |

☐ Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

☐ Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

## *1% TRAFFIC VOLUME ANALYSIS*

***INTERSECTION:*** MACARTHUR BOULEVARD & FORD ROAD 4985

***(Existing Traffic Volumes Based on Average Daily Traffic 2003 PM)***

| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
|---|---|---|---|---|---|---|
| Northbound | 2503 | | | | | |
| Southbound | 2118 | | | | | |
| Eastbound | 292 | | | | | |
| Westbound | 1235 | | | | | |

☐ Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

☐ Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

MA4985AM

INTERSECTION CAPACITY UTILIZATION ANALYSIS

INTERSECTION: MACARTHUR BOULEVARD & FORD ROAD 4985
EXISTING TRAFFIC VOLUMES BASED ON AVERAGE DAILY TRAFFIC

2003 AM

| Movement | EXISTING Lanes Capacity | PROPOSED Lanes Capacity | EXISTING PK HR Volume | EXISTING V/C Ratio | REGIONAL GROWTH Volume | COMMITTED PROJECT Volume | PROJECTED V/C Ratio w/o Project Volume | PROJECT Volume | PROJECT V/C Ratio |
|---|---|---|---|---|---|---|---|---|---|
| NL | 3200 | | 70 | 0.022 | | | | | |
| NT | 6400 | | 2187 | 0.342 * | | | | | |
| NR | N.S. | | 115 | | | | | | |
| SL | 3200 | | 355 | 0.111 * | | | | | |
| ST | 6400 | | 2105 | 0.329 | | | | | |
| SR | N.S. | | 4 | | | | | | |
| EL | 3200 | | 43 | 0.013 | | | | | |
| ET | 3200 | | 178 | 0.056 * | | | | | |
| ER | 1600 | | 79 | 0.049 | | | | | |
| WL | 3200 | | 687 | 0.215 * | | | | | |
| WT | 3200 | | 376 | 0.118 | | | | | |
| WR | N.S. | | 1268 | | | | | | |
| EXISTING I.C.U. | | | | 0.724 | | | | | |
| EXISTING + REG GROWTH + COMMITTED W/PROPOSED IMPROVEMENTS I.C.U. | | | | | | | | | |
| EXISTING + COMMITTED + REGIONAL GROWTH + PROJECT I.C.U. | | | | | | | | | |

☐ Projected + project traffic I.C.U. will be less than or equal to 0.90

☐ Projected + project traffic I.C.U. will be greater than 0.90

☐ Projected + project traffic I.C.U. w/systems improvement will be less than or equal to 0.90

☐ Projected + project traffic I.C.U. with project improvements will be less than I.C.U. without project

Description of system improvement:

MA4985PM

INTERSECTION CAPACITY UTILIZATION ANALYSIS

INTERSECTION: MACARTHUR BOULEVARD & FORD ROAD 4985
EXISTING TRAFFIC VOLUMES BASED ON AVERAGE DAILY TRAFFIC

2003 PM

| Movement | EXISTING Lanes Capacity | PROPOSED Lanes Capacity | EXISTING PK HR Volume | EXISTING V/C Ratio | REGIONAL GROWTH Volume | COMMITTED PROJECT Volume | PROJECTED V/C Ratio w/o Project Volume | PROJECT Volume | PROJECT V/C Ratio |
|---|---|---|---|---|---|---|---|---|---|
| NL | 3200 | | 0 | 0.000 | | | | | |
| NT | 6400 | | 2350 | 0.367 * | | | | | |
| NR | N.S. | | 153 | | | | | | |
| SL | 3200 | | 492 | 0.154 * | | | | | |
| ST | 6400 | | 1606 | 0.251 | | | | | |
| SR | N.S. | | 20 | | | | | | |
| EL | 3200 | | 31 | 0.010 | | | | | |
| ET | 3200 | | 197 | 0.062 * | | | | | |
| ER | 1600 | | 64 | 0.040 | | | | | |
| WL | 3200 | | 257 | 0.080 * | | | | | |
| WT | 3200 | | 229 | 0.072 | | | | | |
| WR | N.S. | | 749 | | | | | | |
| EXISTING I.C.U. | | | | 0.663 | | | | | |
| EXISTING + REG GROWTH + COMMITTED W/PROPOSED IMPROVEMENTS I.C.U. | | | | | | | | | |
| EXISTING + COMMITTED + REGIONAL GROWTH + PROJECT I.C.U. | | | | | | | | | |

☐ Projected + project traffic I.C.U. will be less than or equal to 0.90

☐ Projected + project traffic I.C.U. will be greater than 0.90

☐ Projected + project traffic I.C.U. w/systems improvement will be less than or equal to 0.90

☐ Projected + project traffic I.C.U. with project improvements will be less than I.C.U. without project

Description of system improvement:

## *1% TRAFFIC VOLUME ANALYSIS*

***INTERSECTION:*** MACARTHUR BOULEVARD & SAN JOAQUIN HILLS ROAD 5070

***(Existing Traffic Volumes Based on Average Daily Traffic 2003 AM)***

| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
|---|---|---|---|---|---|---|
| Northbound | 1526 | | | | | |
| Southbound | 2815 | | | | | |
| Eastbound | 351 | | | | | |
| Westbound | 1188 | | | | | |

☐ Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

☐ Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

## *1% TRAFFIC VOLUME ANALYSIS*

***INTERSECTION:*** MACARTHUR BOULEVARD & SAN JOAQUIN HILLS ROAD 5070

***(Existing Traffic Volumes Based on Average Daily Traffic 2003 PM)***

| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
|---|---|---|---|---|---|---|
| Northbound | 1625 | | | | | |
| Southbound | 1999 | | | | | |
| Eastbound | 1119 | | | | | |
| Westbound | 707 | | | | | |

☐ Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

☐ Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

MA5070AM

INTERSECTION CAPACITY UTILIZATION ANALYSIS

INTERSECTION: MACARTHUR BOULEVARD & SAN JOAQUIN HILLS ROAD 5070
EXISTING TRAFFIC VOLUMES BASED ON AVERAGE DAILY TRAFFIC

2003 AM

| Movement | EXISTING Lanes Capacity | PROPOSED Lanes Capacity | EXISTING PK HR Volume | EXISTING V/C Ratio | | REGIONAL GROWTH Volume | COMMITTED PROJECT Volume | PROJECTED V/C Ratio w/o Project Volume | PROJECT Volume | PROJECT V/C Ratio |
|---|---|---|---|---|---|---|---|---|---|---|
| NL | 3200 | | 67 | 0.021 | | | | | | |
| NT | 4800 | | 1453 | 0.303 | * | | | | | |
| NR | 1600 | | 6 | 0.004 | | | | | | |
| SL | 3200 | | 408 | 0.128 | * | | | | | |
| ST | 4800 | | 1420 | 0.296 | | | | | | |
| SR | N.S. | | 987 | | | | | | | |
| EL | 3200 | | 107 | 0.033 | * | | | | | |
| ET | 4800 | | 199 | 0.051 | | | | | | |
| ER | | | 45 | | | | | | | |
| WL | 1600 | | 19 | 0.012 | | | | | | |
| WT | 3200 | | 464 | 0.145 | * | | | | | |
| WR | N.S. | | 705 | | | | | | | |
| EXISTING I.C.U. | | | | 0.609 | | | | | | |
| EXISTING + REG GROWTH + COMMITTED W/PROPOSED IMPROVEMENTS I.C.U. | | | | | | | | | | |
| EXISTING + COMMITTED + REGIONAL GROWTH + PROJECT I.C.U. | | | | | | | | | | |

[ ] Projected + project traffic I.C.U. will be less than or equal to 0.90

[ ] Projected + project traffic I.C.U. will be greater than 0.90

[ ] Projected + project traffic I.C.U. w/systems improvement will be less than or equal to 0.90

[ ] Projected + project traffic I.C.U. with project improvements will be less than I.C.U. without project

Description of system improvement:

INTERSECTION CAPACITY UTILIZATION ANALYSIS

INTERSECTION: MACARTHUR BOULEVARD & SAN JOAQUIN HILLS ROAD 5070
EXISTING TRAFFIC VOLUMES BASED ON AVERAGE DAILY TRAFFIC 2003 PM

| Movement | EXISTING Lanes Capacity | PROPOSED Lanes Capacity | EXISTING PK HR Volume | EXISTING V/C Ratio | REGIONAL GROWTH Volume | COMMITTED PROJECT Volume | PROJECTED V/C Ratio w/o Project Volume | PROJECT Volume | PROJECT V/C Ratio |
|---|---|---|---|---|---|---|---|---|---|
| NL | 3200 | | 44 | 0.014 | | | | | |
| NT | 4800 | | 1567 | 0.326 * | | | | | |
| NR | 1600 | | 14 | 0.009 | | | | | |
| SL | 3200 | | 570 | 0.178 * | | | | | |
| ST | 4800 | | 1209 | 0.252 | | | | | |
| SR | N.S. | | 220 | | | | | | |
| EL | 3200 | | 588 | 0.184 * | | | | | |
| ET | 4800 | | 403 | 0.111 | | | | | |
| ER | | | 128 | | | | | | |
| WL | 1600 | | 27 | 0.017 | | | | | |
| WT | 3200 | | 285 | 0.089 * | | | | | |
| WR | N.S. | | 395 | | | | | | |
| EXISTING I.C.U. | | | | 0.777 | | | | | |
| EXISTING + REG GROWTH + COMMITTED W/PROPOSED IMPROVEMENTS I.C.U. | | | | | | | | | |
| EXISTING + COMMITTED + REGIONAL GROWTH + PROJECT I.C.U. | | | | | | | | | |

[_] Projected + project traffic I.C.U. will be less than or equal to 0.90

[_] Projected + project traffic I.C.U. will be greater than 0.90

[_] Projected + project traffic I.C.U. w/systems improvement will be less than or equal to 0.90

[_] Projected + project traffic I.C.U. with project improvements will be less than I.C.U. without project

Description of system improvement:

## *1% TRAFFIC VOLUME ANALYSIS*

***INTERSECTION:*** MACARTHUR BOULEVARD & SAN MIGUEL DRIVE 7135

***(Existing Traffic Volumes Based on Average Daily Traffic 2003 AM)***

| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
|---|---|---|---|---|---|---|
| Northbound | 1606 | | | | | |
| Southbound | 1380 | | | | | |
| Eastbound | 303 | | | | | |
| Westbound | 516 | | | | | |

☐ Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

☐ Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

## *1% TRAFFIC VOLUME ANALYSIS*

***INTERSECTION:*** MACARTHUR BOULEVARD & SAN MIGUEL DRIVE 7135

***(Existing Traffic Volumes Based on Average Daily Traffic 2003 PM)***

| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
|---|---|---|---|---|---|---|
| Northbound | 1235 | | | | | |
| Southbound | 1355 | | | | | |
| Eastbound | 1098 | | | | | |
| Westbound | 458 | | | | | |

☐ Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

☐ Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

***PROJECT:*** ***DATE:***

INTERSECTION CAPACITY UTILIZATION ANALYSIS

INTERSECTION: MACARTHUR BOULEVARD & SAN MIGUEL DRIVE 7135
EXISTING TRAFFIC VOLUMES BASED ON AVERAGE DAILY TRAFFIC 2003 AM

| Movement | EXISTING Lanes Capacity | PROPOSED Lanes Capacity | EXISTING PK HR Volume | EXISTING V/C Ratio | REGIONAL GROWTH Volume | COMMITTED PROJECT Volume | PROJECTED V/C Ratio w/o Project Volume | PROJECT Volume | PROJECT V/C Ratio |
|---|---|---|---|---|---|---|---|---|---|
| NL | 3200 | | 142 | 0.044 | | | | | |
| NT | 4800 | | 1245 | 0.259 * | | | | | |
| NR | 1600 | | 219 | 0.137 | | | | | |
| SL | 3200 | | 1 | 0.000 * | | | | | |
| ST | 4800 | | 749 | 0.156 | | | | | |
| SR | 1600 | | 630 | 0.394 | | | | | |
| EL | 3200 | | 204 | 0.064 * | | | | | |
| ET<br>ER | 3200 | | 78<br>21 | 0.031 | | | | | |
| WL | 3200 | | 212 | 0.066 | | | | | |
| WT<br>WR | 3200 | | 297<br>7 | 0.095 * | | | | | |
| EXISTING I.C.U. | | | | 0.418 | | | | | |
| EXISTING + REG GROWTH + COMMITTED W/PROPOSED IMPROVEMENTS I.C.U. | | | | | | | | | |
| EXISTING + COMMITTED + REGIONAL GROWTH + PROJECT I.C.U. | | | | | | | | | |

☐ Projected + project traffic I.C.U. will be less than or equal to 0.90

☐ Projected + project traffic I.C.U. will be greater than 0.90

☐ Projected + project traffic I.C.U. w/systems improvement will be less than or equal to 0.90

☐ Projected + project traffic I.C.U. with project improvements will be less than I.C.U. without project

Description of system improvement:

INTERSECTION CAPACITY UTILIZATION ANALYSIS

INTERSECTION: MACARTHUR BOULEVARD & SAN MIGUEL DRIVE 7135
EXISTING TRAFFIC VOLUMES BASED ON AVERAGE DAILY TRAFFIC 2003 PM

| Movement | EXISTING Lanes Capacity | PROPOSED Lanes Capacity | EXISTING PK HR Volume | EXISTING V/C Ratio | REGIONAL GROWTH Volume | COMMITTED PROJECT Volume | PROJECTED V/C Ratio w/o Project Volume | PROJECT Volume | PROJECT V/C Ratio |
|---|---|---|---|---|---|---|---|---|---|
| NL | 3200 | | 74 | 0.023 * | | | | | |
| NT | 4800 | | 911 | 0.190 | | | | | |
| NR | 1600 | | 250 | 0.156 | | | | | |
| SL | 3200 | | 8 | 0.003 | | | | | |
| ST | 4800 | | 1034 | 0.215 * | | | | | |
| SR | 1600 | | 313 | 0.196 | | | | | |
| EL | 3200 | | 687 | 0.215 * | | | | | |
| ET / ER | 3200 | | 362 / 49 | 0.128 | | | | | |
| WL | 3200 | | 199 | 0.062 | | | | | |
| WT / WR | 3200 | | 239 / 20 | 0.081 * | | | | | |
| EXISTING I.C.U. | | | | 0.534 | | | | | |
| EXISTING + REG GROWTH + COMMITTED W/PROPOSED IMPROVEMENTS I.C.U. | | | | | | | | | |
| EXISTING + COMMITTED + REGIONAL GROWTH + PROJECT I.C.U. | | | | | | | | | |

☐ Projected + project traffic I.C.U. will be less than or equal to 0.90

☐ Projected + project traffic I.C.U. will be greater than 0.90

☐ Projected + project traffic I.C.U. w/systems improvement will be less than or equal to 0.90

☐ Projected + project traffic I.C.U. with project improvements will be less than I.C.U. without project

Description of system improvement:

## *1% TRAFFIC VOLUME ANALYSIS*

***INTERSECTION:*** COAST HIGHWAY & MACARTHUR BOULEVARD 5335

***(Existing Traffic Volumes Based on Average Daily Traffic 2004 AM)***

| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
|---|---|---|---|---|---|---|
| Northbound | 0 | | | | | |
| Southbound | 776 | | | | | |
| Eastbound | 1241 | | | | | |
| Westbound | 2085 | | | | | |

☐ Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

☐ Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

## *1% TRAFFIC VOLUME ANALYSIS*

***INTERSECTION:*** COAST HIGHWAY & MACARTHUR BOULEVARD 5335

***(Existing Traffic Volumes Based on Average Daily Traffic 2004 PM)***

| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
|---|---|---|---|---|---|---|
| Northbound | 0 | | | | | |
| Southbound | 1264 | | | | | |
| Eastbound | 2141 | | | | | |
| Westbound | 2193 | | | | | |

☐ Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

☐ Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

***PROJECT:*** ***DATE:***

CH5335AM

INTERSECTION CAPACITY UTILIZATION ANALYSIS

INTERSECTION: COAST HIGHWAY & MACARTHUR BOULEVARD 5335
EXISTING TRAFFIC VOLUMES BASED ON AVERAGE DAILY TRAFFIC

2004 AM

| Movement | EXISTING Lanes Capacity | PROPOSED Lanes Capacity | EXISTING PK HR Volume | EXISTING V/C Ratio | REGIONAL GROWTH Volume | COMMITTED PROJECT Volume | PROJECTED V/C Ratio w/o Project Volume | PROJECT Volume | PROJECT V/C Ratio |
|---|---|---|---|---|---|---|---|---|---|
| NL | | | | | | | | | |
| NT | | | | | | | | | |
| NR | | | | | | | | | |
| SL | 3200 | | 516 | 0.161 * | | | | | |
| ST | | | | | | | | | |
| SR | N.S. | | 371 | | | | | | |
| EL | 3200 | | 513 | 0.160 * | | | | | |
| ET | 4800 | | 987 | 0.206 | | | | | |
| ER | | | | | | | | | |
| WL | | | | | | | | | |
| WT | 4800 | | 787 | 0.164 * | | | | | |
| WR | N.S. | | 1071 | | | | | | |
| EXISTING I.C.U. | | | | 0.485 | | | | | |
| EXISTING + REGIONAL GROWTH + COMMITTED W/PROPOSED IMPROVEMENTS I.C.U. | | | | | | | | | |
| EXISTING + COMMITTED + REGIONAL GROWTH + PROJECT I.C.U. | | | | | | | | | |

_ Projected + project traffic I.C.U. will be less than or equal to 0.90

_ Projected + project traffic I.C.U. will be greater than 0.90

_ Projected + project traffic I.C.U. w/systems improvement will be less than or equal to 0.90

_ Projected + project traffic I.C.U. with project improvements will be less than I.C.U. without project

Description of system improvement:

PROJECT
CH5335AM

FORM II

INTERSECTION CAPACITY UTILIZATION ANALYSIS

INTERSECTION: COAST HIGHWAY & MACARTHUR BOULEVARD 5335
EXISTING TRAFFIC VOLUMES BASED ON AVERAGE DAILY TRAFFIC

2004 PM

| Movement | EXISTING Lanes Capacity | PROPOSED Lanes Capacity | EXISTING PK HR Volume | EXISTING V/C Ratio | REGIONAL GROWTH Volume | COMMITTED PROJECT Volume | PROJECTED V/C Ratio w/o Project Volume | PROJECT Volume | PROJECT V/C Ratio |
|---|---|---|---|---|---|---|---|---|---|
| NL | | | | | | | | | |
| NT | | | | | | | | | |
| NR | | | | | | | | | |
| SL | 3200 | | 772 | 0.241 * | | | | | |
| ST | | | | | | | | | |
| SR | N.S. | | 390 | | | | | | |
| EL | 3200 | | 476 | 0.149 * | | | | | |
| ET | 4800 | | 1225 | 0.255 | | | | | |
| ER | | | | | | | | | |
| WL | | | | | | | | | |
| WT | 4800 | | 1086 | 0.226 * | | | | | |
| WR | N.S. | | 675 | | | | | | |
| EXISTING I.C.U. | | | | 0.616 | | | | | |
| EXISTING + REGIONAL GROWTH + COMMITTED W/PROPOSED IMPROVEMENTS I.C.U. | | | | | | | | | |
| EXISTING + COMMITTED + REGIONAL GROWTH + PROJECT I.C.U. | | | | | | | | | |

_ Projected + project traffic I.C.U. will be less than or equal to 0.90

_ Projected + project traffic I.C.U. will be greater than 0.90

_ Projected + project traffic I.C.U. w/systems improvement will be less than or equal to 0.90

_ Projected + project traffic I.C.U. with project improvements will be less than I.C.U. without project

Description of system improvement:

# APPENDIX C

## Approved Project Data

# Traffic Phasing Data
## Projects Less Than 100% Complete



| Project Number | Project Name | Percent |
|---|---|---|
| 148 | FASHION ISLAND EXPANSION | 36 % |
| 154 | TEMPLE BAT YAHM EXPANSION | 65 % |
| 157 | FORD REDEVELOPMENT | 95 % |
| 167 | CANNERY LOFTS VILLAGE | 0 % |
| 168 | HOAG HOSPITAL PHASE II | 0 % |
| 555 | CIOSA - IRVINE PROJECT | 91 % |
| 910 | NEWPORT DUNES | 0 % |
| 936 | 1401 DOVE STREET | 0 % |
| 937 | NEWPORT AUTO CENTER EXPAN | 0 % |
| 938 | OLSEN TOWNHOME PROJECT (1 | 0 % |
| 939 | BAYVIEW LANDING SENIOR HO | 0 % |
| 940 | BIRCH BAYVIEW PLAZA II | 0 % |
| 941 | 494/496 OLD NEWPORT BL | 0 % |
| 942 | 401 OLD NEWPORT BL | 0 % |

# Traffic Phasing Ordinance
## Approved Projects 80% Volume Summary
## Intersection Report

| Int. Number | Int. Name |
|---|---|
| 4980 | EASTBLUFF DR / FORD RD JAMBOREE RD |

| | 1 Hr Peak Totals | | | | 1 Hr Peak | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | NB | SB | EB | WB | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR |
| AM | 75 | 105 | 1 | 3 | | 74 | 1 | | 105 | | | | 1 | 2 | | 1 |
| PM | 113 | 95 | 2 | 4 | 3 | 105 | 5 | 1 | 95 | | | | 2 | 4 | | |

# Traffic Phasing Ordinance
## Approved Projects 80% Volume Summary
## Intersection Report



| Int. Number | Int. Name |
|---|---|
| 5045 | JAMBOREE RD / SAN JOAQUIN HILLS RD |

| | 1 Hr Peak Totals | | | | 1 Hr Peak | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | NB | SB | EB | WB | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR |
| AM | 83 | 107 | | 10 | | 77 | 6 | 1 | 106 | | | | | 10 | | |
| PM | 97 | 105 | 5 | 30 | 1 | 87 | 9 | 20 | 84 | | 1 | 4 | | 7 | | 23 |

# Traffic Phasing Ordinance
## Approved Projects 80% Volume Summary
## Intersection Report



| Int. Number | Int. Name |
|---|---|
| 5310 | JAMBOREE RD / SANTA BARBARA DR |

| | 1 Hr Peak Totals | | | | 1 Hr Peak | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | NB | SB | EB | WB | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR |
| AM | 75 | 114 | 6 | 6 | | 72 | 3 | 1 | 112 | 1 | 6 | | | 2 | | 4 |
| PM | 94 | 93 | 3 | 4 | | 92 | 2 | 4 | 83 | 6 | 2 | 1 | | 2 | 1 | 1 |

# Traffic Phasing Ordinance
## Approved Projects 80% Volume Summary
## Intersection Report

| Int. Number | Int. Name |
|---|---|
| 5055 | JAMBOREE RD / COAST HWY E |

| | 1 Hr Peak Totals | | | | 1 Hr Peak | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | NB | SB | EB | WB | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR |
| AM | 1 | 118 | 81 | 44 | | 1 | | 12 | 1 | 105 | 51 | 29 | 1 | | 43 | 1 |
| PM | 3 | 79 | 128 | 61 | 1 | 1 | 2 | 8 | 3 | 68 | 88 | 40 | | 3 | 53 | 5 |

# Traffic Phasing Ordinance
## Approved Projects 80% Volume Summary
## Intersection Report

| Int. Number | Int. Name |
|---|---|
| 5060 | SANTA CRUZ DR / SAN JOAQUIN HILLS RD BIG CANYON DR W |

| | 1 Hr Peak Totals | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | NB | SB | EB | WB | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | | |
| AM | 1 | 1 | 1 | 1 | 1 | | 1 | | 1 | | | 1 | | 1 | | | | |
| PM | | 1 | 1 | 1 | | | | 1 | | | | | 1 | | 1 | | | |

# Traffic Phasing Ordinance
## Approved Projects 80% Volume Summary
## Intersection Report

| Int. Number | Int. Name |
|---|---|
| 5330 | NEWPORT CENTER DR / COAST HWY E |

| | 1 Hr Peak Totals | | | | | | | | | 1 Hr Peak | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | NB | SB | EB | WB | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR |
| AM | | 9 | 26 | 32 | | | | | | 9 | 5 | 21 | | | 31 | 1 |
| PM | | 34 | 46 | 23 | | | | 3 | | 31 | 13 | 34 | | | 18 | 6 |

# Traffic Phasing Ordinance
## Approved Projects 80% Volume Summary
## Intersection Report

| Int. Number | Int. Name |
|---|---|
| 5065 | SANTA ROSA DR / SAN JOAQUIN HILLS RD BIG CANYON DR E |

| | 1 Hr Peak Totals | | | | | | | | | 1 Hr Peak | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | NB | SB | EB | WB | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR |
| AM | 10 | | 7 | 1 | 9 | | 1 | | | | 1 | 1 | 6 | | 1 | |
| PM | 26 | | 9 | 12 | 6 | | 19 | | | | | 1 | 8 | 12 | 1 | |

# Traffic Phasing Ordinance
## Approved Projects 80% Volume Summary
## Intersection Report



Int. Number: 6085
Int. Name: COAST HWY E / AVOCADO AVE

| | 1 Hr Peak Totals | | | | | | | | | 1 Hr Peak | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | NB | SB | EB | WB | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR |
| AM | | | 26 | 33 | | | | | | | | 26 | | | 33 | |
| PM | | 1 | 35 | 20 | | | | | | 1 | | 34 | 1 | | 20 | |

# Traffic Phasing Ordinance
## Approved Projects 80% Volume Summary
## Intersection Report



| Int. Number | Int. Name |
|---|---|
| 4985 | FORD RD / MACARTHUR BLVD |

| | 1 Hr Peak Totals | | | | 1 Hr Peak | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | NB | SB | EB | WB | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR |
| AM | 2 | 3 | 4 | 2 | 1 | 1 | | | 3 | | 1 | 1 | 2 | 1 | | 1 |
| PM | 24 | 14 | 2 | 3 | 2 | 14 | 8 | 1 | 13 | 1 | | 1 | 1 | 2 | 1 | |

# Traffic Phasing Ordinance
## Approved Projects 80% Volume Summary
## Intersection Report

| Int. Number | Int. Name |
|---|---|
| 5070 | SAN JOAQUIN HILLS RD / MACARTHUR BLVD |

| | 1 Hr Peak Totals | | | | 1 Hr Peak | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | NB | SB | EB | WB | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR |
| AM | | 4 | 1 | 1 | | | | | 3 | 1 | | 1 | | | 1 | |
| PM | 3 | 15 | 19 | 1 | | 3 | | | 3 | 12 | 19 | | | | 1 | |

# Traffic Phasing Ordinance
## Approved Projects 80% Volume Summary
## Intersection Report

| Int. Number | Int. Name |
|---|---|
| 7135 | MACARTHUR BLVD / SAN MIGUEL DR |

| | 1 Hr Peak Totals | | | | | | | | | 1 Hr Peak | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | NB | SB | EB | WB | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR |
| AM | | 2 | 1 | 1 | | | | | | 2 | | 1 | | | 1 | |
| PM | 2 | 3 | 24 | 12 | 2 | | | | | 3 | 3 | 10 | 10 | | 12 | |

# Traffic Phasing Ordinance
## Approved Projects 80% Volume Summary
## Intersection Report

| Int. Number | Int. Name |
|---|---|
| 5335 | MACARTHUR BLVD / COAST HWY E |

| | 1 Hr Peak Totals | | | | | | | | | 1 Hr Peak | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | NB | SB | EB | WB | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR |
| AM | | 13 | 29 | 22 | | | | | 1 | 12 | 9 | 20 | | | 22 | |
| PM | | 6 | 38 | 15 | | | | | | 6 | 14 | 23 | | | 15 | |

# APPENDIX D

## TPO One-Percent Analysis Calculation Worksheets

## *1% TRAFFIC VOLUME ANALYSIS*

***INTERSECTION:*** JAMBOREE ROAD & EASTBLUFF DRIVE/FORD ROAD

***(Existing Traffic Volumes Based on Average Daily Traffic 2003 AM)***

| AM PEAK HOUR | | | | | | |
|---|---|---|---|---|---|---|
| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
| Northbound | 1766 | 88 | 75 | 1929 | 19 | 12 |
| Southbound | 1722 | 86 | 105 | 1913 | 19 | 2 |
| Eastbound | 1203 | 0 | 1 | 1204 | 12 | 0 |
| Westbound | 508 | 0 | 3 | 511 | 5 | 1 |

[X] Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

[ ] Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

## *1% TRAFFIC VOLUME ANALYSIS*

***INTERSECTION:*** JAMBOREE ROAD & EASTBLUFF DRIVE/FORD ROAD

***(Existing Traffic Volumes Based on Average Daily Traffic 2003 PM)***

| PM PEAK HOUR | | | | | | |
|---|---|---|---|---|---|---|
| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
| Northbound | 1770 | 89 | 113 | 1972 | 20 | 6 |
| Southbound | 1798 | 90 | 95 | 1983 | 20 | 6 |
| Eastbound | 641 | 0 | 2 | 643 | 6 | 0 |
| Westbound | 233 | 0 | 4 | 237 | 2 | 2 |

[ ] Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

[X] Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

**PROJECT:** Santa Barbara Condominium Project **DATE:** 12/22/2004

## *1% TRAFFIC VOLUME ANALYSIS*

***INTERSECTION:*** JAMBOREE ROAD & SAN JOAQUIN HILLS ROAD

***(Existing Traffic Volumes Based on Average Daily Traffic 2003 AM)***

| AM PEAK HOUR | | | | | | |
|---|---|---|---|---|---|---|
| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
| Northbound | 1402 | 70 | 83 | 1555 | 16 | 12 |
| Southbound | 2018 | 101 | 107 | 2226 | 22 | 3 |
| Eastbound | 391 | 0 | 0 | 391 | 4 | 0 |
| Westbound | 151 | 0 | 10 | 161 | 2 | 0 |

[X] Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

[ ] Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

## *1% TRAFFIC VOLUME ANALYSIS*

***INTERSECTION:*** JAMBOREE ROAD & SAN JOAQUIN HILLS ROAD

***(Existing Traffic Volumes Based on Average Daily Traffic 2003 PM)***

| PM PEAK HOUR | | | | | | |
|---|---|---|---|---|---|---|
| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
| Northbound | 1321 | 66 | 97 | 1484 | 15 | 5 |
| Southbound | 1957 | 98 | 105 | 2160 | 22 | 8 |
| Eastbound | 186 | 0 | 5 | 191 | 2 | 0 |
| Westbound | 298 | 0 | 30 | 328 | 3 | 0 |

[X] Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

[ ] Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

**PROJECT:** Santa Barbara Condominium Project **DATE:** 12/22/2004

## *1% TRAFFIC VOLUME ANALYSIS*

***INTERSECTION:*** JAMBOREE ROAD & SANTA BARBARA DRIVE

***(Existing Traffic Volumes Based on Average Daily Traffic 2003 AM)***

| AM PEAK HOUR | | | | | | |
|---|---|---|---|---|---|---|
| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
| Northbound | 1724 | 86 | 75 | 1885 | 19 | 2 |
| Southbound | 1388 | 69 | 114 | 1571 | 16 | 3 |
| Eastbound | 28 | 0 | 6 | 34 | 0 | 0 |
| Westbound | 125 | 0 | 6 | 131 | 1 | 19 |

[ ] Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

[X] Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

## *1% TRAFFIC VOLUME ANALYSIS*

***INTERSECTION:*** JAMBOREE ROAD & SANTA BARBARA DRIVE

***(Existing Traffic Volumes Based on Average Daily Traffic 2003 PM)***

| PM PEAK HOUR | | | | | | |
|---|---|---|---|---|---|---|
| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
| Northbound | 1051 | 53 | 94 | 1198 | 12 | 5 |
| Southbound | 1685 | 84 | 93 | 1862 | 19 | 8 |
| Eastbound | 40 | 0 | 3 | 43 | 0 | 0 |
| Westbound | 771 | 0 | 4 | 775 | 8 | 8 |

[ ] Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

[X] Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

**PROJECT:** Santa Barbara Condominium Project **DATE:** 12/22/2004

## *1% TRAFFIC VOLUME ANALYSIS*

***INTERSECTION:*** JAMBOREE ROAD & COAST HIGHWAY

***(Existing Traffic Volumes Based on Average Daily Traffic 2004 AM)***

| AM PEAK HOUR | | | | | | |
|---|---|---|---|---|---|---|
| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
| Northbound | 512 | 0 | 1 | 513 | 5 | 0 |
| Southbound | 974 | 49 | 118 | 1141 | 11 | 7 |
| Eastbound | 2896 | 145 | 81 | 3122 | 31 | 2 |
| Westbound | 1159 | 58 | 44 | 1261 | 13 | 0 |

[X] Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

[ ] Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

## *1% TRAFFIC VOLUME ANALYSIS*

***INTERSECTION:*** JAMBOREE ROAD & COAST HIGHWAY

***(Existing Traffic Volumes Based on Average Daily Traffic 2004 PM)***

| PM PEAK HOUR | | | | | | |
|---|---|---|---|---|---|---|
| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
| Northbound | 415 | 0 | 3 | 418 | 4 | 0 |
| Southbound | 2134 | 107 | 79 | 2320 | 23 | 3 |
| Eastbound | 1999 | 100 | 128 | 2227 | 22 | 5 |
| Westbound | 2174 | 109 | 61 | 2344 | 23 | 0 |

[X] Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

[ ] Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

**PROJECT:** Santa Barbara Condominium Project **DATE:** 12/22/2004

## *1% TRAFFIC VOLUME ANALYSIS*

***INTERSECTION:*** SANTA CRUZ ROAD & SAN JOAQUIN HILLS ROAD

***(Existing Traffic Volumes Based on Average Daily Traffic 2003 AM)***

| AM PEAK HOUR | | | | | | |
|---|---|---|---|---|---|---|
| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
| Northbound | 77 | 0 | 1 | 78 | 1 | 2 |
| Southbound | 69 | 0 | 1 | 70 | 1 | 0 |
| Eastbound | 768 | 0 | 1 | 769 | 8 | 0 |
| Westbound | 590 | 0 | 1 | 591 | 6 | 0 |

[ ] Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

[X] Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

## *1% TRAFFIC VOLUME ANALYSIS*

***INTERSECTION:*** SANTA CRUZ ROAD & SAN JOAQUIN HILLS ROAD

***(Existing Traffic Volumes Based on Average Daily Traffic 2003 PM)***

| PM PEAK HOUR | | | | | | |
|---|---|---|---|---|---|---|
| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
| Northbound | 538 | 0 | 0 | 538 | 5 | 1 |
| Southbound | 43 | 0 | 1 | 44 | 0 | 0 |
| Eastbound | 631 | 0 | 1 | 632 | 6 | 0 |
| Westbound | 457 | 0 | 1 | 458 | 5 | 1 |

[X] Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

[ ] Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

**PROJECT:** Santa Barbara Condominium Project **DATE:** 12/22/2004

## *1% TRAFFIC VOLUME ANALYSIS*

*INTERSECTION:* SANTA CRUZ DRIVE & SAN CLEMENTE DRIVE

***(Existing Traffic Volumes Based on Average Daily Traffic 2003 AM)***

| AM PEAK HOUR | | | | | | |
|---|---|---|---|---|---|---|
| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
| Northbound | 95 | 0 | 0 | 95 | 1 | 0 |
| Southbound | 312 | 0 | 0 | 312 | 3 | 0 |
| Eastbound | 159 | 0 | 0 | 159 | 2 | 2 |
| Westbound | 56 | 0 | 0 | 56 | 1 | 0 |

[ ] Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

[X] Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

## *1% TRAFFIC VOLUME ANALYSIS*

*INTERSECTION:* SANTA CRUZ DRIVE & SAN CLEMENTE DRIVE

***(Existing Traffic Volumes Based on Average Daily Traffic 2003 PM)***

| PM PEAK HOUR | | | | | | |
|---|---|---|---|---|---|---|
| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
| Northbound | 333 | 0 | 0 | 333 | 3 | 0 |
| Southbound | 263 | 0 | 0 | 263 | 3 | 1 |
| Eastbound | 298 | 0 | 0 | 298 | 3 | 1 |
| Westbound | 100 | 0 | 0 | 100 | 1 | 0 |

[X] Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

[ ] Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

**PROJECT:** Santa Barbara Condominium Project **DATE:** 12/22/2004

## *1% TRAFFIC VOLUME ANALYSIS*

***INTERSECTION:*** NEWPORT CENTER DRIVE & SANTA BARBARA DRIVE

***(Existing Traffic Volumes Based on Average Daily Traffic 2003 AM)***

| AM PEAK HOUR | | | | | | |
|---|---|---|---|---|---|---|
| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
| Northbound | 219 | 0 | 0 | 219 | 2 | 2 |
| Southbound | 124 | 0 | 0 | 124 | 1 | 1 |
| Eastbound | 210 | 0 | 0 | 210 | 2 | 14 |
| Westbound | 10 | 0 | 0 | 10 | 0 | 0 |

[ ] Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

[X] Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

## *1% TRAFFIC VOLUME ANALYSIS*

***INTERSECTION:*** NEWPORT CENTER DRIVE & SANTA BARBARA DRIVE

***(Existing Traffic Volumes Based on Average Daily Traffic 2003 PM)***

| PM PEAK HOUR | | | | | | |
|---|---|---|---|---|---|---|
| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
| Northbound | 265 | 0 | 0 | 265 | 3 | 6 |
| Southbound | 323 | 0 | 0 | 323 | 3 | 2 |
| Eastbound | 281 | 0 | 0 | 281 | 3 | 7 |
| Westbound | 136 | 0 | 0 | 136 | 1 | 1 |

[ ] Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

[X] Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

**PROJECT:** Santa Barbara Condominium Project **DATE:** 12/22/2004

## *1% TRAFFIC VOLUME ANALYSIS*

***INTERSECTION:*** NEWPORT CENTER DRIVE & COAST HIGHWAY

***(Existing Traffic Volumes Based on Average Daily Traffic 2003 AM)***

| AM PEAK HOUR | | | | | | |
|---|---|---|---|---|---|---|
| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
| Northbound | 0 | 0 | 0 | 0 | 0 | 0 |
| Southbound | 115 | 0 | 9 | 124 | 1 | 5 |
| Eastbound | 1660 | 83 | 26 | 1769 | 18 | 0 |
| Westbound | 1287 | 64 | 32 | 1383 | 14 | 1 |

[ ] Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

[X] Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

## *1% TRAFFIC VOLUME ANALYSIS*

***INTERSECTION:*** NEWPORT CENTER DRIVE & COAST HIGHWAY

***(Existing Traffic Volumes Based on Average Daily Traffic 2003 PM)***

| PM PEAK HOUR | | | | | | |
|---|---|---|---|---|---|---|
| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
| Northbound | 0 | 0 | 0 | 0 | 0 | 0 |
| Southbound | 796 | 0 | 34 | 830 | 8 | 2 |
| Eastbound | 1967 | 98 | 46 | 2111 | 21 | 0 |
| Westbound | 1843 | 92 | 23 | 1958 | 20 | 4 |

[X] Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

[ ] Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

**PROJECT:** Santa Barbara Condominium Project **DATE:** 12/22/2004

## *1% TRAFFIC VOLUME ANALYSIS*

***INTERSECTION:*** SANTA ROSA DRIVE/BIG CANYON DRIVE & SAN JOAQUIN HILLS ROAD

***(Existing Traffic Volumes Based on Average Daily Traffic 2003 AM)***

| AM PEAK HOUR | | | | | | |
|---|---|---|---|---|---|---|
| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
| Northbound | 102 | 0 | 10 | 112 | 1 | 3 |
| Southbound | 120 | 0 | 0 | 120 | 1 | 0 |
| Eastbound | 543 | 0 | 7 | 550 | 6 | 2 |
| Westbound | 1020 | 0 | 1 | 1021 | 10 | 1 |

[ ] Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

[X] Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

## *1% TRAFFIC VOLUME ANALYSIS*

***INTERSECTION:*** SANTA ROSA DRIVE/BIG CANYON DRIVE & SAN JOAQUIN HILLS ROAD

***(Existing Traffic Volumes Based on Average Daily Traffic 2003 PM)***

| PM PEAK HOUR | | | | | | |
|---|---|---|---|---|---|---|
| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
| Northbound | 641 | 0 | 26 | 667 | 7 | 2 |
| Southbound | 96 | 0 | 0 | 96 | 1 | 0 |
| Eastbound | 564 | 0 | 9 | 573 | 6 | 1 |
| Westbound | 518 | 0 | 12 | 530 | 5 | 3 |

[X] Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

[ ] Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

**PROJECT:** Santa Barbara Condominium Project **DATE:** 12/22/2004

## *1% TRAFFIC VOLUME ANALYSIS*

***INTERSECTION:*** AVOCADO AVENUE & COAST HIGHWAY

***(Existing Traffic Volumes Based on Average Daily Traffic 2004 AM)***

| AM PEAK HOUR | | | | | | |
|---|---|---|---|---|---|---|
| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
| Northbound | 223 | 0 | 0 | 223 | 2 | 0 |
| Southbound | 185 | 0 | 0 | 185 | 2 | 0 |
| Eastbound | .1591 | 80 | 26 | 1697 | 17 | 5 |
| Westbound | 1152 | 58 | 33 | 1243 | 12 | 1 |

[X] Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

[ ] Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

## *1% TRAFFIC VOLUME ANALYSIS*

***INTERSECTION:*** AVOCADO AVENUE & COAST HIGHWAY

***(Existing Traffic Volumes Based on Average Daily Traffic 2004 PM)***

| PM PEAK HOUR | | | | | | |
|---|---|---|---|---|---|---|
| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
| Northbound | 228 | 0 | 0 | 228 | 2 | 0 |
| Southbound | 524 | 0 | 1 | 525 | 5 | 0 |
| Eastbound | 1435 | 72 | 35 | 1542 | 15 | 2 |
| Westbound | 1485 | 74 | 20 | 1579 | 16 | 4 |

[X] Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

[ ] Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

**PROJECT:** Santa Barbara Condominium Project **DATE:** 12/22/2004

## *1% TRAFFIC VOLUME ANALYSIS*

***INTERSECTION:*** MACARTHUR BOULEVARD & FORD ROAD

***(Existing Traffic Volumes Based on Average Daily Traffic 2003 AM)***

| AM PEAK HOUR | | | | | | |
|---|---|---|---|---|---|---|
| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
| Northbound | 2372 | 119 | 2 | 2493 | 25 | 4 |
| Southbound | 2464 | 123 | 3 | 2590 | 26 | 0 |
| Eastbound | 300 | 0 | 4 | 304 | 3 | 3 |
| Westbound | 2331 | 0 | 2 | 2333 | 23 | 1 |

[ ] Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

[X] Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

## *1% TRAFFIC VOLUME ANALYSIS*

***INTERSECTION:*** MACARTHUR BOULEVARD & FORD ROAD

***(Existing Traffic Volumes Based on Average Daily Traffic 2003 PM)***

| PM PEAK HOUR | | | | | | |
|---|---|---|---|---|---|---|
| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
| Northbound | 2503 | 125 | 24 | 2652 | 27 | 2 |
| Southbound | 2118 | 106 | 14 | 2238 | 22 | 1 |
| Eastbound | 292 | 0 | 2 | 294 | 3 | 2 |
| Westbound | 1235 | 0 | 3 | 1238 | 12 | 3 |

[X] Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

[ ] Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

**PROJECT:** Santa Barbara Condominium Project **DATE:** 12/22/2004

## *1% TRAFFIC VOLUME ANALYSIS*

***INTERSECTION:*** MACARTHUR BOULEVARD & SAN JOAQUIN HILLS ROAD

***(Existing Traffic Volumes Based on Average Daily Traffic 2003 AM)***

| AM PEAK HOUR | | | | | | |
|---|---|---|---|---|---|---|
| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
| Northbound | 1526 | 76 | 0 | 1602 | 16 | 0 |
| Southbound | 2815 | 141 | 4 | 2960 | 30 | 1 |
| Eastbound | 351 | 0 | 1 | 352 | 4 | 5 |
| Westbound | 1188 | 0 | 1 | 1189 | 12 | 0 |

[ ] Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

[X] Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

## *1% TRAFFIC VOLUME ANALYSIS*

***INTERSECTION:*** MACARTHUR BOULEVARD & SAN JOAQUIN HILLS ROAD

***(Existing Traffic Volumes Based on Average Daily Traffic 2003 PM)***

| PM PEAK HOUR | | | | | | |
|---|---|---|---|---|---|---|
| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
| Northbound | 1625 | 81 | 3 | 1709 | 17 | 0 |
| Southbound | 1999 | 100 | 15 | 2114 | 21 | 2 |
| Eastbound | 1119 | 0 | 19 | 1138 | 11 | 3 |
| Westbound | 707 | 0 | 1 | 708 | 7 | 1 |

[X] Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

[ ] Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

**PROJECT:** Santa Barbara Condominium Project **DATE:** 12/22/2004

## *1% TRAFFIC VOLUME ANALYSIS*

***INTERSECTION:*** MACARTHUR BOULEVARD & SAN MIGUEL DRIVE

***(Existing Traffic Volumes Based on Average Daily Traffic 2003 AM)***

| AM PEAK HOUR | | | | | | |
|---|---|---|---|---|---|---|
| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
| Northbound | 1606 | 80 | 0 | 1686 | 17 | 0 |
| Southbound | 1380 | 69 | 2 | 1451 | 15 | 0 |
| Eastbound | 303 | 0 | 1 | 304 | 3 | 2 |
| Westbound | 516 | 0 | 1 | 517 | 5 | 0 |

[X] Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

[ ] Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

## *1% TRAFFIC VOLUME ANALYSIS*

***INTERSECTION:*** MACARTHUR BOULEVARD & SAN MIGUEL DRIVE

***(Existing Traffic Volumes Based on Average Daily Traffic 2003 PM)***

| PM PEAK HOUR | | | | | | |
|---|---|---|---|---|---|---|
| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
| Northbound | 1235 | 62 | 2 | 1299 | 13 | 0 |
| Southbound | 1355 | 68 | 3 | 1426 | 14 | 0 |
| Eastbound | 1098 | 0 | 24 | 1122 | 11 | 1 |
| Westbound | 458 | 0 | 12 | 470 | 5 | 1 |

[X] Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

[ ] Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

**PROJECT:** Santa Barbara Condominium Project **DATE:** 12/22/2004

## *1% TRAFFIC VOLUME ANALYSIS*

***INTERSECTION:*** MACARTHUR BOULEVARD & COAST HIGHWAY

***(Existing Traffic Volumes Based on Average Daily Traffic 2004 AM)***

| AM PEAK HOUR | | | | | | |
|---|---|---|---|---|---|---|
| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
| Northbound | 0 | 0 | 0 | 0 | 0 | 0 |
| Southbound | 776 | 39 | 13 | 828 | 8 | 0 |
| Eastbound | 1241 | 62 | 29 | 1332 | 13 | 5 |
| Westbound | 2085 | 104 | 22 | 2211 | 22 | 1 |

[X] Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

[ ] Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

## *1% TRAFFIC VOLUME ANALYSIS*

***INTERSECTION:*** MACARTHUR BOULEVARD & COAST HIGHWAY

***(Existing Traffic Volumes Based on Average Daily Traffic 2004 PM)***

| PM PEAK HOUR | | | | | | |
|---|---|---|---|---|---|---|
| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
| Northbound | 0 | 0 | 0 | 0 | 0 | 0 |
| Southbound | 1264 | 63 | 6 | 1333 | 13 | 0 |
| Eastbound | 2141 | 107 | 38 | 2286 | 23 | 2 |
| Westbound | 2193 | 110 | 15 | 2318 | 23 | 4 |

[X] Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

[ ] Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

**PROJECT:** Santa Barbara Condominium Project **DATE:** 12/22/2004

# APPENDIX E

## Cumulative Project Data

## Table E-1

## Cumulative Project Traffic Generation

| Project | Peak Hour | | | | | | Daily[1] |
|---|---|---|---|---|---|---|---|
| | Morning | | | Evening | | | |
| | Inbound | Outbound | Total | Inbound | Outbound | Total | |
| South Coast Shipyard | 35 | 20 | 55 | 41 | 38 | 79 | 892 |
| Morman Temple | 20 | 5 | 25 | 16 | 10 | 26 | 410 |
| Saint Mark Presbyterian | 36 | 30 | 66 | 42 | 44 | 86 | N/A |
| Our Lady Queen of Angels | 47 | 31 | 78 | 6 | 6 | 12 | N/A |
| St. Andrews Church | 3 | 1 | 4 | 11 | 10 | 21 | N/A |
| Mariners Church | 157 | 95 | 252 | 182 | 137 | 319 | 4,505 |
| Exodus Community Center | 331 | 253 | 584 | 240 | 333 | 573 | 5,365 |
| Newport Coast - TAZ 1 | 74 | 244 | 318 | 238 | 159 | 397 | 3,928 |
| Newport Coast - TAZ 2 | 91 | 327 | 418 | 327 | 183 | 510 | 5,105 |
| Newport Coast - TAZ 3 | 51 | 178 | 229 | 178 | 102 | 280 | 2,794 |
| Newport Coast - TAZ 4 | 56 | 186 | 242 | 184 | 113 | 297 | 2,960 |
| Subtotal | 272 | 935 | 1,207 | 927 | 557 | 1,484 | 14,787 |
| Newport Ridge - TAZ 1 | 135 | 317 | 452 | 464 | 353 | 817 | 8,778 |
| Newport Ridge - TAZ 2 | 63 | 222 | 285 | 222 | 127 | 349 | 3,487 |
| Newport Ridge - TAZ 3 | 26 | 119 | 145 | 122 | 57 | 179 | 1,822 |
| Subtotal | 224 | 658 | 882 | 808 | 537 | 1,345 | 14,087 |
| Bonita Canyon - Residential | 39 | 183 | 222 | 187 | 87 | 274 | 2,821 |
| Total | 1,164 | 2,211 | 3,375 | 2,460 | 1,759 | 4,219 | 42,867 |

[1] N/A = Not Available

## TABLE 3-1

## TRIP GENERATION RATES[1]

| LAND USE | UNITS[2] | PEAK HOUR | | | | DAILY |
|---|---|---|---|---|---|---|
| | | AM | | PM | | |
| | | IN | OUT | IN | OUT | |
| Residential - Apartments | DU | 0.90 | 0.42 | 0.43 | 0.20 | 6.47 |
| Commercial Retail | TSF | 0.60 | 0.50 | 1.90 | 2.00 | 45.00 |
| General Office | TSF | 2.60 | 0.35 | 1.49 | 7.26 | 22.44 |

[1] Source: City of Newport Beach Trip Generation Rates, Institue of Transportation Engineers (ITE), Trip Generation, Sixth Edition, 1997, Land Use Category 710

[2] DU = Dwelling Units
TSF = Thousand Square Feet

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**TABLE 3-2**

**PROJECT TRIP GENERATION**

| LAND USE | QUANTITY | UNITS[1] | PEAK HOUR | | | | DAILY |
|---|---|---|---|---|---|---|---|
| | | | AM | | PM | | |
| | | | IN | OUT | IN | OUT | |
| **Existing Credits** | | | | | | | |
| Commercial Retail | 3.8 | TSF | 2 | 2 | 7 | 8 | 171 |
| Commercial Office | 10.4 | TSF | 27 | 4 | 15 | 76 | 233 |
| TOTAL CREDITS | | | 29 | 6 | 23 | 83 | 404 |
| **Proposed Project** | | | | | | | |
| Residential - Apartments | 28 | DU | 25 | 12 | 12 | 6 | 181 |
| Commercial Retail | 19.6 | TSF | 12 | 10 | 37 | 39 | 882 |
| Commercial Office | 10.4 | TSF | 27 | 4 | 15 | 76 | 233 |
| TOTAL | | | 64 | 26 | 64 | 121 | 1,296 |
| NET NEW TRIPS | | | 35 | 20 | 41 | 38 | 892 |

[1] DU = Dwelling Unit
TSF = Thousand Square Feet

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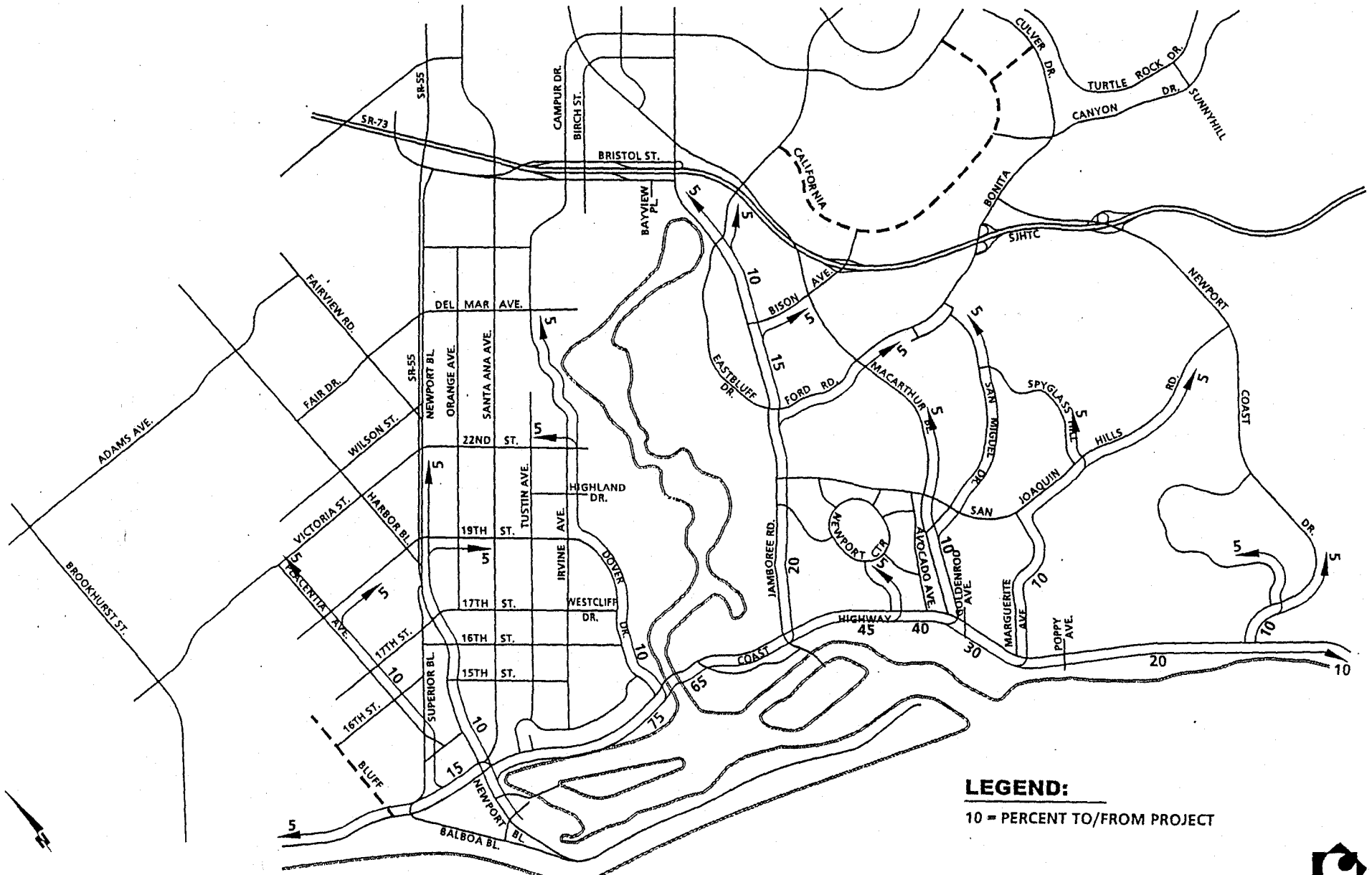
EXHIBIT 3-A

# SOUTH COAST SHIPYARD TRIP DISTRIBUTION




NEWPORT BEACH CUMMULATIVE TRAFFIC ANALYSIS, Newport Beach, California - 00636:22

URBAN CROSSROADS

## TABLE 4-1

## TRIP GENERATION RATES[1]

### WEEKDAY CONDITIONS

| LAND USE | PEAK HOUR TRIP RATES | | | | DAILY RATE |
|---|---|---|---|---|---|
| | AM | | PM | | |
| | IN | OUT | IN | OUT | |
| Morman Temple Rates Based on: | | | | | |
| Thousand Square Feet | 1.12 | 0.28 | 0.93 | 0.56 | 23.46 |

### WEEKEND CONDITIONS

| LAND USE | PEAK HOUR TRIP | | DAILY RATE |
|---|---|---|---|
| | IN | OUT | |
| Morman Temple Rates Based on: | | | |
| Thousand Square Feet | 3.12 | 2.99 | 44.11 |

[1] Source: Empirical data collection/trip generation analysis conducted by Solaegui Engineers, LTD (September 15, 2001)

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## TABLE 4-2

## NEWPORT BEACH MORMON TEMPLE TRIP GENERATION SUMMARY

### WEEKDAY

| LAND USE | QUANTITY | UNITS[1] | PEAK HOUR AM IN | PEAK HOUR AM OUT | PEAK HOUR PM IN | PEAK HOUR PM OUT | DAILY |
|---|---|---|---|---|---|---|---|
| Mormon Temple | | | | | | | |
| Thousand Square Feet | 17.46 | TSF | 20 | 5 | 16 | 10 | 410 |

### WEEKEND

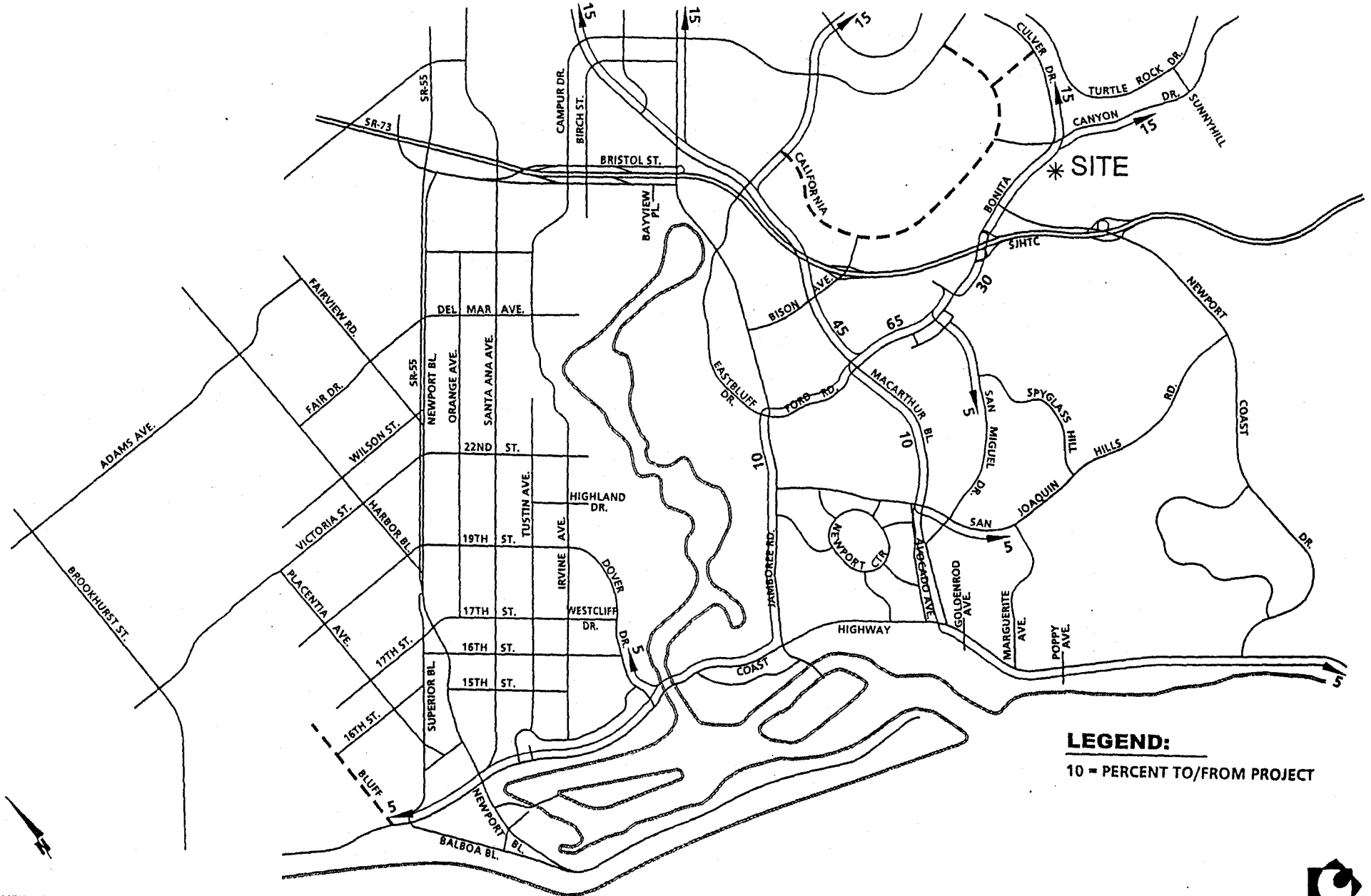
| LAND USE | QUANTITY | UNITS[1] | PEAK HOUR IN | PEAK HOUR OUT | DAILY |
|---|---|---|---|---|---|
| Mormon Temple | | | | | |
| Thousand Square Feet | 17.46 | TSF | 54 | 52 | 770 |

[1] TSF = Thousand Square Feet

U:\UcJobs\00636\Excel\[00636-02.xls]T4-2

EXHIBIT 4-A

# MORMAN TEMPLE TRIP DISTRIBUTION








URBAN CROSSROADS

## TABLE 5-1

## TRIP GENERATION RATES[1]

| LAND USE | UNITS[2] | PEAK HOUR | | | | DAILY |
|---|---|---|---|---|---|---|
| | | AM | | PM | | |
| | | IN | OUT | IN | OUT | |
| Church | TSF | 0.08 | 0.03 | 0.34 | 0.30 | N/A[3] |
| Daycare | TSF | 6.90 | 6.12 | 6.40 | 7.22 | 79.26 |

[1] Source: City of Newport Beach Trip Generation Rates

[2] TSF = Thousand Square Feet

[3] N/A = Not Available

U:\UcJobs\00636\Excel\[00636-02.xls]T 5-1

**TABLE 5-2**

**PROJECT TRIP GENERATION**

| LAND USE | QUANTITY | UNITS[1] | PEAK HOUR | | | | DAILY |
|---|---|---|---|---|---|---|---|
| | | | AM | | PM | | |
| | | | IN | OUT | IN | OUT | |
| Church | 34.8 | TSF | 3 | 1 | 12 | 10 | N/A[2] |
| Daycare | 4.720 | TSF | 33 | 29 | 30 | 34 | 374 |
| TOTAL | | | 36 | 30 | 42 | 44 | N/A |

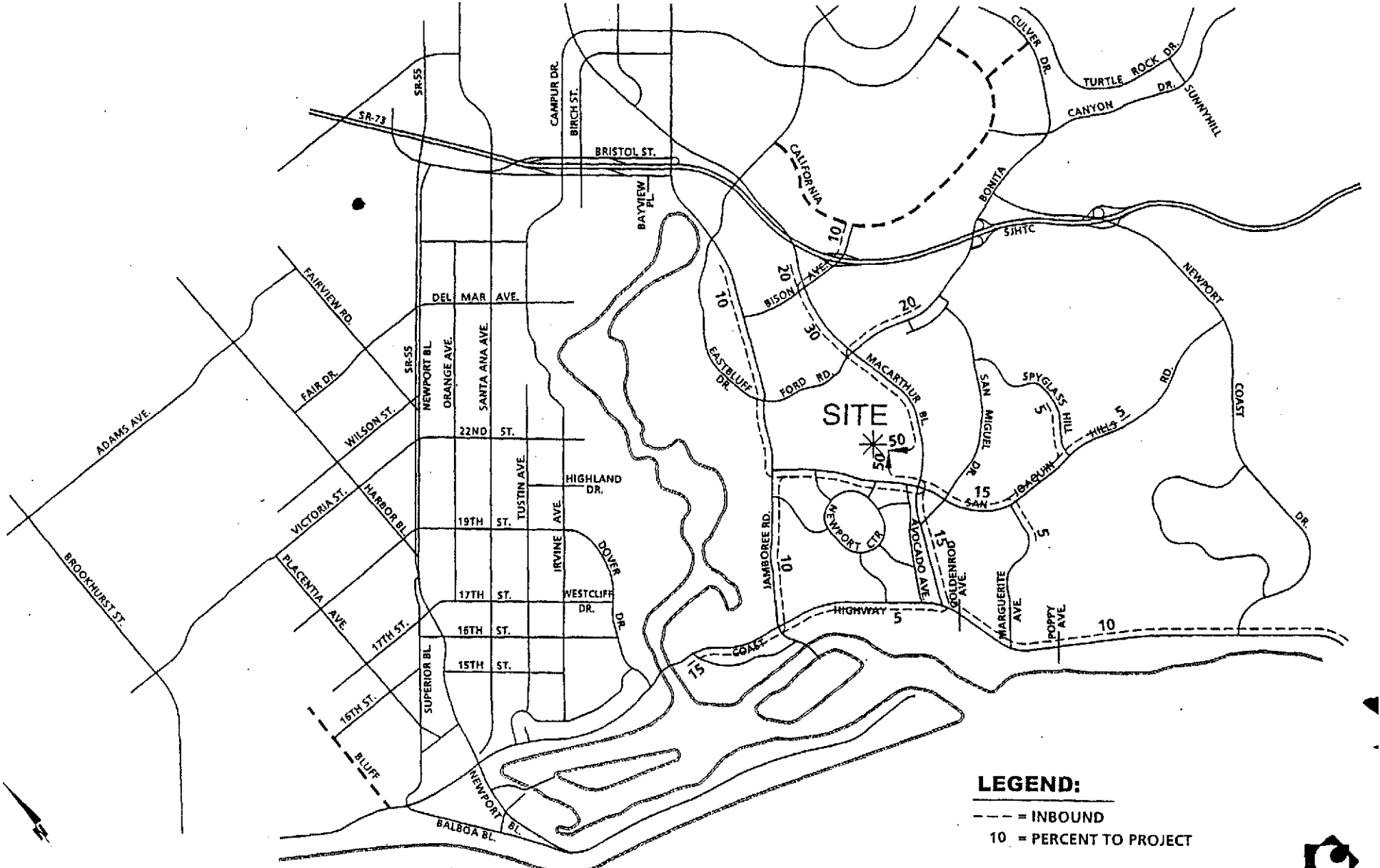
[1] TSF = Thousand Square Feet

[2] N/A = Not Available

U:\UcJobs\00636\Excel\[00636-02.xls]T 5-2

EXHIBIT 5-A

# SAINT MARK PRESBYTERIAN CHURCH
# INBOUND TRIP DISTRIBUTION



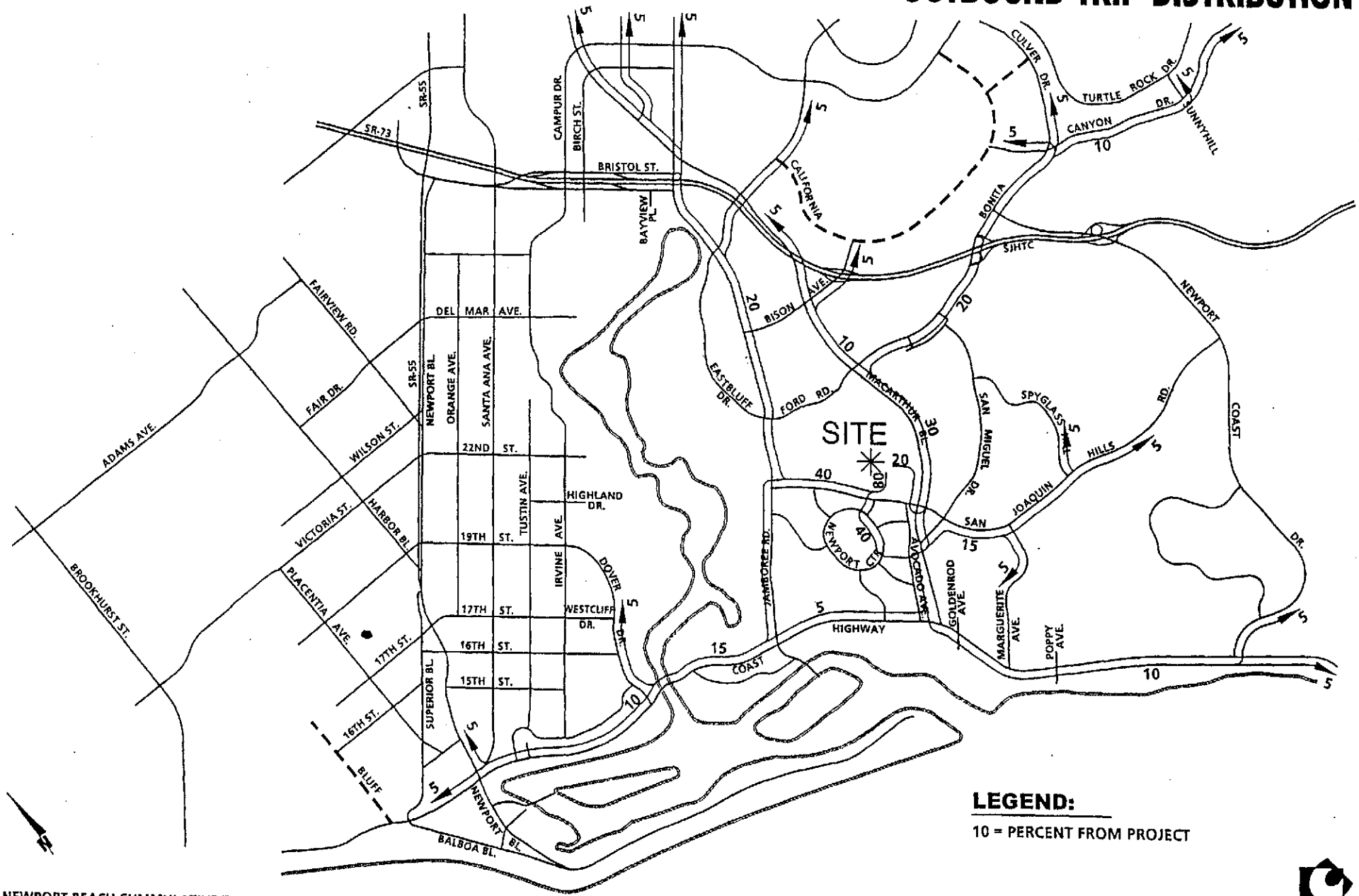

**LEGEND:**

- - - = INBOUND

10 = PERCENT TO PROJECT

EXHIBIT 5-B

# SAINT MARK PRESBYTERIAN CHURCH
# OUTBOUND TRIP DISTRIBUTION




NEWPORT BEACH CUMMULATIVE TRAFFIC ANALYSIS, Newport Beach, California - 00636:03

URBAN CROSSROADS

## TABLE 6-1

## TRIP GENERATION RATES[1]

| LAND USE | UNITS[2] | PEAK HOUR | | | | DAILY |
|---|---|---|---|---|---|---|
| | | AM | | PM | | |
| | | IN | OUT | IN | OUT | |
| Church | TSF | 0.08 | 0.03 | 0.34 | 0.30 | N/A[3] |
| Classrooms | STU | 0.18 | 0.12 | NOM[4] | NOM | 1.09 |

[1] Source: City of Newport Beach Trip Generation Rates

[2] TSF = Thousand Square Feet ; STU = Students

[3] N/A = Not Available

[4] NOM = Nominal

U:\UcJobs\00636\Excel\[00636-02.xls]T 6-1

**TABLE 6-2**

**PROJECT TRIP GENERATION**

| LAND USE | UNITS[1] | PEAK HOUR | | | | DAILY |
|---|---|---|---|---|---|---|
| | | AM | | PM | | |
| | | IN | OUT | IN | OUT | |
| Church | TSF | 2 | 1 | 6 | 6 | N/A[2] |
| Classrooms | STU | 45 | 30 | 0 | 0 | 273 |
| Total | | 47 | 31 | 6 | 6 | N/A |

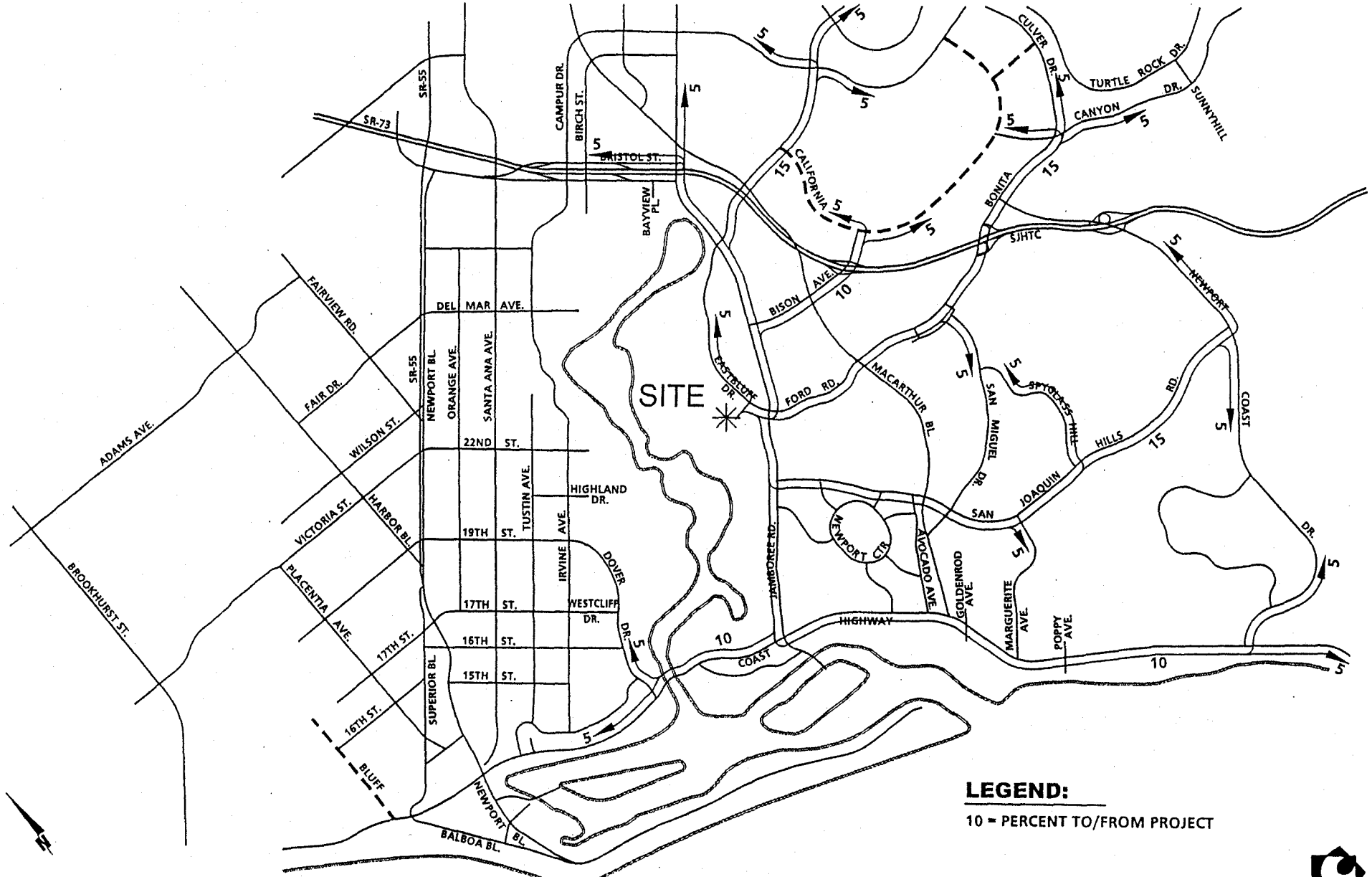
[1] TSF = Thousand Square Feet ; STU = Students

[2] N/A = Not Available

U:\UcJobs\00636\Excel\[00636-02.xls]T 6-2

EXHIBIT 6-A

# OUR LADY QUEEN OF ANGELS
# TRIP DISTRIBUTION




**LEGEND:**

10 = PERCENT TO/FROM PROJECT





URBAN CROSSROADS

## TABLE 7-1

## TRIP GENERATION RATES[1]

| LAND USE | UNITS[2] | PEAK HOUR | | | | DAILY |
|---|---|---|---|---|---|---|
| | | AM | | PM | | |
| | | IN | OUT | IN | OUT | |
| Church | TSF | 0.08 | 0.03 | 0.34 | 0.30 | N/A[3] |

---

[1] Source: City of Newport Beach Trip Generation Rates

[2] TSF = Thousand Square Feet

[3] N/A = Not Available

U:\UcJobs\00636\Excel\[00636-02.xls]T 7-1

## TABLE 7-2

## PROJECT TRIP GENERATION

| LAND USE | UNITS[1] | PEAK HOUR | | | | DAILY |
|---|---|---|---|---|---|---|
| | | AM | | PM | | |
| | | IN | OUT | IN | OUT | |
| Church | TSF | 3 | 1 | 11 | 10 | N/A[2] |

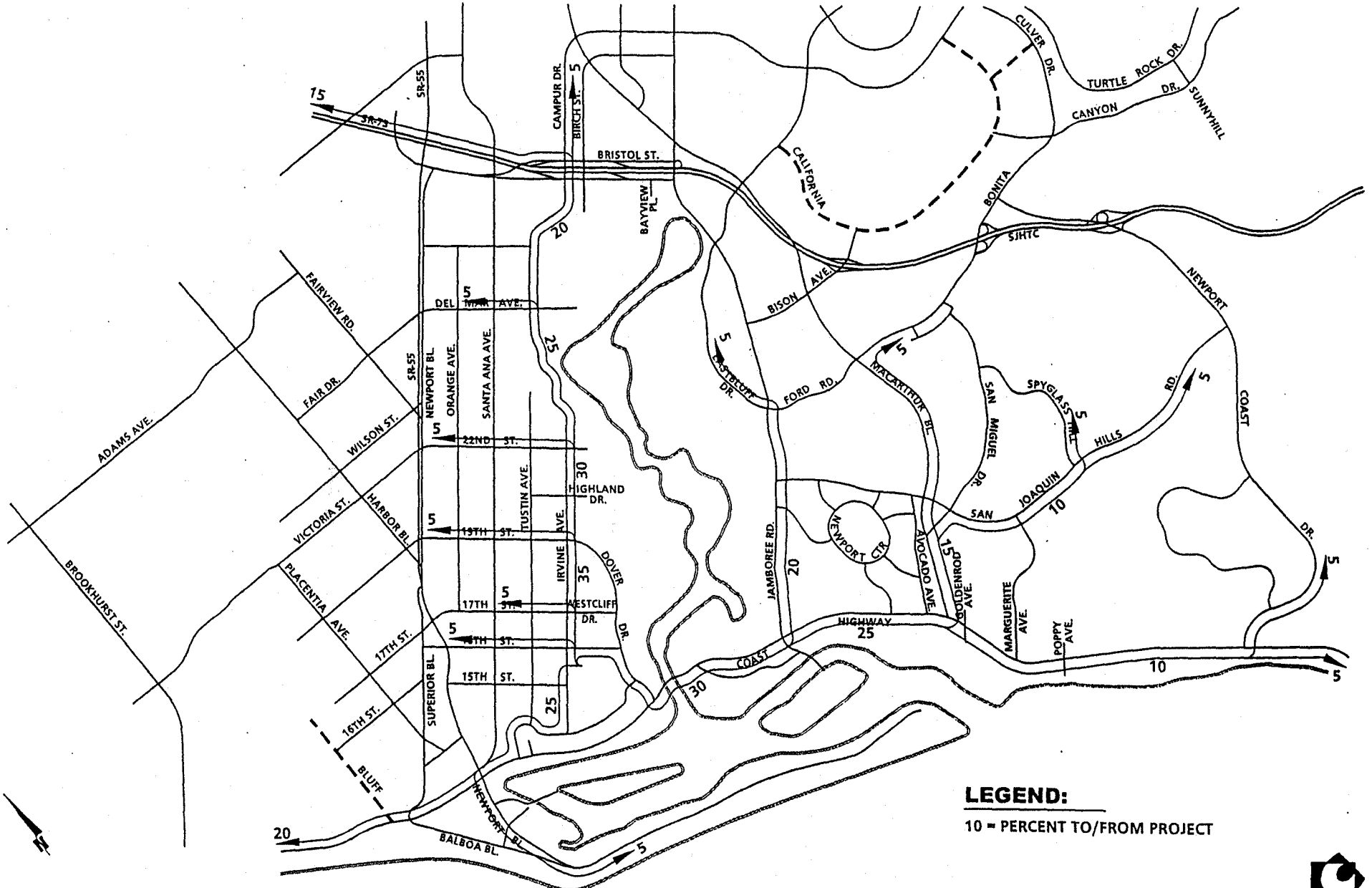
[1] TSF = Thousand Square Feet

[2] N/A = Not Available

U:\UcJobs\00636\Excel\[00636-02.xls]T 7-2

EXHIBIT 7-A

# ST. ANDREWS CHURCH
# TRIP DISTRIBUTION




**LEGEND:**

10 = PERCENT TO/FROM PROJECT

NEWPORT BEACH CUMMULATIVE TRAFFIC ANALYSIS, Newport Beach, California - 00636:23

URBAN CROSSROADS

## TABLE 10-1

## PERSON TRIP GENERATION RATES[1]

| LAND USE | UNITS[2] | PEAK HOUR | | | | DAILY |
|---|---|---|---|---|---|---|
| | | AM | | PM | | |
| | | IN | OUT | IN | OUT | |
| Health Club | TSF | 1.25 | 0.85 | 2.93 | 1.93 | 54.14 |
| Church, Synagogue | TSF | 0.63 | 0.38 | 0.55 | 0.46 | 13.09 |

[1] Source: City of Irvine Mariners Church Master Plan, Austin-Foust Associates, Inc.

[2] TSF = Thousand Square Feet

U:\UcJobs\00636\Excel\[00636-02.xls]T 10-1

TABLE 10-2

PROJECT TRIP GENERATION

| LAND USE | QUANTITY | UNITS[1] | PEAK HOUR | | | | DAILY |
|---|---|---|---|---|---|---|---|
| | | | AM | | PM | | |
| | | | IN | OUT | IN | OUT | |
| Person Trip Generation | | | | | | | |
| Health Club | 35.0 | TSF | 44 | 30 | 103 | 68 | 1,895 |
| Church, Synagogue | 328.25 | TSF | 207 | 125 | 181 | 151 | 4,297 |
| Total Person Trip Generation | | | 251 | 155 | 284 | 219 | 6,192 |
| Total Vehicle Trip Generation[2] | | | 157 | 95 | 182 | 137 | 4,505 |

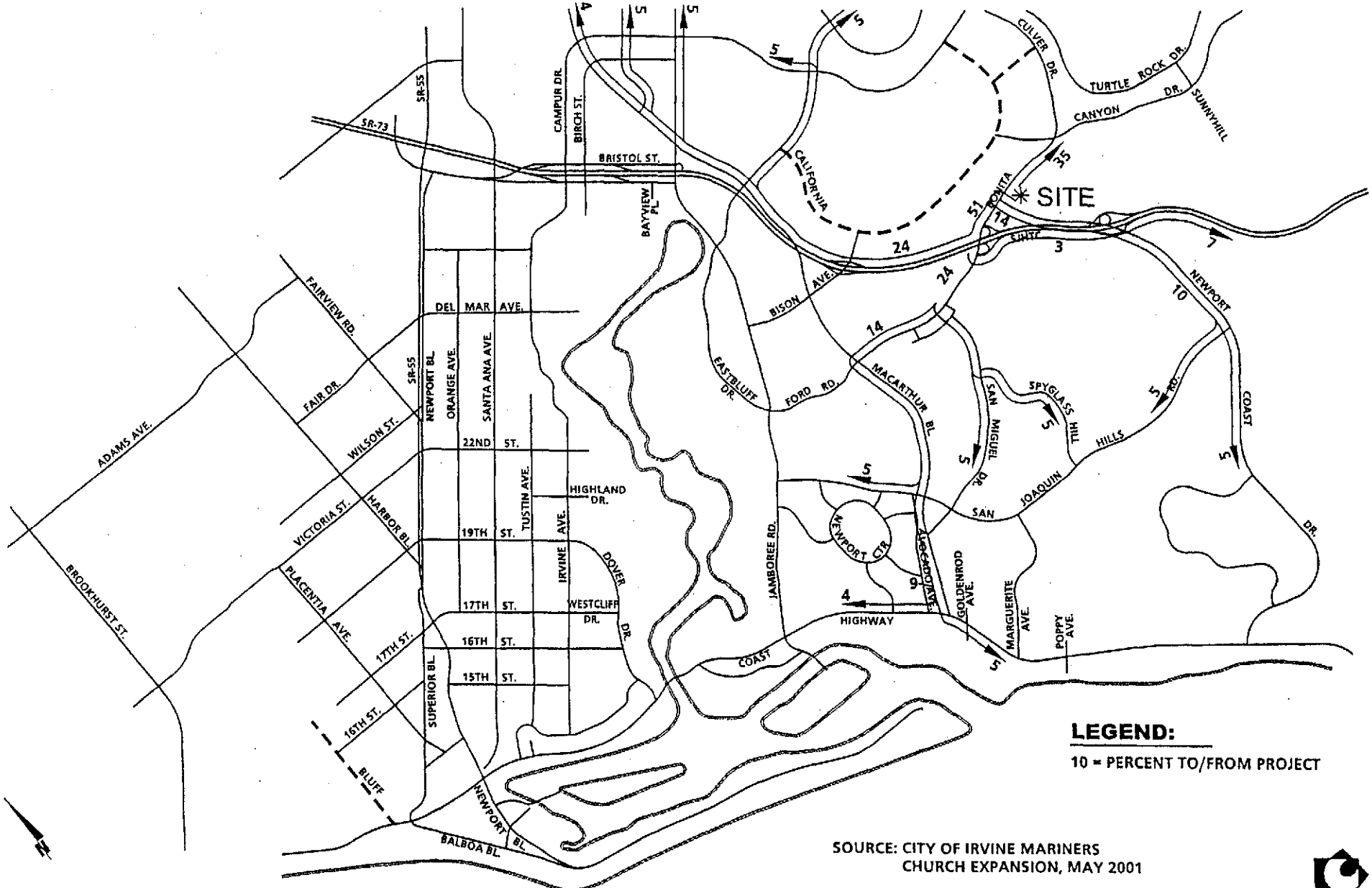
[1] TSF = Thousand Square Feet

[2] Derived during traffic model mode choice process

U:\UcJobs\00636\Excel\[00636-02.xls]T 10-2

EXHIBIT 10-A

# MARINERS CHURCH TRIP DISTRIBUTION




SOURCE: CITY OF IRVINE MARINERS CHURCH EXPANSION, MAY 2001





URBAN CROSSROADS

**TABLE 11-1**

**PERSON TRIP GENERATION RATES[1]**

| LAND USE | UNITS[2] | PEAK HOUR | | | | DAILY |
|---|---|---|---|---|---|---|
| | | AM | | PM | | |
| | | IN | OUT | IN | OUT | |
| **ITAM Person Trip Rates** | | | | | | |
| Health Club | TSF | 1.25 | 0.85 | 2.93 | 1.93 | 54.14 |
| Church, Synagogue | TSF | 0.63 | 0.38 | 0.55 | 0.46 | 13.09 |
| High School | STU | 0.37 | 0.18 | 0.03 | 0.08 | 1.94 |
| Elementary, Middle School | STU | 0.24 | 0.17 | 0.03 | 0.07 | 1.54 |
| Child Care Center | TSF | 9.53 | 9.14 | 6.13 | 13.25 | 99.99 |

[1] Source: City of Irvine Exodus Community Center and Tarbut V'Torah Expansion Traffic Study
Austin-Foust Associates, Inc.

[2] STU = Students
TSF = Thousand Square Feet

U:\UcJobs\00636\Excel\[00636-02.xls]T 11-1

**TABLE 11-2**

**PROJECT TRIP GENERATION**

| LAND USE | QUANTITY | UNITS[1] | PEAK HOUR | | | | DAILY |
|---|---|---|---|---|---|---|---|
| | | | AM | | PM | | |
| | | | IN | OUT | IN | OUT | |
| **Person Trips** | | | | | | | |
| Health Club | 48.73 | TSF | 61 | 41 | 143 | 94 | 2638 |
| Church, Synagogue | 83.49 | TSF | 53 | 32 | 46 | 38 | 1093 |
| High School | 320 | STU | 118 | 58 | 10 | 26 | 621 |
| Elementary, Middle School | 160 | STU | 38 | 27 | 5 | 11 | 246 |
| Child Care Center | 27.78 | TSF | 265 | 254 | 170 | 368 | 2778 |
| TOTAL PERSON TRIP GENERATION | | | 535 | 412 | 374 | 537 | 7376 |
| TOTAL VEHICLE TRIP GENERATION [2] | | | 331 | 253 | 240 | 333 | 5365 |

[1] STU = Students
TSF = Thousand Square Feet

[2] Derived during traffic model mode choice process

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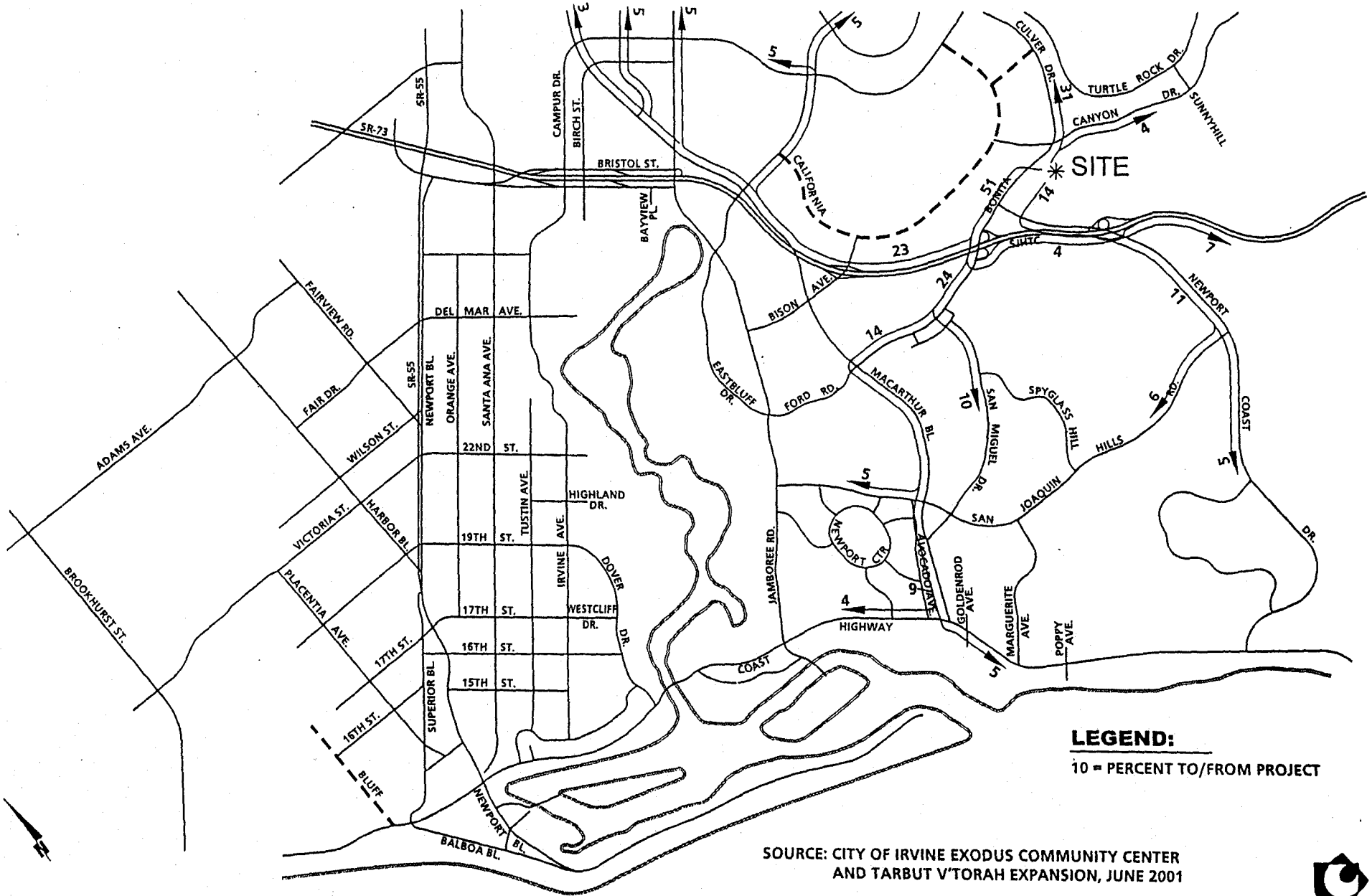
EXHIBIT 11-A

# EXODUS COMMUNITY CENTER AND TARBUT V'TORAH EXPANSION TRIP DISTRIBUTION




SOURCE: CITY OF IRVINE EXODUS COMMUNITY CENTER AND TARBUT V'TORAH EXPANSION, JUNE 2001





URBAN CROSSROADS

TABLE 12-1

TRIP GENERATION RATES[1]

| LAND USE | UNITS[2] | PEAK HOUR | | | | DAILY |
|---|---|---|---|---|---|---|
| | | AM | | PM | | |
| | | IN | OUT | IN | OUT | |
| Condominium/Townhouse | DU | 0.17 | 0.49 | 0.47 | 0.36 | 8.10 |
| Multi Family Dwelling | DU | ~~0.90~~ | 0.42 | 0.43 | 0.20 | 6.47 |
| Single Family Detached Residential | DU | 0.20 | 0.70 | 0.70 | 0.40 | 11.00 |
| State Park (gross acres) | AC | 0.21 | 0.90 | 0.29 | 0.31 | 19.15 |

0.09

[1] Source: City of Newport Beach Trip Generation Rates

[2] DU = Dwelling Units
AC = Acres

U:\UcJobs\00636\Excel\[00636-02.xls]T 12-1

TABLE 12-2

PROJECT TRIP GENERATION

| TAZ | PLANNING AREA | LAND USE | QUANTITY | UNITS[1] | PEAK HOUR AM IN | PEAK HOUR AM OUT | PEAK HOUR PM IN | PEAK HOUR PM OUT | DAILY |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1A | Condominium/Townhouse | 121 | DU | 21 | 59 | 57 | 44 | 980 |
| | 1B | Single Family Detached Residential | 36 | DU | 7 | 25 | 25 | 14 | 396 |
| | 1C | Condominium/Townhouse | 888 | DU | 151 | 435 | 417 | 320 | 7,193 |
| | 2A | Single Family Detached Residential | 206 | DU | 41 | 144 | 144 | 82 | 2,266 |
| | 13C | Multi Family Dwelling | 116 | DU | 104 | 49 | 50 | 23 | 751 |
| | 13D | Multi Family Dwelling | 116 | DU | 104 | 49 | 50 | 23 | 751 |
| | 13E | Multi Family Dwelling | 116 | DU | 104 | 49 | 50 | 23 | 751 |
| TOTAL FOR TAZ 1 | | | | | 532 | 810 | 793 | 529 | 13,088 |
| 2 | 3A | Single Family Detached Residential | 347 | DU | 69 | 243 | 243 | 139 | 3,817 |
| | 3B | Single Family Detached Residential | 450 | DU | 90 | 315 | 315 | 180 | 4,950 |
| | 4B | Single Family Detached Residential | 587 | DU | 117 | 411 | 411 | 235 | 6,457 |
| | 13A | Multi Family Dwelling | 117 | DU | 105 | 49 | 50 | 23 | 757 |
| | 13B | Multi Family Dwelling | 117 | DU | 105 | 49 | 50 | 23 | 757 |
| | 14 | Single Family Detached Residential | 26 | DU | 5 | 18 | 18 | 10 | 286 |
| | 17 | State Park (gross acres) | 2,807 | AC | 589 | 2,526 | 814 | 870 | 53,754 |
| TOTAL FOR TAZ 2 | | | | | 1,080 | 3,611 | 1,901 | 1,480 | 70,778 |
| 3 | 2B | Single Family Detached Residential | 62 | DU | 12 | 43 | 43 | 25 | 682 |
| | 4A | Single Family Detached Residential | 784 | DU | 157 | 549 | 549 | 314 | 8,624 |
| TOTAL FOR TAZ 3 | | | | | 169 | 592 | 592 | 339 | 9,306 |
| 4 | 2C | Single Family Detached Residential | 307 | DU | 61 | 215 | 215 | 123 | 3,377 |
| | 5 | Single Family Detached Residential | 300 | DU | 60 | 210 | 210 | 120 | 3,300 |
| | 6 | Single Family Detached Residential | 75 | DU | 15 | 53 | 53 | 30 | 825 |
| | 8 | Condominium/Townhouse | 289 | DU | 49 | 142 | 136 | 104 | 2,341 |
| TOTAL FOR TAZ 4 | | | | | 185 | 620 | 614 | 377 | 9,843 |
| TOTAL FOR ALL ZONES | | | | | 1,966 | 5,633 | 3,900 | 2,725 | 103,015 |

5060

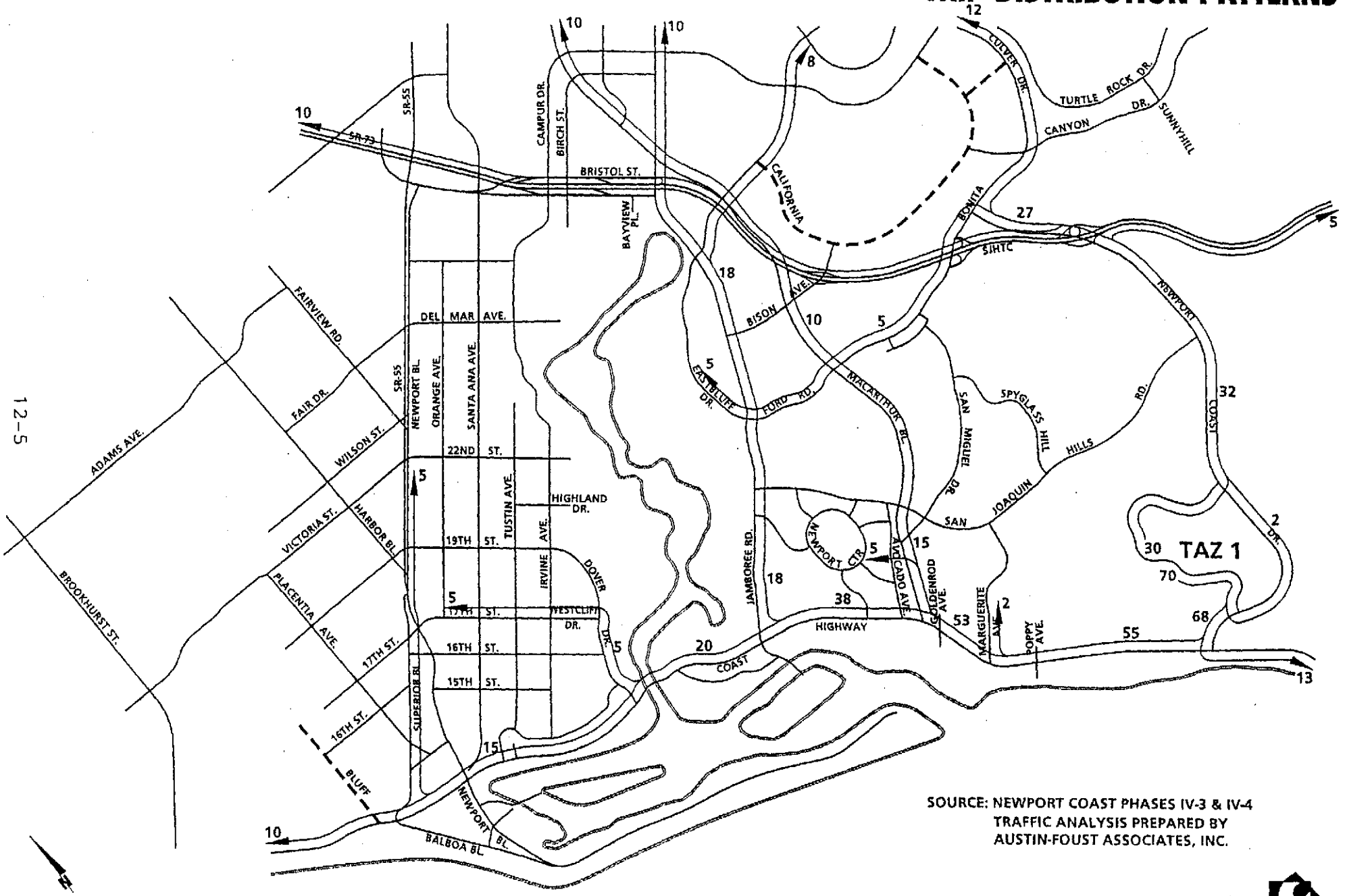
RECALCULATE USING REVISED MULTI-FAMILY RATE

* ASSUME 70% OF DU'S ARE OCCUPIED.
& REMOVE STATE PARK

[1] DU = Dwelling Units
AC = Acres

U:\UcJobs\00636\Excel\[00636-02.xls]T 12-2

# NEWPORT COAST TRAFFIC ANALYSIS ZONE 1
# TRIP DISTRIBUTION PATTERNS




SOURCE: NEWPORT COAST PHASES IV-3 & IV-4
TRAFFIC ANALYSIS PREPARED BY
AUSTIN-FOUST ASSOCIATES, INC.

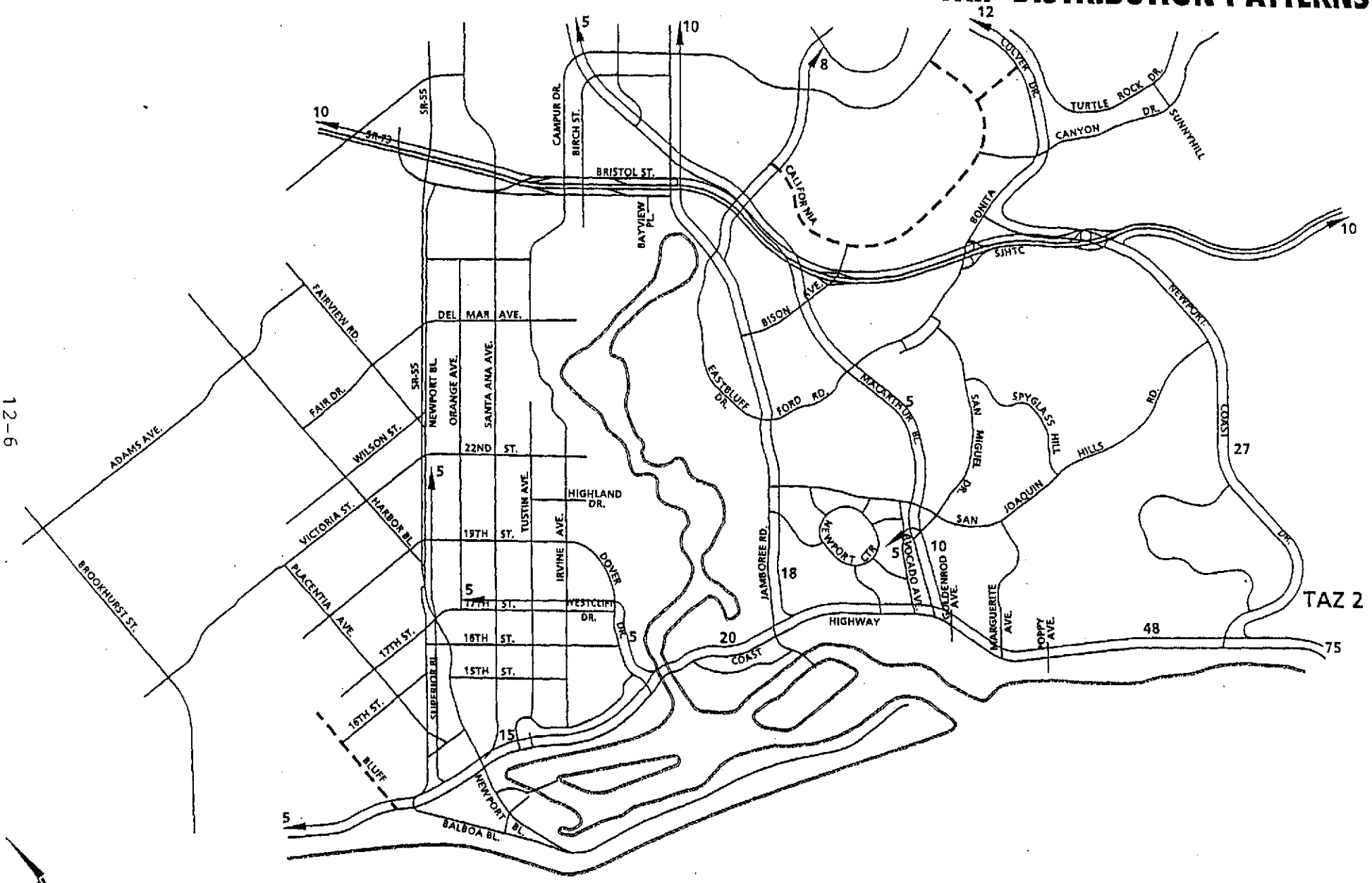
12-5



URBAN CROSSROADS

EXHIBI 12-B

# NEWPORT COAST TRAFFIC ANALYSIS ZONE 2
# TRIP DISTRIBUTION PATTERNS



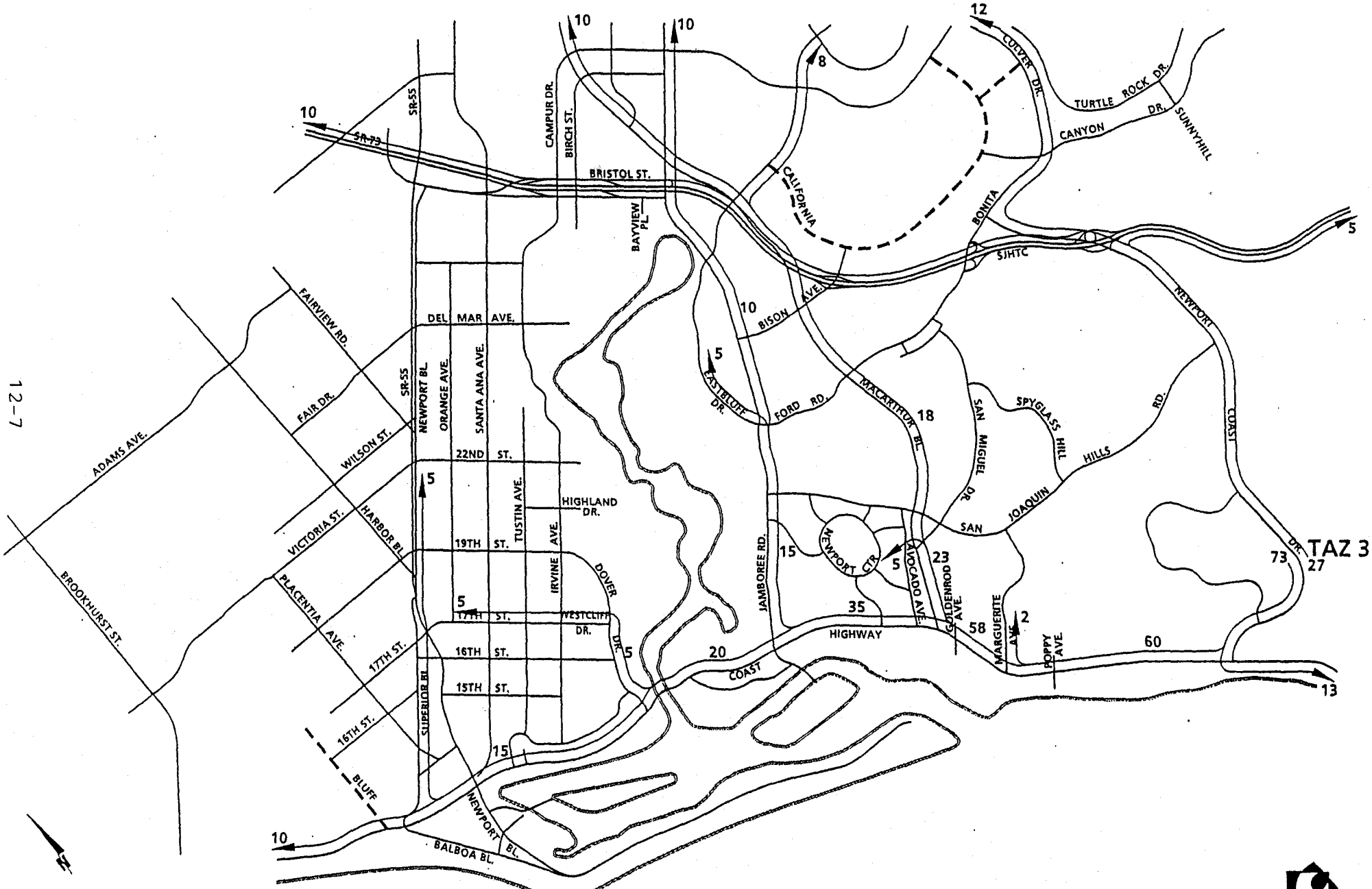

12-6



URBAN CROSSROADS

EXHIBIT 12-C

# NEWPORT COAST TRAFFIC ANALYSIS ZONE 3
# TRIP DISTRIBUTION PATTERNS



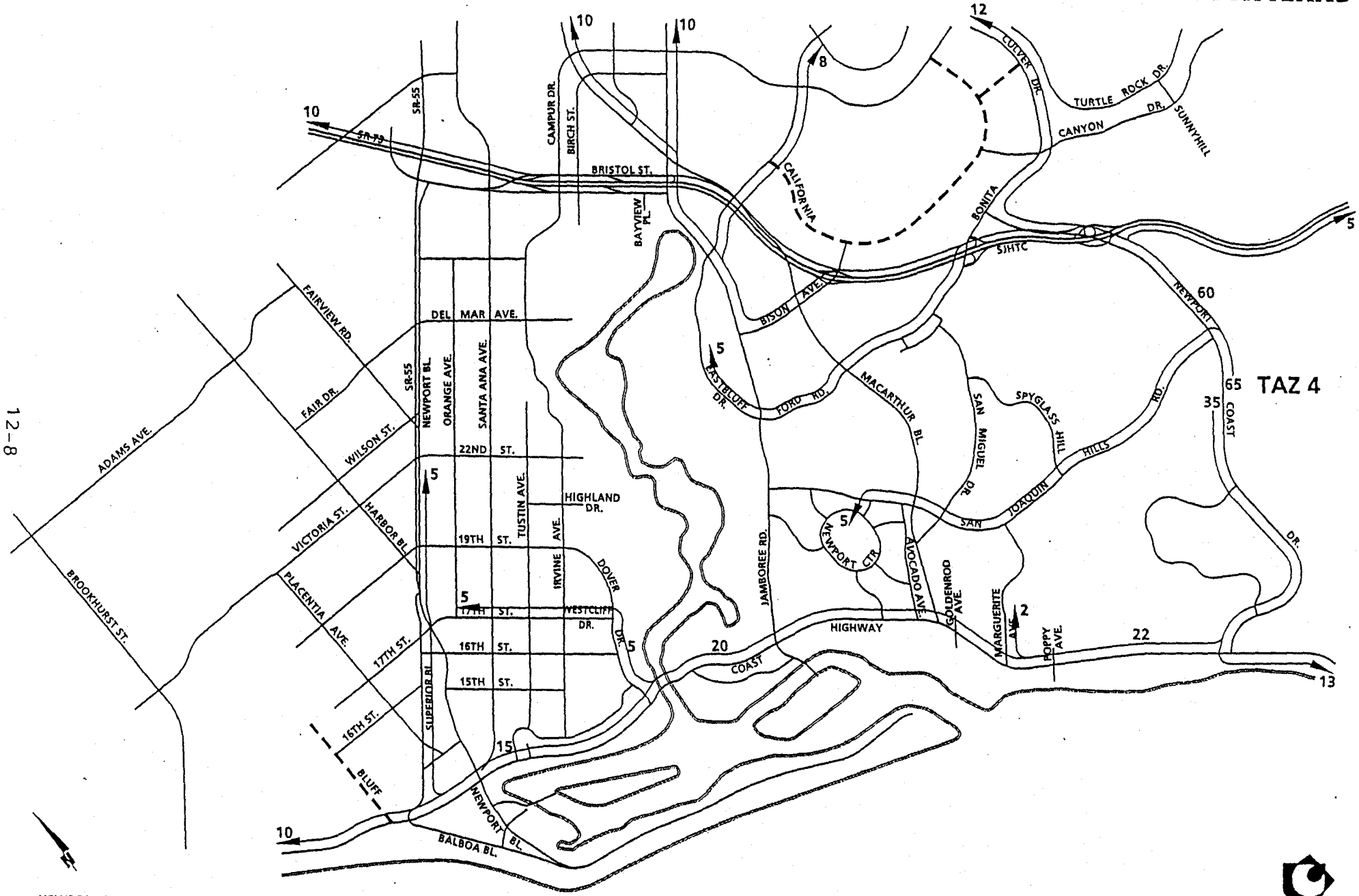



NEWPORT BEACH CUMULATIVE TRAFFIC ANALYSIS, Newport Beach, California - 00636:11

URBAN CROSSROADS

EXHIBIT 12-D

# NEWPORT COAST TRAFFIC ANALYSIS ZONE 4
# TRIP DISTRIBUTION PATTERNS








URBAN CROSSROADS

TABLE 13-1

TRIP GENERATION RATES[1]

| LAND USE | UNITS[2] | PEAK HOUR | | | | DAILY |
|---|---|---|---|---|---|---|
| | | AM | | PM | | |
| | | IN | OUT | IN | OUT | |
| Multi Family Dwelling | DU | ~~0.90~~ 0.09 | 0.42 | 0.43 | 0.20 | 6.47 |
| Single Family Detached Residential | DU | 0.20 | 0.70 | 0.70 | 0.40 | 11.00 |
| Commercial | TSF | 0.60 | 0.50 | 1.90 | 2.00 | 45.00 |

[1] Source: City of Newport Beach Trip Generation Rates

[2] DU = Dwelling Units
TSF = Thousand Square Feet

U:\UcJobs\00636\Excel\[00636-02.xls]T 13-1

TABLE 13-2

PROJECT TRIP GENERATION

| TAZ | PLANNING AREA | LAND USE | QUANTITY | UNITS[1] | PEAK HOUR AM IN | PEAK HOUR AM OUT | PEAK HOUR PM IN | PEAK HOUR PM OUT | DAILY |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1A | Single Family Detached Residential | 93 | DU | 19 | 65 | 65 | 37 | 1,023 |
| | 2 | Single Family Detached Residential | 147 | DU | 29 | 103 | 103 | 59 | 1,617 |
| | 3 | Single Family Detached Residential | 138 | DU | 28 | 97 | 97 | 55 | 1,518 |
| | 4 | Single Family Detached Residential | 125 | DU | 25 | 88 | 88 | 50 | 1,375 |
| | 5 | Multi Family Dwelling | 100 | DU | 90 | 42 | 43 | 20 | 647 |
| | 7 | Multi Family Dwelling | 63 | DU | 57 | 26 | 27 | 13 | 408 |
| | 8 | Multi Family Dwelling | 112 | DU | 101 | 47 | 48 | 22 | 725 |
| | 9 | Multi Family Dwelling | 112 | DU | 101 | 47 | 48 | 22 | 725 |
| | 11 | Single Family Detached Residential | 323 | DU | 65 | 226 | 226 | 129 | 3,553 |
| | 12 | Commercial | 102.959 | TSF | 62 | 51 | 196 | 206 | 4,633 |
| | 12 | Single Family Detached Residential | 200 | DU | 34 | 98 | 94 | 72 | 1,620 |
| TOTAL FOR TAZ 1 | | | | | 611 | 890 | 1,035 | 685 | 17,844 |
| 2 | 21 | Single Family Detached Residential | 350 | DU | 70 | 245 | 245 | 140 | 3,850 |
| | 22 | Single Family Detached Residential | 705 | DU | 141 | 494 | 494 | 282 | 7,755 |
| TOTAL FOR TAZ 2 | | | | | 211 | 739 | 739 | 422 | 11,605 |
| 3 | 13 | Multi Family Dwelling | 347 | DU | 312 | 146 | 149 | 69 | 2,245 |
| | 14 | Single Family Detached Residential | 26 | DU | 5 | 18 | 18 | 10 | 286 |
| | 15 | Multi Family Dwelling | 547 | DU | 492 | 230 | 235 | 109 | 3,539 |
| TOTAL FOR TAZ 3 | | | | | 809 | 394 | 402 | 188 | 6,070 |
| TOTAL FOR ALL ZONES | | | | | 1,631 | 2,023 | 2,176 | 1,295 | 35,519 |

3,708

REVISE USING REVISED MULTI-FAMILY RATE

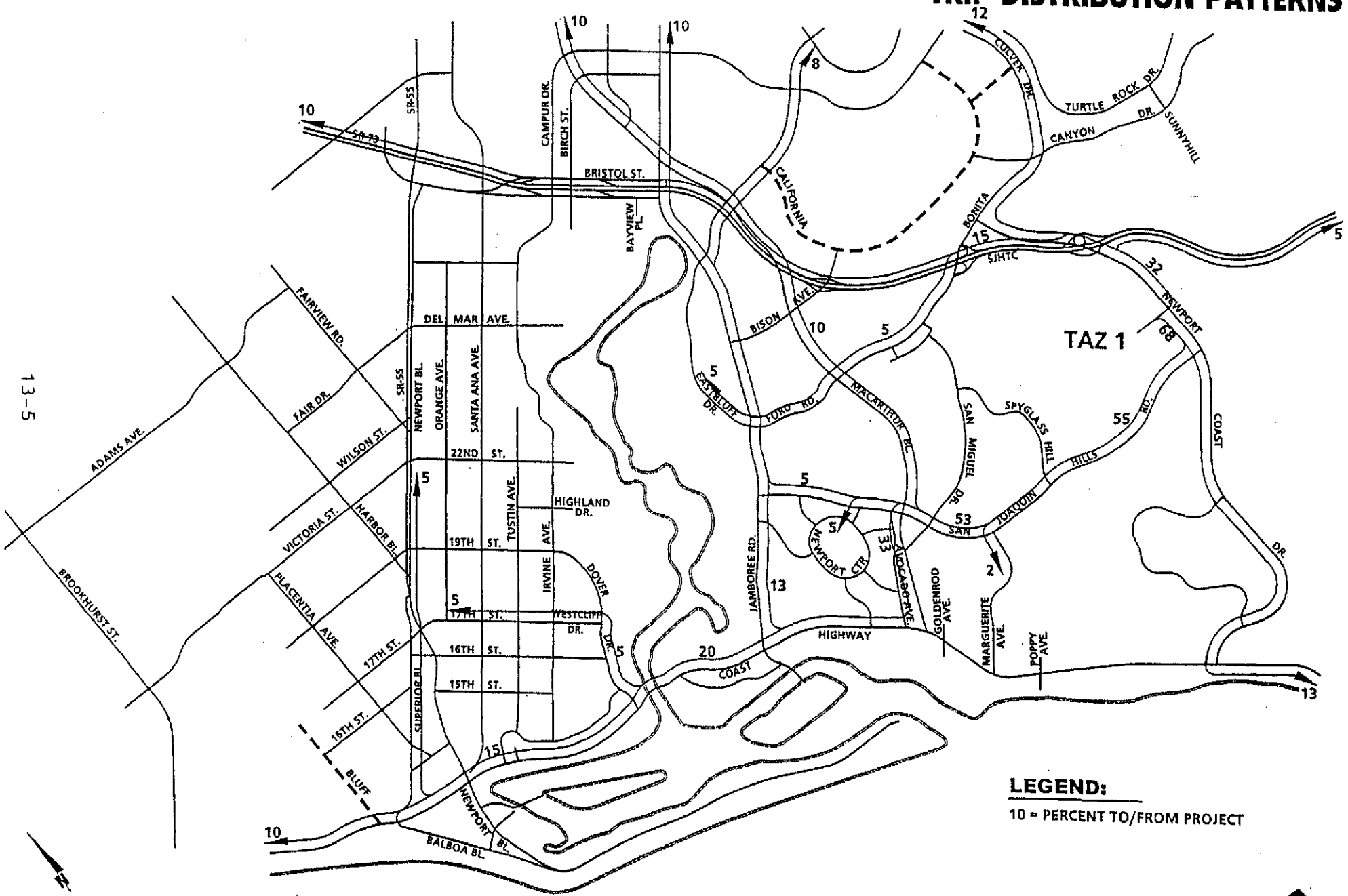
* ASSUME 70% OF DU'S ARE OCCUPIED.

[1] DU = Dwelling Units
TSF = Thousand Square Feet

U:\UcJobs\00636\Excel\[00636-02.xls]T 13-2

EXHIBIT 13-A

# NEWPORT RIDGE TRAFFIC ANALYSIS ZONE 1
# TRIP DISTRIBUTION PATTERNS



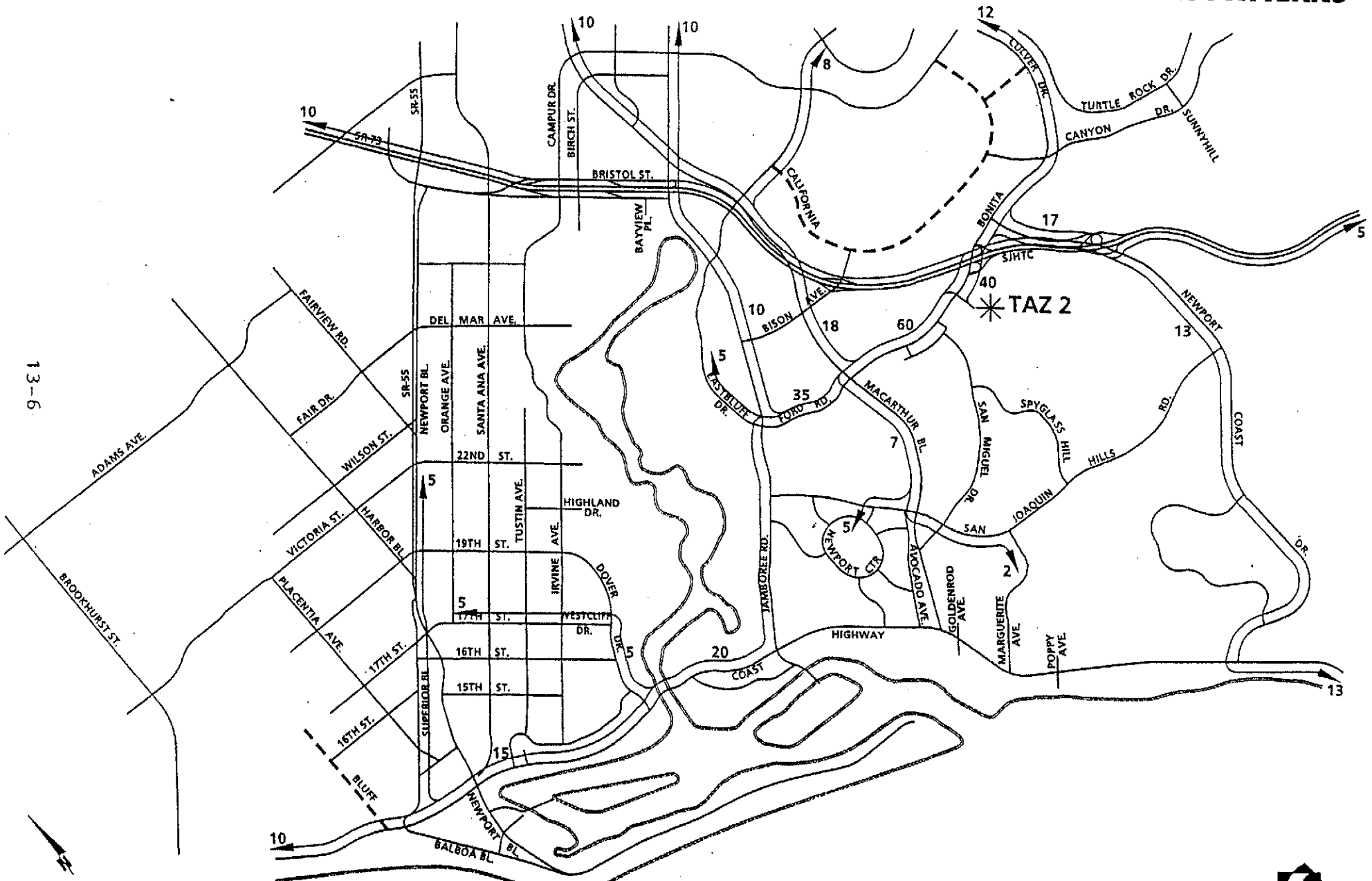

13-5



URBAN

EXHIBIT 13-B

# NEWPORT RIDGE TRAFFIC ANALYSIS ZONE 2
# TRIP DISTRIBUTION PATTERNS

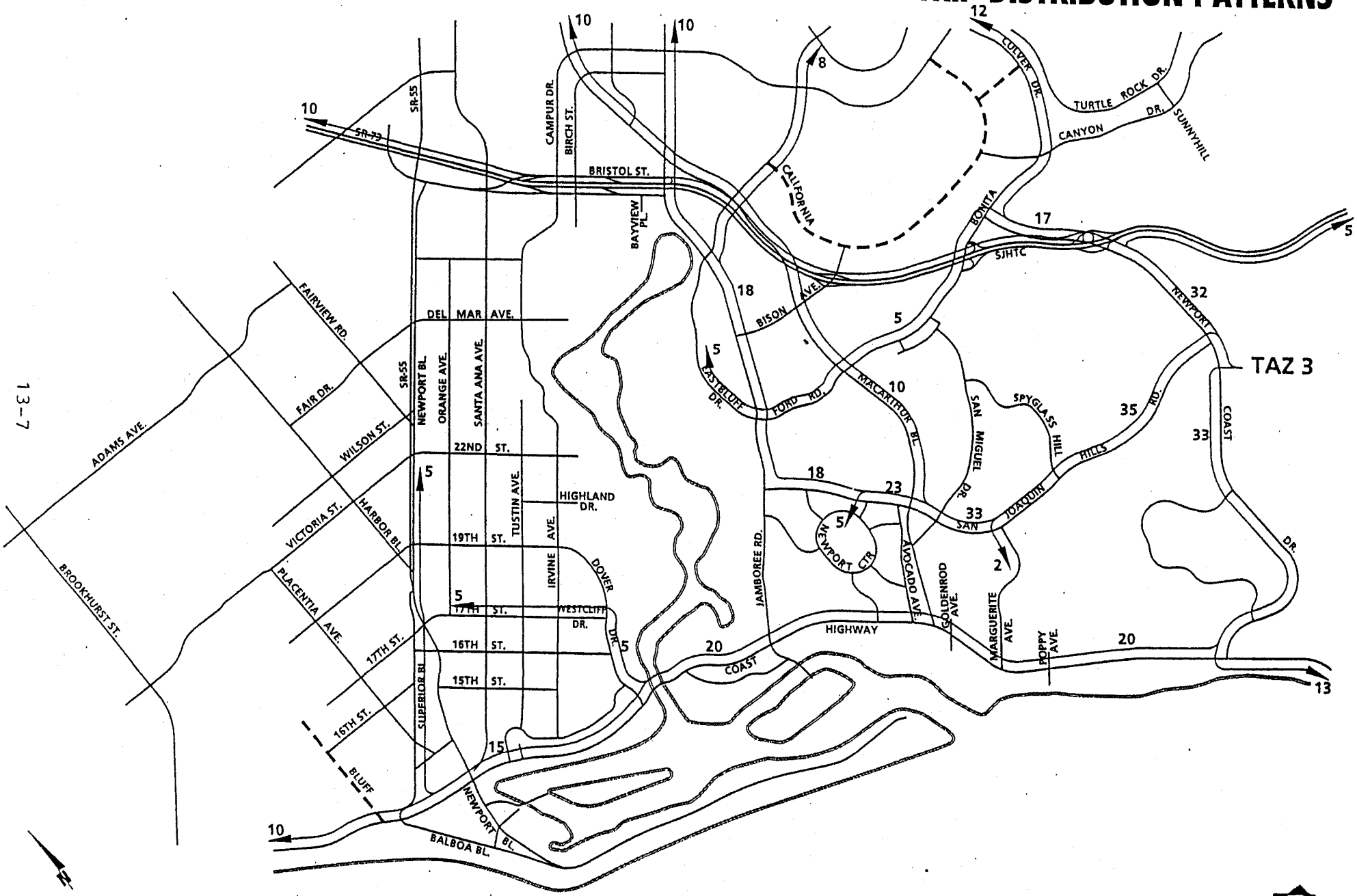



13-6

NEWPORT BEACH CUMULATIVE TRAFFIC ANALYSIS, Newport Beach, California - 00636:16

URBAN CROSSROADS

# NEWPORT RIDGE TRAFFIC ANALYSIS ZONE 3
# TRIP DISTRIBUTION PATTERNS






URBAN CROSSROADS

## TABLE 16-1

## TRIP GENERATION RATES[1]

| LAND USE | UNITS[2] | PEAK HOUR | | | | DAILY |
|---|---|---|---|---|---|---|
| | | AM | | PM | | |
| | | IN | OUT | IN | OUT | |
| Apartments | DU | 0.09 | 0.42 | 0.43 | 0.20 | 6.47 |

[1] Source: City of Newport Beach Trip Generation Rates

[2] DU = Dwelling Units

U:\UcJobs\00636\Excel\[00636-02.xls]T 16-1

## TABLE 16-2

## PROJECT TRIP GENERATION

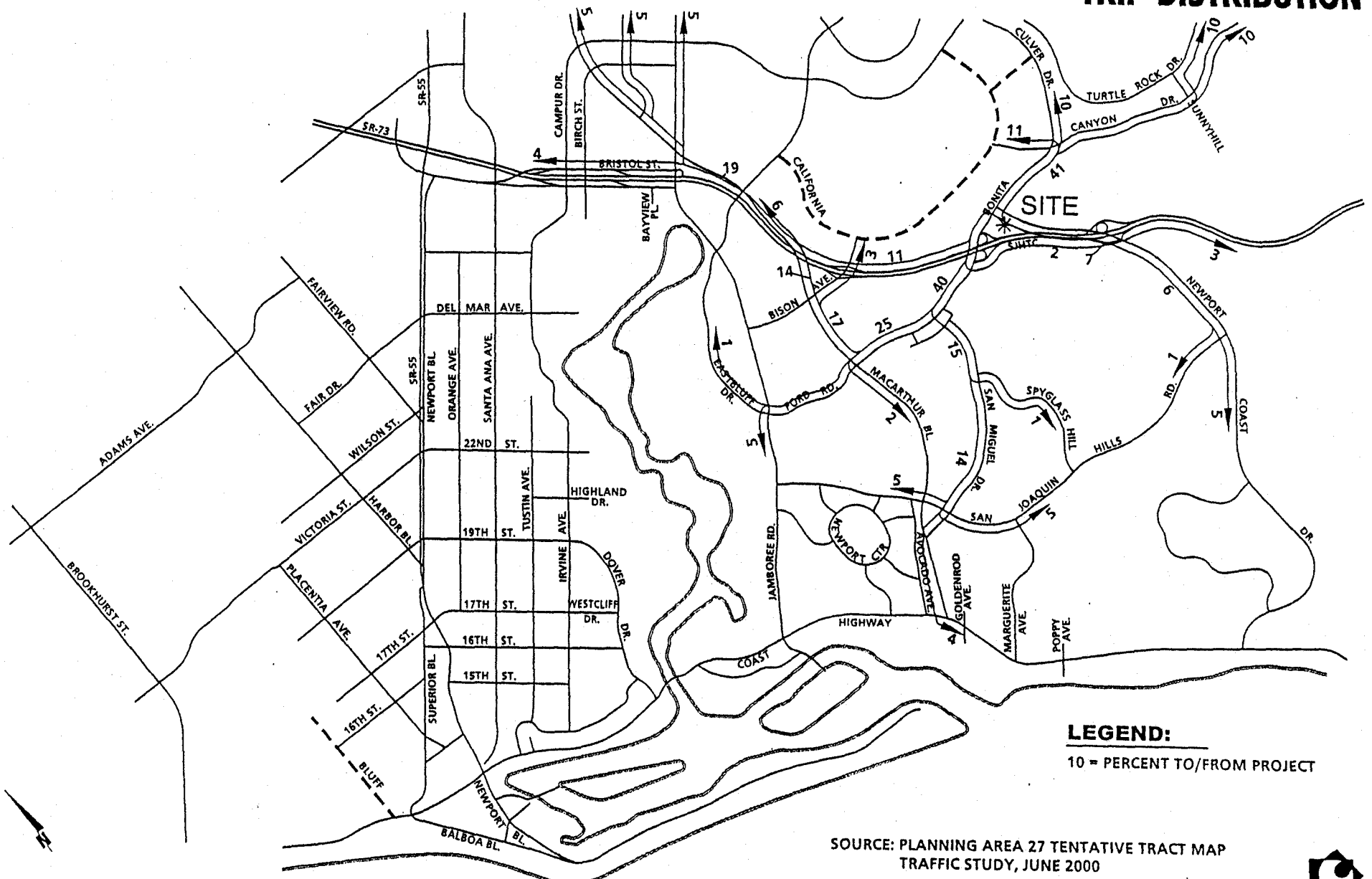
| LAND USE | UNITS[2] | PEAK HOUR | | | | DAILY |
|---|---|---|---|---|---|---|
| | | AM | | PM | | |
| | | IN | OUT | IN | OUT | |
| Apartments | DU | 39 | 183 | 187 | 87 | 2821 |

[2] DU = Dwelling Units

U:\UcJobs\00636\Excel\[00636-02.xls]T 16-2

EXHIBIT 16-A

# BONITA CANYON - RESIDENTIAL TRIP DISTRIBUTION




**LEGEND:**

10 = PERCENT TO/FROM PROJECT

SOURCE: PLANNING AREA 27 TENTATIVE TRACT MAP TRAFFIC STUDY, JUNE 2000





URBAN CROSSROADS

# APPENDIX F

## Explanation and Calculation of Intersection Capacity Utilization (ICU)

## EXPLANATION AND CALCULATION OF INTERSECTION CAPACITY UTILIZATION (ICU)

### Overview

The ability of a roadway to carry traffic is referred to as capacity. The capacity is usually greater between intersections and less at intersections because traffic flows continuously between them and only during the green phase at them. Capacity at intersections is best defined in terms of vehicles per lane per hour of green. If capacity is 1600 vehicles per lane per hour of green, and if the green phase is 50 percent of the cycle and there are three lanes, then the capacity is 1600 times 50 percent times 3 lanes, or 2400 vehicles per hour for that approach.

The technique used to compare the volume and capacity at an intersection is known as Intersection Capacity Utilization (ICU). ICU, usually expressed as a decimal, is the proportion of an hour required to provide sufficient capacity to accommodate all intersection traffic if all approaches operate at capacity. If an intersection is operating at 80 percent of capacity (i.e., an ICU of 80 percent), then 20 percent of the signal cycle is not used. The signal could show red on all indications 20 percent of the time and the signal would just accommodate approaching traffic.

ICU analysis consists of (a) determining the proportion of signal time needed to serve each conflicting movement of traffic, (b) summing the times for the movements, and (c) comparing the total time required to the total time available. For example, if for north-south traffic the northbound traffic is 1600 vehicles per hour, the southbound traffic is 1200 vehicles per hour, and the capacity of either direction is 3200 vehicles per hour, then the northbound traffic is critical and requires 1600/3200 or 50 percent of the signal time. If for east-west traffic, 30 percent of the signal time is required, then it can be seen that the ICU is 50 plus 30, or 80 percent. When left turn arrows (left turn phasing) exist, they are incorporated into the analysis. The critical movements are usually the heavy left turn movements and the opposing through movements.

The ICU technique is an ideal tool to quantify existing as well as future intersection operation. The impact of adding a lane can be quickly determined by examining the effect the lane has on the Intersection Capacity Utilization.

**ICU Worksheets That Follow This Discussion**

The ICU worksheet table contains the following information:

1. Peak hour turning movement volumes.
2. Number of lanes that serve each movement.
3. For right turn lanes, whether the lane is a free right turn lane, whether it has a right turn arrow, and the percent of right turns on red that are assumed.
4. Capacity assumed per lane.
5. Capacity available to serve each movement (number of lanes times capacity per lane).
6. Volume to capacity ratio for each movement.
7. Whether the movement's volume to capacity ratio is critical and adds to the ICU value.
8. The yellow time or clearance interval assumed.
9. Adjustments for right turn movements.
10. The ICU and LOS.

The ICU Worksheet also has two graphics on the same page. These two graphics show the following:

1. Peak hour turning movement volumes.
2. Number of lanes that serve each movement.

3. The approach and exit leg volumes.

4. The two-way leg volumes.

5. An estimate of daily traffic volumes that is fairly close to actual counts and is based strictly on the peak hour leg volumes multiplied by a factor.

6. Percent of daily traffic in peak hours.

7. Percent of peak hour leg volume that is inbound versus outbound.

A more detailed discussion of ICU and LOS follows.

**Level of Service (LOS)**

Level of Service is used to describe the quality of traffic flow. Levels of Service A to C operate quite well. Level of Service C is typically the standard to which rural roadways are designed.

Level of Service D is characterized by fairly restricted traffic flow. Level of Service D is the standard to which urban roadways are typically designed. Level of Service E is the maximum volume a facility can accommodate and will result in possible stoppages of momentary duration. Level of Service F occurs when a facility is overloaded and is characterized by stop-and-go traffic with stoppages of long duration.

A description of the various Levels of Service appears at the end of the ICU description, along with the relationship between ICU and Level of Service.

**Signalized and Unsignalized Intersections**

Although calculating an ICU value for an unsignalized intersection is invalid, the presumption is that a signal can be installed and the calculation shows whether the geometrics are capable of accommodating the expected volumes with a signal. A traffic signal becomes warranted before Level of Service D is reached for a signalized intersection.

## Signal Timing

The ICU calculation assumes that a signal is properly timed. It is possible to have an ICU well below 100 percent, yet have severe traffic congestion. This would occur if one or more movements is not getting sufficient green time to satisfy its demand, and excess green time exists on other movements. This is an operational problem that should be remedied.

## Lane Capacity

Capacity is often defined in terms of roadway width; however, standard lanes have approximately the same capacity whether they are 11 or 14 feet wide. Our data indicates a typical lane, whether a through lane or a left turn lane, has a capacity of approximately 1750 vehicles per hour of green time, with nearly all locations showing a capacity greater than 1600 vehicles per hour of green per lane. Right turn lanes have a slightly lower capacity; however 1600 vehicles per hour is a valid capacity assumption for right turn lanes.

This finding is published in the August, 1978 issue of ITE Journal in the article entitled, "Another Look at Signalized Intersection Capacity" by William Kunzman. A capacity of 1600 vehicles per hour per lane with no yellow time penalty, or 1700 vehicles per hour with a 3 or 5 percent yellow time penalty is reasonable.

## Yellow Time

The yellow time can either be assumed to be completely used and no penalty applied, or it can be assumed to be only partially usable. Total yellow time accounts for approximately 10 percent of a signal cycle, and a penalty of 3 to 5 percent is reasonable.

During peak hour traffic operation the yellow times are nearly completely used. If there is no left turn phasing, the left turn vehicles completely use the yellow time. Even if there is left turn phasing, the through traffic continues to enter the intersection on the yellow until just a split second before the red.

## Shared Lanes

Shared lanes occur in many locations. A shared lane is often found at the end of an off ramp where the ramp forms an intersection with the cross street. Often at a diamond interchange off ramp, there are three lanes. In the case of a diamond interchange, the middle lane is sometimes shared, and the driver can turn left, go through, or turn right from that lane.

If one assumes a three lane off ramp as described above, and if one assumes that each lane has 1600 capacity, and if one assumes that there are 1000 left turns per hour, 500 right turns per hour, and 100 through vehicles per hour, then how should one assume that the three lanes operate. There are three ways that it is done.

One way is to just assume that all 1600 vehicles (1000 plus 500 plus 100) are served simultaneously by three lanes. When this is done, the capacity is 3 times 1600 or 4800, and the amount of green time needed to serve the ramp is 1600 vehicles divided by 4800 capacity or 33.3 percent. This assumption effectively assumes perfect lane distribution between the three lanes that is not realistic. It also means a left turn can be made from the right lane.

Another way is to equally split the capacity of a shared lane and in this case to assume there are 1.33 left turn lanes, 1.33 right turn lanes, and 0.33 through lanes. With this assumption, the critical movement is the left turns and the 1000 left turns are served by a capacity of 1.33 times 1600, or 2133. The volume to capacity ratio of the critical move is 1000 divided by 2133 or 46.9 percent.

The first method results in a critical move of 33.3 percent and the second method results in a critical move of 46.9 percent. Neither is very accurate, and the difference in the calculated Level of Service will be approximately 1.5 Levels of Service (one Level of Service is 10 percent).

The way Kunzman Associates does it is to assign fractional lanes in a reasonable way. In this example, it would be assumed that there is 1.1 right turn lanes, 0.2 through lanes, and 1.7 left turn lanes. The volume to capacity ratios for each movement would be 31.3 percent for the through traffic, 28.4 percent for the right turn movement, and 36.8 percent for the

left turn movement. The critical movement would be the 36.8 percent for the left turns.

## Right Turn on Red

Kunzman Associates' software treats right turn lanes in one of five different ways. Each right turn lane is classified into one of five cases. The five cases are (1) free right turn lane, (2) right turn lane with separate right turn arrow, (3) standard right turn lane with no right turns on red allowed, (4) standard right turn lane with a certain percentage of right turns on red allowed, and (5) separate right turn arrow and a certain percentage of right turns on red allowed.

## Free Right Turn Lane

If it is a free right turn lane, then it is given a capacity of one full lane with continuous or 100 percent green time. A free right turn lane occurs when there is a separate approach lane for right turning vehicles, there is a separate departure lane for the right turning vehicles after they turn and are exiting the intersection, and the through cross street traffic does not interfere with the vehicles after they turn right.

## Separate Right Turn Arrow

If there is a separate right turn arrow, then it is assumed that vehicles are given a green indication and can proceed on what is known as the left turn overlap.

The left turn overlap for a northbound right turn is the westbound left turn. When the left turn overlap has a green indication, the right turn lane is also given a green arrow indication. Thus, if there is a northbound right turn arrow, then it can be turned green for the period of time that the westbound left turns are proceeding.

If there are more right turns than can be accommodated during the northbound through green and the time that the northbound right turn arrow is on, then an adjustment is made to the ICU to account for the green time that needs to be added to the northbound through green to accommodate the northbound right turns.

## Standard Right Turn Lane, No Right Turns on Red

A standard right turn lane, with no right turn on red assumed, proceeds only when there is a green indication displayed for the adjacent through movement. If additional green time is needed above that amount of time, then in the ICU calculation a right turn adjustment green time is added above the green time that is needed to serve the adjacent through movement.

## Standard Right Turn Lane, With Right Turns on Red

A standard right turn lane with say 20 percent of the right turns allowed to turn right on a red indication is calculated the same as the standard right turn case where there is no right turn on red allowed, except that the right turn adjustment is reduced to account for the 20 percent of the right turning vehicles that can logically turn right on a red light. The right turns on red are never allowed to exceed the time the overlap left turns take plus the unused part of the green cycle that the cross street traffic moving from left to right has.

As an example of how 20 percent of the cars are allowed to turn right on a red indication, assume that the northbound right turn volume needs 40 percent of the signal cycle to be satisfied. To allow 20 percent of the northbound right turns to turn right on red, then during 8 percent of the signal cycle (40 percent of signal cycle times 20 percent that can turn right on red) right turns on red will be allowed if it is feasible.

For this example, assume that 15 percent of the signal cycle is green for the northbound through traffic, and that means that 15 percent of the signal cycle is available to satisfy northbound right turns. After the northbound through traffic has received its green, 25 percent of the signal cycle is still needed to satisfy the northbound right turns (40 percent of the signal cycle minus the 15 percent of the signal cycle that the northbound through used).

Assume that the westbound left turns require a green time of 6 percent of the signal cycle. This 6 percent of the signal cycle is used by northbound right turns on red. After accounting for the northbound right turns that occur on the westbound overlap left turn, 19 percent of the signal cycle is still needed for the northbound right turns (25 percent of

the cycle was needed after the northbound through green time was accounted for [see above paragraph], and 6 percent was served during the westbound left turn overlap). Also, at this point 6 percent of the signal cycle has been used for northbound right turns on red, and still 2 percent more of the right turns will be allowed to occur on the red if there is unused eastbound through green time.

For purpose of this example, assume that the westbound through green is critical, and that 15 percent of the signal cycle is unused by eastbound through traffic. Thus, 2 percent more of the signal cycle can be used by the northbound right turns on red since there is 15 seconds of unused green time being given to the eastbound through traffic.

At this point, 8 percent of the signal cycle was available to serve northbound right turning vehicles on red, and 15 percent of the signal cycle was available to serve right turning vehicles on the northbound through green. So 23 percent of the signal cycle has been available for northbound right turns.

Because 40 percent of the signal cycle is needed to serve northbound right turns, there is still a need for 17 percent more of the signal cycle to be available for northbound right turns. What this means is the northbound through traffic green time is increased by 17 percent of the cycle length to serve the unserved right turn volume, and a 17 percent adjustment is added to the ICU to account for the northbound right turns that were not served on the northbound through green time or when right turns on red were assumed.

**Separate Right Turn Arrow, With Right Turns on Red**

A right turn lane with a separate right turn arrow, plus a certain percentage of right turns allowed on red is calculated the same way as a standard right turn lane with a certain percentage of right turns allowed on red, except the turns which occur on the right turn arrow are not counted as part of the percentage of right turns that occur on red.

**Critical Lane Method**

ICU parallels another calculation procedure known as the Critical Lane Method with one exception. Critical Lane Method dimensions capacity in terms of standardized vehicles per hour per lane. A Critical Lane

Method result of 800 vehicles per hour means that the intersection operates as though 800 vehicles were using a single lane continuously. If one assumes a lane capacity of 1600 vehicles per hour, then a Critical Lane Method calculation resulting in 800 vehicles per hour is the same as an ICU calculation of 50 percent since 800/1600 is 50 percent. It is our opinion that the Critical Lane Method is inferior to the ICU method simply because a statement such as "The Critical Lane Method value is 800 vehicles per hour" means little to most persons, whereas a statement such as "The Intersection Capacity Utilization is 50 percent" communicates clearly. Critical Lane Method results directly correspond to ICU results. The correspondence is as follows, assuming a lane capacity of 1600 vehicles per hour and no clearance interval.

| Critical Lane Method Result | ICU Result |
|---|---|
| 800 vehicles per hour | 50 percent |
| 960 vehicles per hour | 60 percent |
| 1120 vehicles per hour | 70 percent |
| 1280 vehicles per hour | 80 percent |
| 1440 vehicles per hour | 90 percent |
| 1600 vehicles per hour | 100 percent |
| 1760 vehicles per hour | 110 percent |

# INTERSECTION CAPACITY UTILIZATION (ICU)
# LEVEL OF SERVICE (LOS) DESCRIPTION[1]

| Level of Service | Description | Volume to Capacity Ratio |
|---|---|---|
| A | Level of Service A occurs when progression is extremely favorable and vehicles arrive during the green phase. Most vehicles do not stop at all. Short cycle lengths may also contribute to low delay. | 0.600 and below |
| B | Level of Service B generally occurs with good progression and/or short cycle lengths. More vehicles stop than for LOS A, causing higher levels of average delay. | 0.601 to 0.700 |
| C | Level of Service C generally results when there is fair progression and/or longer cycle lengths. Individual cycle failures may begin to appear in this level. The number of vehicles stopping is significant at this level, although many still pass through the intersection without stopping. | 0.701 to 0.800 |
| D | Level of Service D generally results in noticeable congestion. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or high volume to capacity ratios. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable. | 0.801 to 0.900 |
| E | Level of Service E is considered to be the limit of acceptable delay. These high delay values generally indicate poor progression, long cycle lengths, and high volume to capacity ratios. Individual cycle failures are frequent. | 0.901 to 1.000 |
| F | Level of Service F is considered to be unacceptable to most drivers. This condition often occurs when oversaturation, i.e., when arrival flow rates exceed the capacity of the intersection. It may also occur at high volume to capacity ratios below 1.00 with many individual cycle failures. Poor progression and long cycle lengths may also be major contributing causes to such delay levels. | 1.001 and up |

[1]Source: Highway Capacity Manual Special Report 209, Transportation Research Board, National Research Council Washington D.C., 2000.

# Existing + Approved Projects

# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

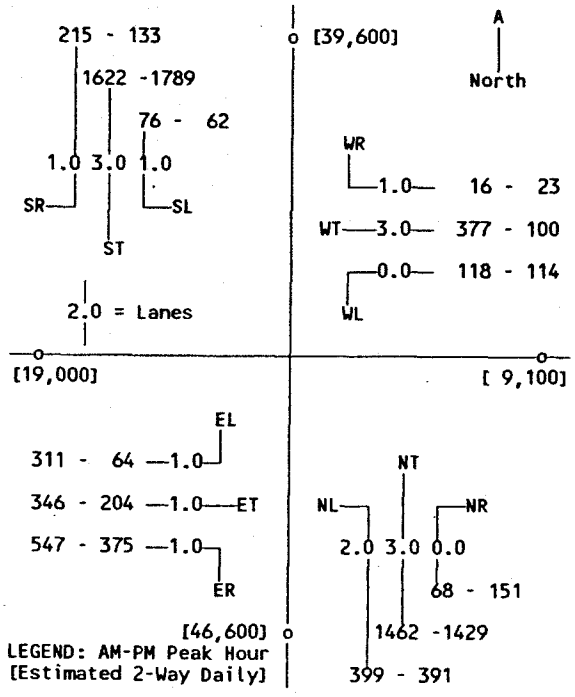
INTERSECTION: JAMBOREE ROAD (NS) and EASTBLUFF DRIVE/FORD ROAD (EW)
LAND USE: EXISTING + APPROVED PROJECTS

COUNT DATE: 01-01-04
GEOMETRICS: Existing

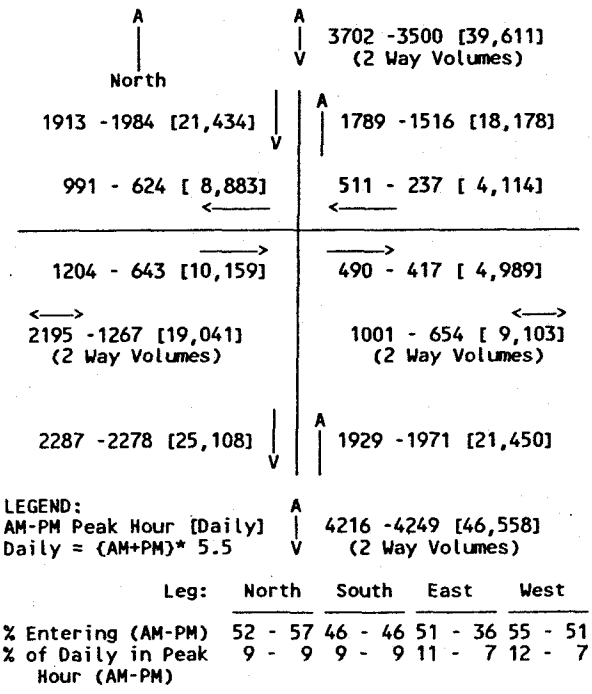
| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 2 | 3200 | 399 | 388 | 0 | 3 | 399 | 391 | 0.125* | 0.122* |
| Northbound Through | 3 | 4800 | 1388 | 1324 | 74 | 105 | 1462 | 1429 | 0.319 | 0.329 |
| Northbound Right | 0 | 0 | 67 | 146 | 1 | 5 | 68 | 151 | 0.000 | 0.000 |
| Southbound Left | 1 | 1600 | 76 | 61 | 0 | 1 | 76 | 62 | 0.048 | 0.039 |
| Southbound Through | 3 | 4800 | 1517 | 1694 | 105 | 95 | 1622 | 1789 | 0.338* | 0.373* |
| Southbound Right | 1 | 1600 | 215 | 133 | 0 | 0 | 215 | 133 | 0.134 | 0.083 |
| Eastbound Left | 1 | 1600 | 311 | 64 | 0 | 0 | 311 | 64 | 0.194 | 0.040 |
| Eastbound Through | 1 | 1600 | 346 | 204 | 0 | 0 | 346 | 204 | 0.216* | 0.128* |
| Eastbound Right | Free 1 | 1600 | 546 | 373 | 1 | 2 | 547 | 375 | 0.342 | 0.234 |
| Westbound Left | 0 | 0 | 116 | 110 | 2 | 4 | 118 | 114 | 0.000 | 0.000 |
| Westbound Through | 3 | 4800 | 377 | 100 | 0 | 0 | 377 | 100 | 0.103* | 0.045* |
| Westbound Right | 1 | 1600 | 15 | 23 | 1 | 0 | 16 | 23 | 0.010 | 0.014 |
| Northbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Clearance Interval | | | | | | | | | 0.000* | 0.000* |
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) | | | | | | | | | 0.78 | 0.67 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | | | | | | | | | C | B |

None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted.

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




PLOT OF INTERSECTION LEG VOLUMES




| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 52 - 57 | 46 - 46 | 51 - 36 | 55 - 51 |
| % of Daily in Peak Hour (AM-PM) | 9 - 9 | 9 - 9 | 11 - 7 | 12 - 7 |

Kunzman Associates

# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

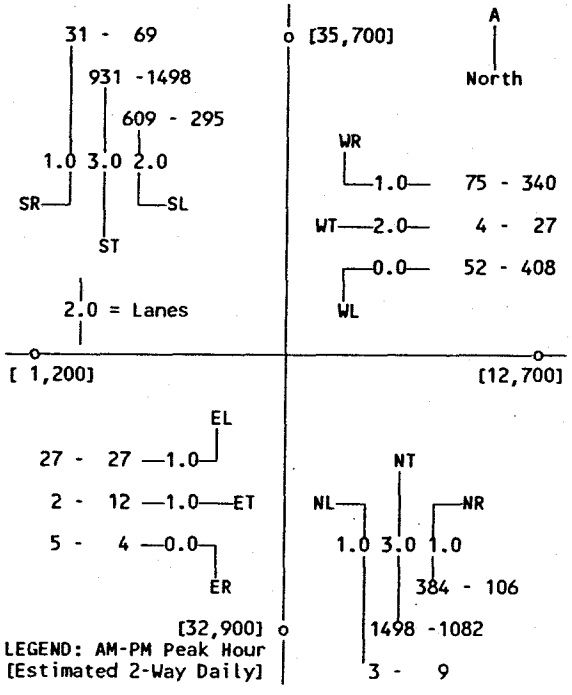
INTERSECTION: JAMBOREE ROAD (NS) and SANTA BARBARA DRIVE (EW)
LAND USE: EXISTING + APPROVED PROJECTS

COUNT DATE: 01-01-04
GEOMETRICS: Existing

| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 1 | 1600 | 3 | 9 | 0 | 0 | 3 | 9 | 0.002 | 0.006* |
| Northbound Through | 3 | 4800 | 1426 | 990 | 72 | 92 | 1498 | 1082 | 0.312* | 0.225 |
| Northbound Right | 1 | 1600 | 381 | 104 | 3 | 2 | 384 | 106 | 0.240 | 0.066 |
| Southbound Left | 2 | 3200 | 608 | 291 | 1 | 4 | 609 | 295 | 0.190* | 0.092 |
| Southbound Through | 3 | 4800 | 819 | 1415 | 112 | 83 | 931 | 1498 | 0.194 | 0.312* |
| Southbound Right | 1 | 1600 | 30 | 63 | 1 | 6 | 31 | 69 | 0.019 | 0.043 |
| Eastbound Left | 1 | 1600 | 21 | 25 | 6 | 2 | 27 | 27 | 0.017* | 0.017* |
| Eastbound Through | 1 | 1600 | 2 | 11 | 0 | 1 | 2 | 12 | 0.004 | 0.010 |
| Eastbound Right | 0 | 0 | 5 | 4 | 0 | 0 | 5 | 4 | 0.000 | 0.000 |
| Westbound Left | 0 | 0 | 50 | 406 | 2 | 2 | 52 | 408 | 0.000 | 0.000 |
| Westbound Through | 2 | 3200 | 4 | 26 | 0 | 1 | 4 | 27 | 0.018 | 0.136 |
| Westbound Right | 1 | 1600 | 71 | 339 | 4 | 1 | 75 | 340 | 0.047* | 0.213* |
| Northbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Clearance Interval | | | | | | | | | 0.000* | 0.000* |
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) ——> | | | | | | | | | 0.57 | 0.55 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | | | | | | | | | A | A |

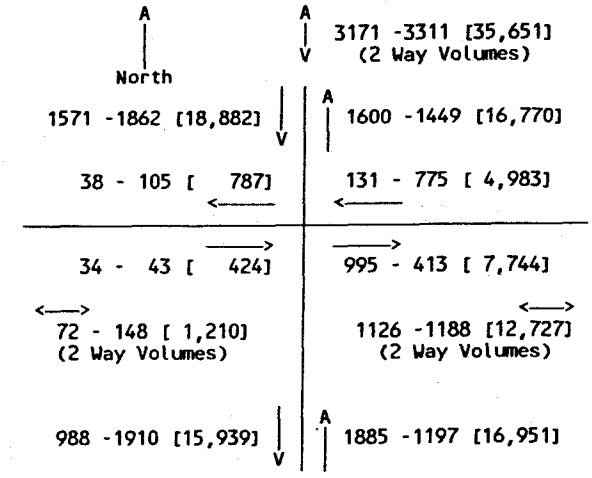
None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted.

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




LEGEND: AM-PM Peak Hour
[Estimated 2-Way Daily]

PLOT OF INTERSECTION LEG VOLUMES




LEGEND:
AM-PM Peak Hour [Daily]
Daily = (AM+PM)* 5.5

A
V
2873 -3107 [32,890]
(2 Way Volumes)

| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 50 - 56 | 66 - 39 | 12 - 65 | 47 - 29 |
| % of Daily in Peak Hour (AM-PM) | 9 - 9 | 9 - 9 | 9 - 9 | 6 - 12 |

# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

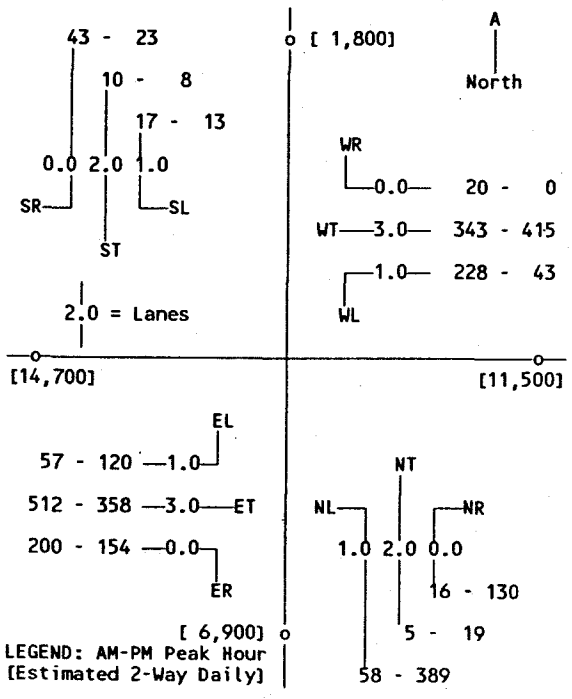
INTERSECTION: SANTA CRUZ DRIVE (NS) and SAN JOAQUIN HILLS ROAD (EW)
LAND USE: EXISTING + APPROVED PROJECTS

COUNT DATE: 01-01-04
GEOMETRICS: Existing

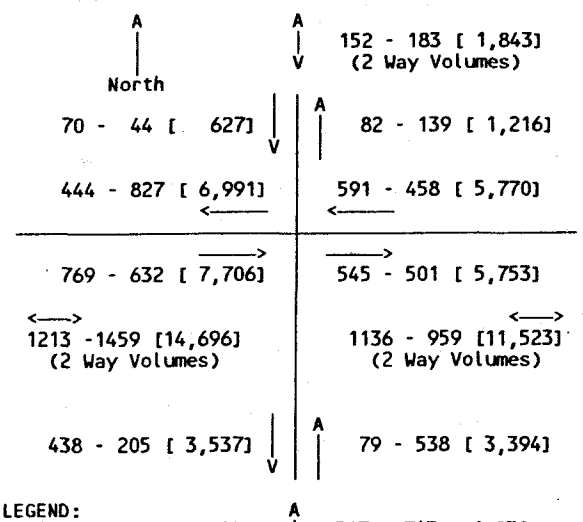
| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 1 | 1600 | 57 | 389 | 1 | 0 | 58 | 389 | 0.036* | 0.243* |
| Northbound Through | 2 | 3200 | 5 | 19 | 0 | 0 | 5 | 19 | 0.007 | 0.047 |
| Northbound Right | 0 | 0 | 15 | 130 | 1 | 0 | 16 | 130 | 0.000 | 0.000 |
| Southbound Left | 1 | 1600 | 17 | 12 | 0 | 1 | 17 | 13 | 0.011 | 0.008 |
| Southbound Through | 2 | 3200 | 9 | 8 | 1 | 0 | 10 | 8 | 0.017* | 0.010* |
| Southbound Right | 0 | 0 | 43 | 23 | 0 | 0 | 43 | 23 | 0.000 | 0.000 |
| Eastbound Left | 1 | 1600 | 57 | 120 | 0 | 0 | 57 | 120 | 0.036 | 0.075* |
| Eastbound Through | 3 | 4800 | 511 | 358 | 1 | 0 | 512 | 358 | 0.148* | 0.107 |
| Eastbound Right | 0 | 0 | 200 | 153 | 0 | 1 | 200 | 154 | 0.000 | 0.000 |
| Westbound Left | 1 | 1600 | 227 | 43 | 1 | 0 | 228 | 43 | 0.143* | 0.027 |
| Westbound Through | 3 | 4800 | 343 | 414 | 0 | 1 | 343 | 415 | 0.076 | 0.086* |
| Westbound Right | 0 | 0 | 20 | 0 | 0 | 0 | 20 | 0 | 0.000 | 0.000 |
| Northbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Clearance Interval | | | | | | | | | 0.000* | 0.000* |
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) ——> | | | | | | | | | 0.34 | 0.41 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | | | | | | | | | A | A |

None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted.

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




PLOT OF INTERSECTION LEG VOLUMES




| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 46 - 24 | 15 - 72 | 52 - 48 | 63 - 43 |
| % of Daily in Peak Hour (AM-PM) | 8 - 10 | 7 - 11 | 10 - 8 | 8 - 10 |

# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

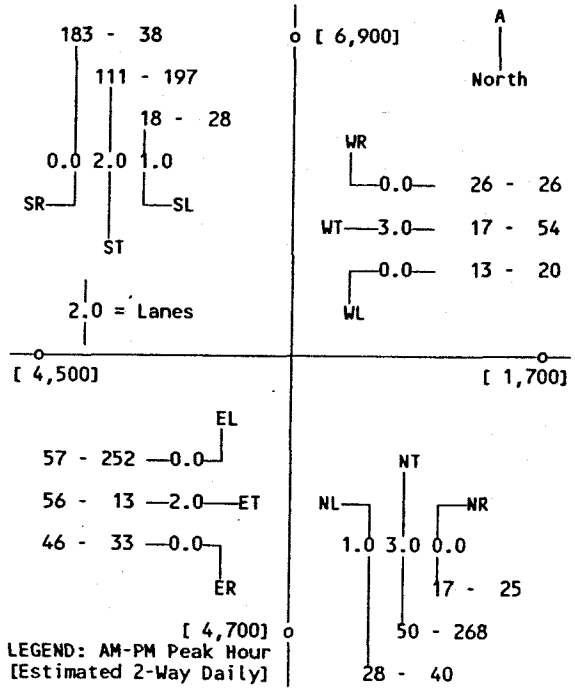
INTERSECTION: SANTA CRUZ DRIVE (NS) and SAN CLEMENTE DRIVE (EW)
LAND USE: EXISTING + APPROVED PROJECTS

COUNT DATE: 01-01-04
GEOMETRICS: Existing

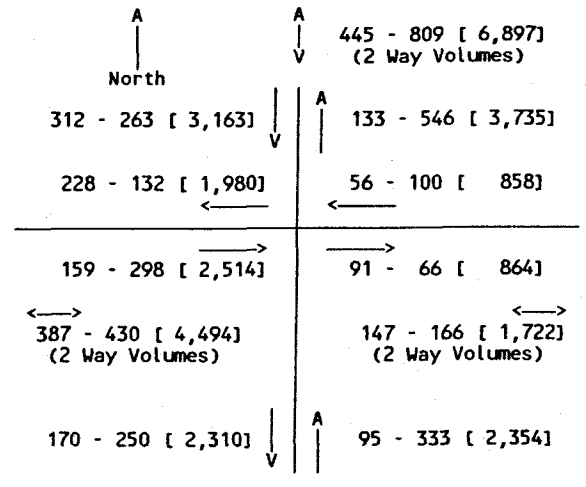
| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 1 | 1600 | 28 | 40 | 0 | 0 | 28 | 40 | 0.018* | 0.025* |
| Northbound Through | 3 | 4800 | 50 | 268 | 0 | 0 | 50 | 268 | 0.014 | 0.061 |
| Northbound Right | 0 | 0 | 17 | 25 | 0 | 0 | 17 | 25 | 0.000 | 0.000 |
| Southbound Left | 1 | 1600 | 18 | 28 | 0 | 0 | 18 | 28 | 0.011 | 0.018 |
| Southbound Through | 2 | 3200 | 111 | 197 | 0 | 0 | 111 | 197 | 0.092* | 0.073* |
| Southbound Right | 0 | 0 | 183 | 38 | 0 | 0 | 183 | 38 | 0.000 | 0.000 |
| Eastbound Left | 0 | 0 | 57 | 252 | 0 | 0 | 57 | 252 | 0.000 | 0.000 |
| Eastbound Through | 2 | 3200 | 56 | 13 | 0 | 0 | 56 | 13 | 0.050* | 0.093* |
| Eastbound Right | 0 | 0 | 46 | 33 | 0 | 0 | 46 | 33 | 0.000 | 0.000 |
| Westbound Left | 0 | 0 | 13 | 20 | 0 | 0 | 13 | 20 | 0.000* | 0.000* |
| Westbound Through | 3 | 4800 | 17 | 54 | 0 | 0 | 17 | 54 | 0.012 | 0.021 |
| Westbound Right | 0 | 0 | 26 | 26 | 0 | 0 | 26 | 26 | 0.000 | 0.000 |
| Northbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Clearance Interval | | | | | | | | | 0.000* | 0.000* |
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) ——> | | | | | | | | | 0.16 | 0.19 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | | | | | | | | | A | A |

None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted.

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




PLOT OF INTERSECTION LEG VOLUMES




| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 70 - 33 | 36 - 57 | 38 - 60 | 41 - 69 |
| % of Daily in Peak Hour (AM-PM) | 6 - 12 | 6 - 13 | 9 - 10 | 9 - 10 |

# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

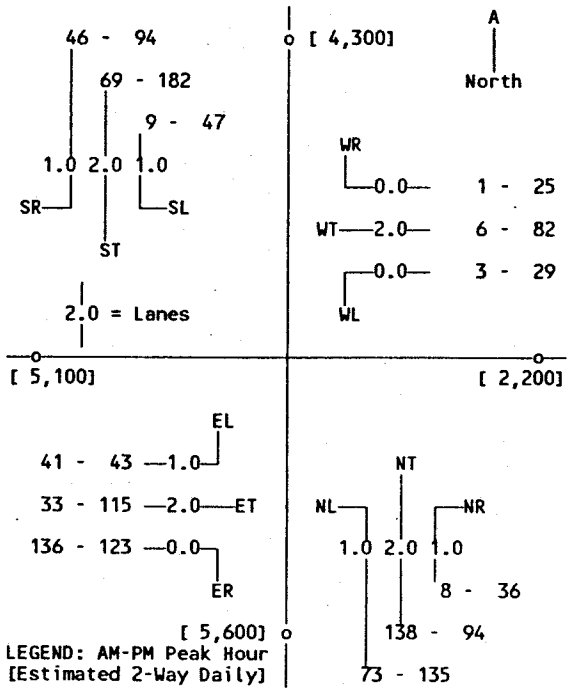
INTERSECTION: NEWPORT CENTER DRIVE (NS) and SANTA BARBARA DRIVE (EW)
LAND USE: EXISTING + APPROVED PROJECTS

COUNT DATE: 01-01-04
GEOMETRICS: Existing

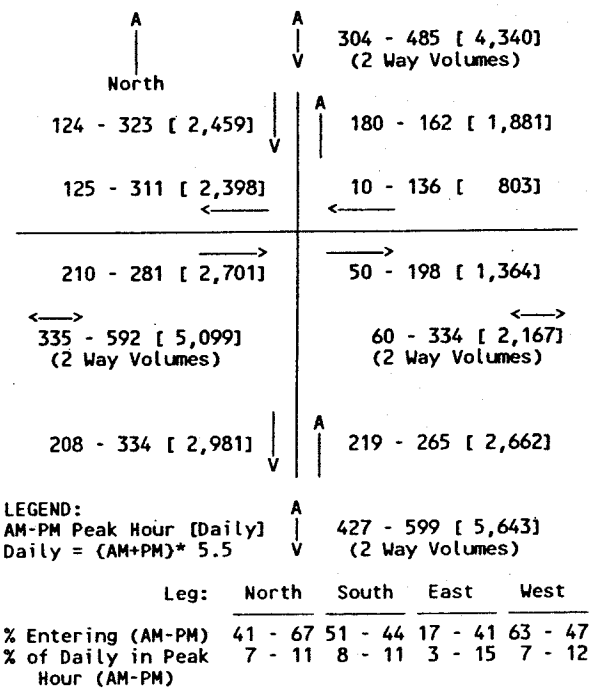
| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 1 | 1600 | 73 | 135 | 0 | 0 | 73 | 135 | 0.046* | 0.084* |
| Northbound Through | 2 | 3200 | 138 | 94 | 0 | 0 | 138 | 94 | 0.043 | 0.029 |
| Northbound Right | 1 | 1600 | 8 | 36 | 0 | 0 | 8 | 36 | 0.005 | 0.023 |
| Southbound Left | 1 | 1600 | 9 | 47 | 0 | 0 | 9 | 47 | 0.006 | 0.029 |
| Southbound Through | 2 | 3200 | 69 | 182 | 0 | 0 | 69 | 182 | 0.022* | 0.057* |
| Southbound Right | 1 | 1600 | 46 | 94 | 0 | 0 | 46 | 94 | 0.029 | 0.059 |
| Eastbound Left | 1 | 1600 | 41 | 43 | 0 | 0 | 41 | 43 | 0.026 | 0.027* |
| Eastbound Through | 2 | 3200 | 33 | 115 | 0 | 0 | 33 | 115 | 0.053* | 0.074 |
| Eastbound Right | 0 | 0 | 136 | 123 | 0 | 0 | 136 | 123 | 0.000 | 0.000 |
| Westbound Left | 0 | 0 | 3 | 29 | 0 | 0 | 3 | 29 | 0.000* | 0.000 |
| Westbound Through | 2 | 3200 | 6 | 82 | 0 | 0 | 6 | 82 | 0.003 | 0.043* |
| Westbound Right | 0 | 0 | 1 | 25 | 0 | 0 | 1 | 25 | 0.000 | 0.000 |
| Northbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Clearance Interval | | | | | | | | | 0.000* | 0.000* |
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) ——→ | | | | | | | | | 0.12 | 0.21 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | | | | | | | | | A | A |

None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted.

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




PLOT OF INTERSECTION LEG VOLUMES




| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 41 - 67 | 51 - 44 | 17 - 41 | 63 - 47 |
| % of Daily in Peak Hour (AM-PM) | 7 - 11 | 8 - 11 | 3 - 15 | 7 - 12 |

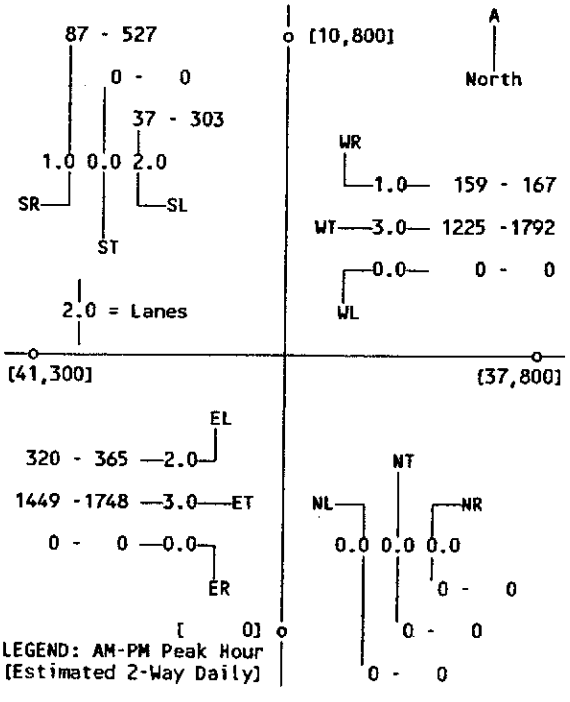
# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

INTERSECTION: NEWPORT CENTER DRIVE (NS) and COAST HIGHWAY (EW)
LAND USE: EXISTING + APPROVED PROJECTS

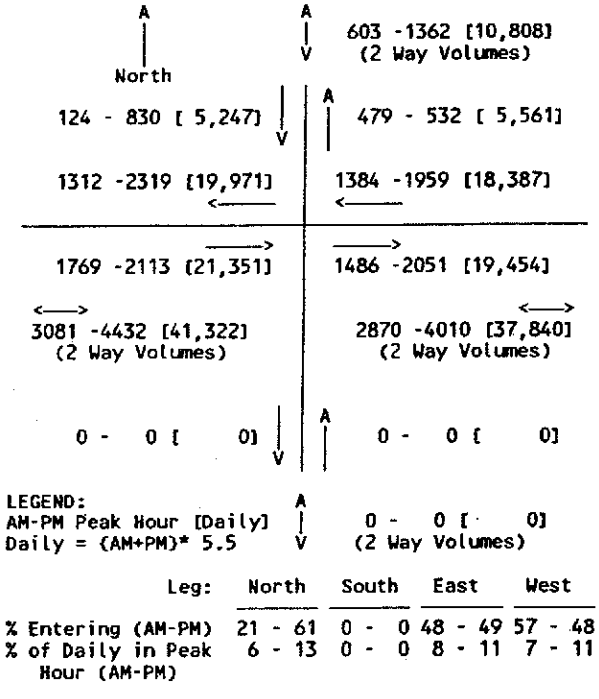
COUNT DATE: 01-01-04
GEOMETRICS: Existing

| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000 | 0.000 |
| Northbound Through | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000* | 0.000* |
| Northbound Right | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000 | 0.000 |
| Southbound Left | 2 | 3200 | 37 | 300 | 0 | 3 | 37 | 303 | 0.012* | 0.095* |
| Southbound Through | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000 | 0.000 |
| Southbound Right | Free 1 | 1600 | 78 | 496 | 9 | 31 | 87 | 527 | 0.054 | 0.329 |
| Eastbound Left | 2 | 3200 | 315 | 352 | 5 | 13 | 320 | 365 | 0.100* | 0.114* |
| Eastbound Through | 3 | 4800 | 1428 | 1714 | 21 | 34 | 1449 | 1748 | 0.302 | 0.364 |
| Eastbound Right | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000 | 0.000 |
| Westbound Left | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000 | 0.000 |
| Westbound Through | 3 | 4800 | 1194 | 1774 | 31 | 18 | 1225 | 1792 | 0.255* | 0.373* |
| Westbound Right | Free 1 | 1600 | 158 | 161 | 1 | 6 | 159 | 167 | 0.099 | 0.104 |
| Northbound Right Turn Adjustment | None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted. | | | | | | | | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Clearance Interval | | | | | | | | | 0.000* | 0.000* |
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) ——→ | | | | | | | | | 0.37 | 0.58 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | | | | | | | | | A | A |

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




PLOT OF INTERSECTION LEG VOLUMES




| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 21 - 61 | 0 - 0 | 48 - 49 | 57 - 48 |
| % of Daily in Peak Hour (AM-PM) | 6 - 13 | 0 - 0 | 8 - 11 | 7 - 11 |

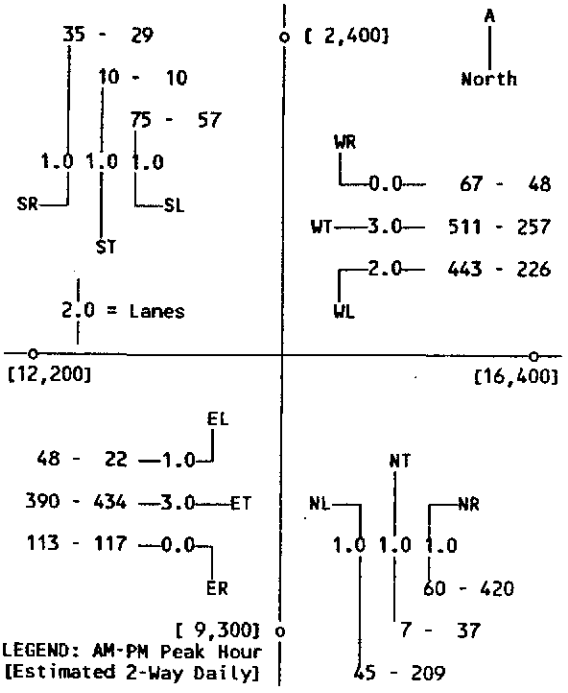
# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

INTERSECTION: SANTA ROSA DRIVE/BIG CANYON DRIVE (NS) and SAN JOAQUIN HILLS ROA — COUNT DATE: 01-01-04
LAND USE: EXISTING + APPROVED PROJECTS — GEOMETRICS: Existing

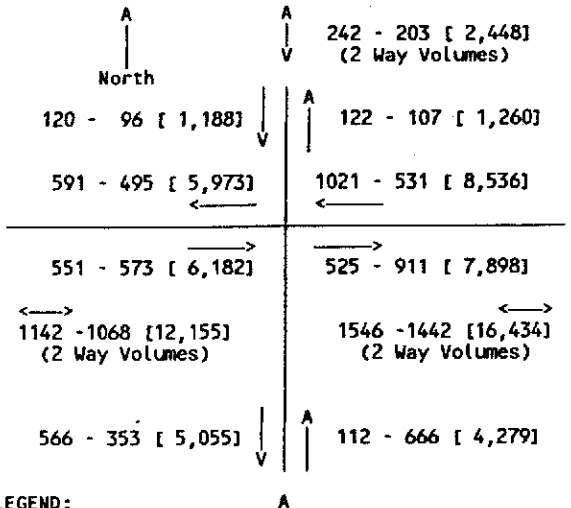
| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 1 | 1600 | 36 | 203 | 9 | 6 | 45 | 209 | 0.028 | 0.131 |
| Northbound Through | 1 | 1600 | 7 | 37 | 0 | 0 | 7 | 37 | 0.004 | 0.023 |
| Northbound Right | 1 | 1600 | 59 | 401 | 1 | 19 | 60 | 420 | 0.038* | 0.262* |
| Southbound Left | 1 | 1600 | 75 | 57 | 0 | 0 | 75 | 57 | 0.047* | 0.036* |
| Southbound Through | 1 | 1600 | 10 | 10 | 0 | 0 | 10 | 10 | 0.006 | 0.006 |
| Southbound Right | 1 | 1600 | 35 | 29 | 0 | 0 | 35 | 29 | 0.022 | 0.018 |
| Eastbound Left | 1 | 1600 | 47 | 22 | 1 | 0 | 48 | 22 | 0.030 | 0.014 |
| Eastbound Through | 3 | 4800 | 389 | 433 | 1 | 1 | 390 | 434 | 0.105* | 0.115* |
| Eastbound Right | 0 | 0 | 107 | 109 | 6 | 8 | 113 | 117 | 0.000 | 0.000 |
| Westbound Left | 2 | 3200 | 443 | 214 | 0 | 12 | 443 | 226 | 0.138* | 0.071* |
| Westbound Through | 3 | 4800 | 510 | 256 | 1 | 1 | 511 | 257 | 0.120 | 0.064 |
| Westbound Right | 0 | 0 | 67 | 48 | 0 | 0 | 67 | 48 | 0.000 | 0.000 |
| Northbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Clearance Interval | | | | | | | | | 0.000* | 0.000* |
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) ——> | | | | | | | | | 0.33 | 0.48 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | | | | | | | | | A | A |

None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted.

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




PLOT OF INTERSECTION LEG VOLUMES




| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 50 - 47 | 17 - 65 | 66 - 37 | 48 - 54 |
| % of Daily in Peak Hour (AM-PM) | 10 - 8 | 7 - 11 | 9 - 9 | 9 - 9 |

# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

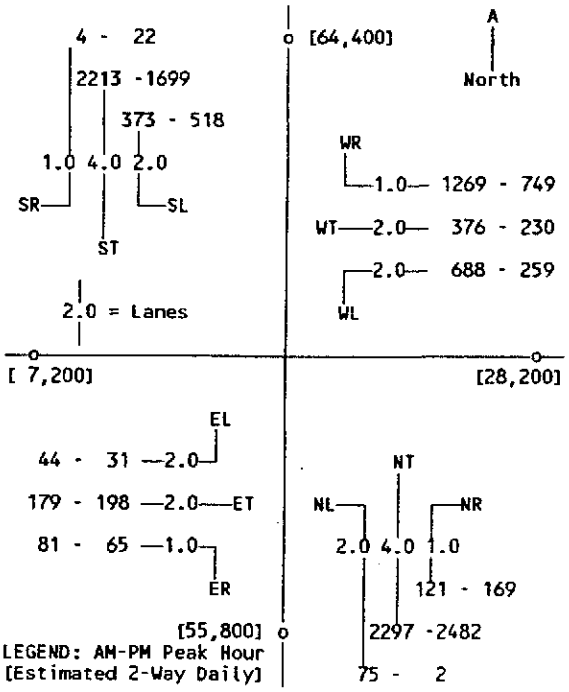
INTERSECTION: MACARTHUR BOULEVARD (NS) and FORD ROAD (EW)
LAND USE: EXISTING + APPROVED PROJECTS

COUNT DATE: 01-01-04
GEOMETRICS: Existing

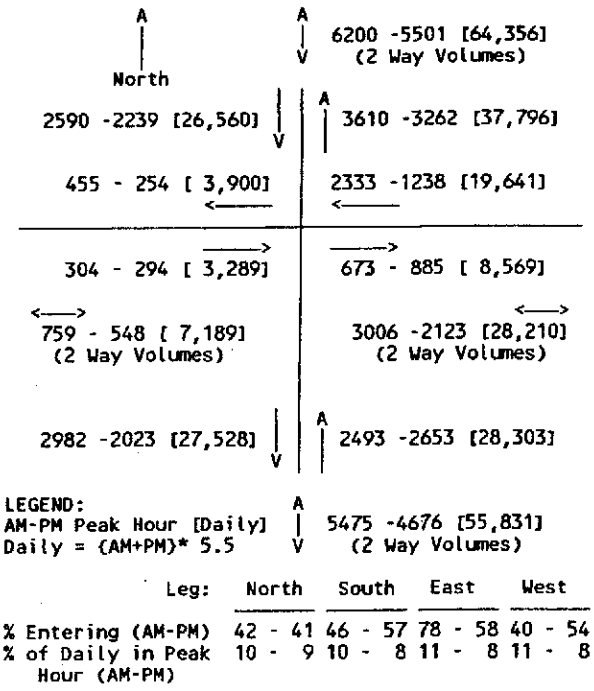
| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 2 | 3200 | 74 | 0 | 1 | 2 | 75 | 2 | 0.023 | 0.001 |
| Northbound Through | 4 | 6400 | 2296 | 2468 | 1 | 14 | 2297 | 2482 | 0.359* | 0.388* |
| Northbound Right | Free 1 | 1600 | 121 | 161 | 0 | 8 | 121 | 169 | 0.076 | 0.106 |
| Southbound Left | 2 | 3200 | 373 | 517 | 0 | 1 | 373 | 518 | 0.117* | 0.162* |
| Southbound Through | 4 | 6400 | 2210 | 1686 | 3 | 13 | 2213 | 1699 | 0.346 | 0.265 |
| Southbound Right | Free 1 | 1600 | 4 | 21 | 0 | 1 | 4 | 22 | 0.003 | 0.014 |
| Eastbound Left | 2 | 3200 | 43 | 31 | 1 | 0 | 44 | 31 | 0.014 | 0.010 |
| Eastbound Through | 2 | 3200 | 178 | 197 | 1 | 1 | 179 | 198 | 0.056* | 0.062* |
| Eastbound Right | 1 | 1600 | 79 | 64 | 2 | 1 | 81 | 65 | 0.051 | 0.041 |
| Westbound Left | 2 | 3200 | 687 | 257 | 1 | 2 | 688 | 259 | 0.215* | 0.081* |
| Westbound Through | 2 | 3200 | 376 | 229 | 0 | 1 | 376 | 230 | 0.118 | 0.072 |
| Westbound Right | Free 1 | 1600 | 1268 | 749 | 1 | 0 | 1269 | 749 | 0.793 | 0.468 |
| Northbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Clearance Interval | | | | | | | | | 0.000* | 0.000* |
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) | | | | | | | | | 0.75 | 0.69 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | | | | | | | | | C | B |

None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted.

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




PLOT OF INTERSECTION LEG VOLUMES




| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 42 - 41 | 46 - 57 | 78 - 58 | 40 - 54 |
| % of Daily in Peak Hour (AM-PM) | 10 - 9 | 10 - 8 | 11 - 8 | 11 - 8 |

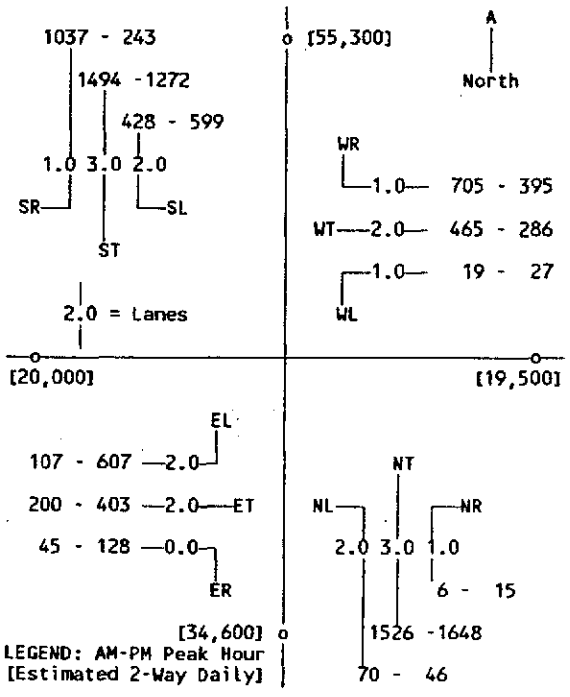
# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

INTERSECTION: MACARTHUR BOULEVARD (NS) and SAN JOAQUIN HILLS ROAD (EW) — COUNT DATE: 01-01-04
LAND USE: EXISTING + APPROVED PROJECTS — GEOMETRICS: Existing

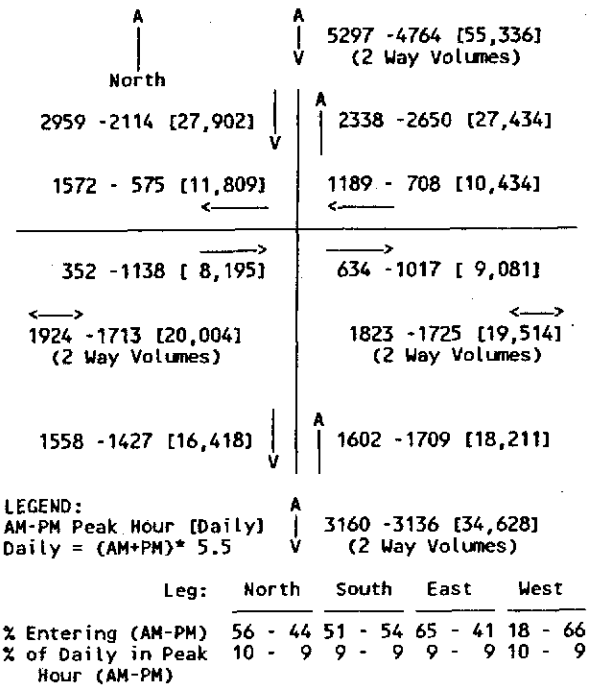
| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 2 | 3200 | 70 | 46 | 0 | 0 | 70 | 46 | 0.022 | 0.014 |
| Northbound Through | 3 | 4800 | 1526 | 1645 | 0 | 3 | 1526 | 1648 | 0.318* | 0.343* |
| Northbound Right | 1 | 1600 | 6 | 15 | 0 | 0 | 6 | 15 | 0.004 | 0.009 |
| Southbound Left | 2 | 3200 | 428 | 599 | 0 | 0 | 428 | 599 | 0.134* | 0.187* |
| Southbound Through | 3 | 4800 | 1491 | 1269 | 3 | 3 | 1494 | 1272 | 0.311 | 0.265 |
| Southbound Right | Free 1 | 1600 | 1036 | 231 | 1 | 12 | 1037 | 243 | 0.648 | 0.152 |
| Eastbound Left | 2 | 3200 | 107 | 588 | 0 | 19 | 107 | 607 | 0.033* | 0.190* |
| Eastbound Through | 2 | 3200 | 199 | 403 | 1 | 0 | 200 | 403 | 0.077 | 0.166 |
| Eastbound Right | 0 | 0 | 45 | 128 | 0 | 0 | 45 | 128 | 0.000 | 0.000 |
| Westbound Left | 1 | 1600 | 19 | 27 | 0 | 0 | 19 | 27 | 0.012 | 0.017 |
| Westbound Through | 2 | 3200 | 464 | 285 | 1 | 1 | 465 | 286 | 0.145* | 0.089* |
| Westbound Right | Free 1 | 1600 | 705 | 395 | 0 | 0 | 705 | 395 | 0.441 | 0.247 |
| Northbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Clearance Interval | | | | | | | | | 0.000* | 0.000* |
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) ——> | | | | | | | | | 0.63 | 0.81 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | | | | | | | | | B | D |

None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted.

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




PLOT OF INTERSECTION LEG VOLUMES




| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 56 - 44 | 51 - 54 | 65 - 41 | 18 - 66 |
| % of Daily in Peak Hour (AM-PM) | 10 - 9 | 9 - 9 | 9 - 9 | 10 - 9 |

## Existing + Approved Projects + Project

# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

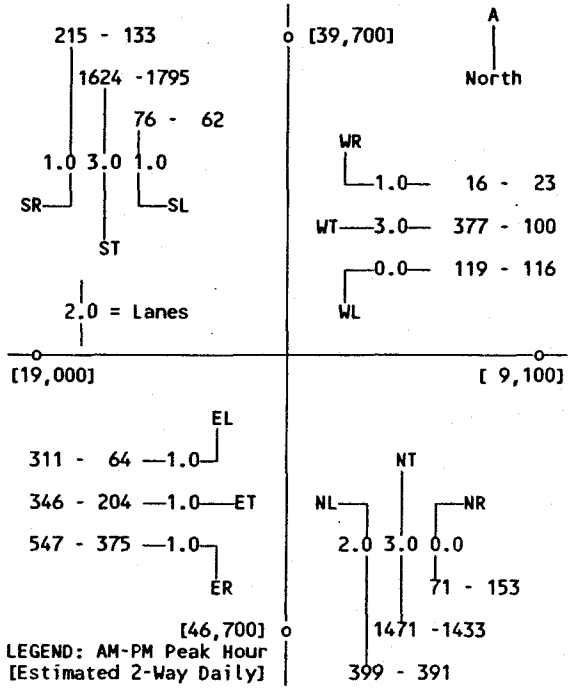
INTERSECTION: JAMBOREE ROAD (NS) and EASTBLUFF DRIVE/FORD ROAD (EW)
LAND USE: EXISTING + APPROVED PROJECTS + PROJECT

COUNT DATE: 01-01-04
GEOMETRICS: Existing

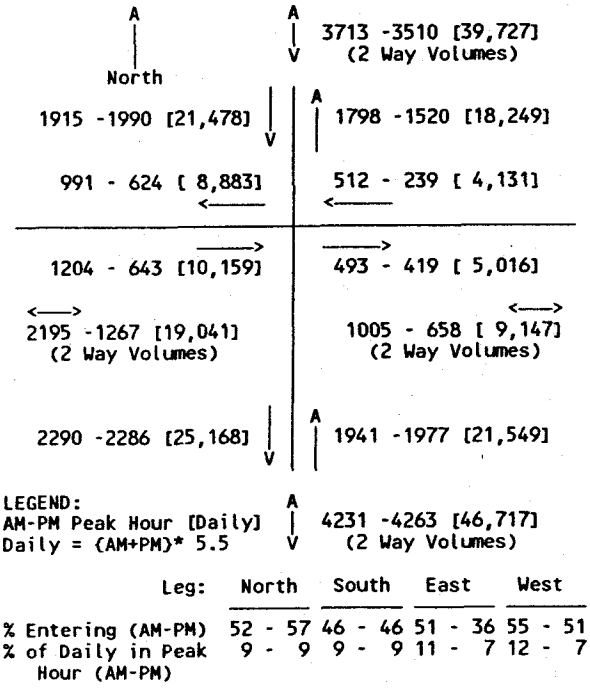
| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 2 | 3200 | 399 | 388 | 0 | 3 | 399 | 391 | 0.125* | 0.122* |
| Northbound Through | 3 | 4800 | 1388 | 1324 | 83 | 109 | 1471 | 1433 | 0.321 | 0.330 |
| Northbound Right | 0 | 0 | 67 | 146 | 4 | 7 | 71 | 153 | 0.000 | 0.000 |
| Southbound Left | 1 | 1600 | 76 | 61 | 0 | 1 | 76 | 62 | 0.048 | 0.039 |
| Southbound Through | 3 | 4800 | 1517 | 1694 | 107 | 101 | 1624 | 1795 | 0.338* | 0.374* |
| Southbound Right | 1 | 1600 | 215 | 133 | 0 | 0 | 215 | 133 | 0.134 | 0.083 |
| Eastbound Left | 1 | 1600 | 311 | 64 | 0 | 0 | 311 | 64 | 0.194 | 0.040 |
| Eastbound Through | 1 | 1600 | 346 | 204 | 0 | 0 | 346 | 204 | 0.216* | 0.128* |
| Eastbound Right | Free 1 | 1600 | 546 | 373 | 1 | 2 | 547 | 375 | 0.342 | 0.234 |
| Westbound Left | 0 | 0 | 116 | 110 | 3 | 6 | 119 | 116 | 0.000 | 0.000 |
| Westbound Through | 3 | 4800 | 377 | 100 | 0 | 0 | 377 | 100 | 0.103* | 0.045* |
| Westbound Right | 1 | 1600 | 15 | 23 | 1 | 0 | 16 | 23 | 0.010 | 0.014 |
| Northbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Clearance Interval | | | | | | | | | 0.000* | 0.000* |
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) ——> | | | | | | | | | 0.78 | 0.67 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | | | | | | | | | C | B |

None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted.

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




PLOT OF INTERSECTION LEG VOLUMES




| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 52 - 57 | 46 - 46 | 51 - 36 | 55 - 51 |
| % of Daily in Peak Hour (AM-PM) | 9 - 9 | 9 - 9 | 11 - 7 | 12 - 7 |

# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

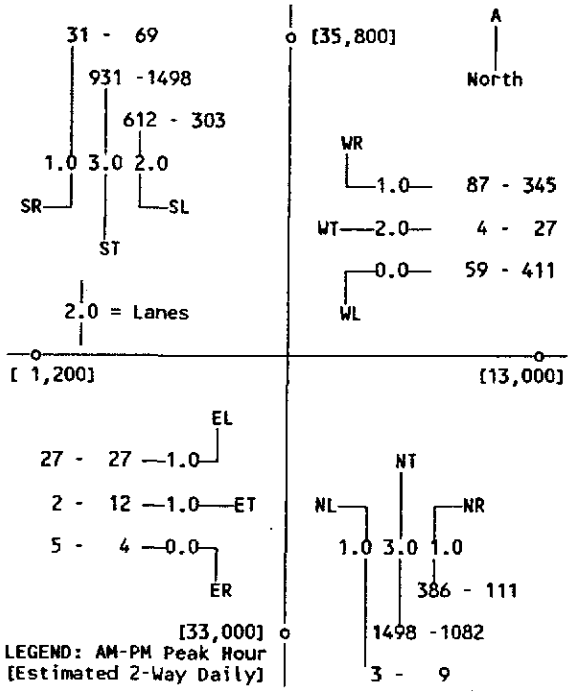
INTERSECTION: JAMBOREE ROAD (NS) and SANTA BARBARA DRIVE (EW)
LAND USE: EXISTING + APPROVED PROJECTS + PROJECT

COUNT DATE: 01-01-04
GEOMETRICS: Existing

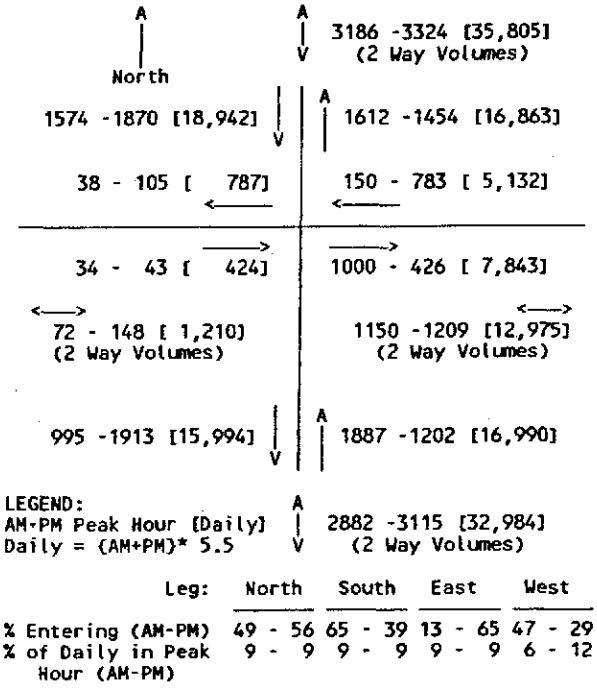
| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 1 | 1600 | 3 | 9 | 0 | 0 | 3 | 9 | 0.002 | 0.006 |
| Northbound Through | 3 | 4800 | 1426 | 990 | 72 | 92 | 1498 | 1082 | 0.312* | 0.225* |
| Northbound Right | 1 | 1600 | 381 | 104 | 5 | 7 | 386 | 111 | 0.241 | 0.069 |
| Southbound Left | 2 | 3200 | 608 | 291 | 4 | 12 | 612 | 303 | 0.191* | 0.095* |
| Southbound Through | 3 | 4800 | 819 | 1415 | 112 | 83 | 931 | 1498 | 0.194 | 0.312 |
| Southbound Right | 1 | 1600 | 30 | 63 | 1 | 6 | 31 | 69 | 0.019 | 0.043 |
| Eastbound Left | 1 | 1600 | 21 | 25 | 6 | 2 | 27 | 27 | 0.017* | 0.017* |
| Eastbound Through | 1 | 1600 | 2 | 11 | 0 | 1 | 2 | 12 | 0.004 | 0.010 |
| Eastbound Right | 0 | 0 | 5 | 4 | 0 | 0 | 5 | 4 | 0.000 | 0.000 |
| Westbound Left | 0 | 0 | 50 | 406 | 9 | 5 | 59 | 411 | 0.000 | 0.000 |
| Westbound Through | 2 | 3200 | 4 | 26 | 0 | 1 | 4 | 27 | 0.020 | 0.137 |
| Westbound Right | 1 | 1600 | 71 | 339 | 16 | 6 | 87 | 345 | 0.054* | 0.216* |
| Northbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Clearance Interval | | | | | | | | | 0.000* | 0.000* |
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) | | | | | | | | | 0.57 | 0.55 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | | | | | | | | | A | A |

None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted.

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




PLOT OF INTERSECTION LEG VOLUMES




| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 49 - 56 | 65 - 39 | 13 - 65 | 47 - 29 |
| % of Daily in Peak Hour (AM-PM) | 9 - 9 | 9 - 9 | 9 - 9 | 6 - 12 |

Kunzman Associates

# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

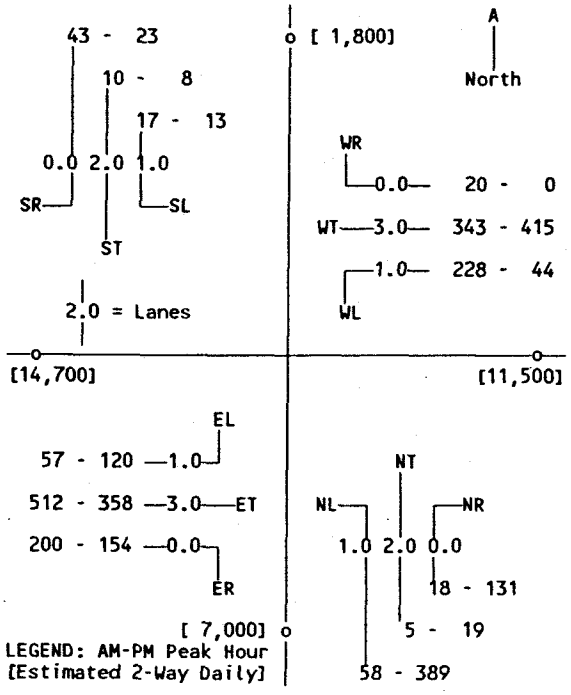
INTERSECTION: SANTA CRUZ DRIVE (NS) and SAN JOAQUIN HILLS ROAD (EW)
LAND USE: EXISTING + APPROVED PROJECTS + PROJECT

COUNT DATE: 01-01-04
GEOMETRICS: Existing

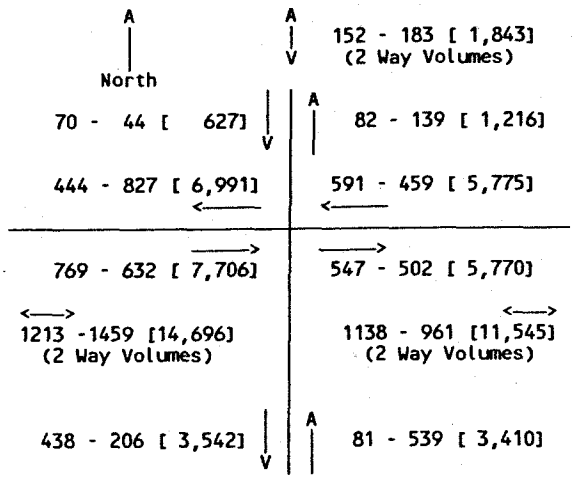
| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 1 | 1600 | 57 | 389 | 1 | 0 | 58 | 389 | 0.036* | 0.243* |
| Northbound Through | 2 | 3200 | 5 | 19 | 0 | 0 | 5 | 19 | 0.007 | 0.047 |
| Northbound Right | 0 | 0 | 15 | 130 | 3 | 1 | 18 | 131 | 0.000 | 0.000 |
| Southbound Left | 1 | 1600 | 17 | 12 | 0 | 1 | 17 | 13 | 0.011 | 0.008 |
| Southbound Through | 2 | 3200 | 9 | 8 | 1 | 0 | 10 | 8 | 0.017* | 0.010* |
| Southbound Right | 0 | 0 | 43 | 23 | 0 | 0 | 43 | 23 | 0.000 | 0.000 |
| Eastbound Left | 1 | 1600 | 57 | 120 | 0 | 0 | 57 | 120 | 0.036 | 0.075* |
| Eastbound Through | 3 | 4800 | 511 | 358 | 1 | 0 | 512 | 358 | 0.148* | 0.107 |
| Eastbound Right | 0 | 0 | 200 | 153 | 0 | 1 | 200 | 154 | 0.000 | 0.000 |
| Westbound Left | 1 | 1600 | 227 | 43 | 1 | 1 | 228 | 44 | 0.143* | 0.028 |
| Westbound Through | 3 | 4800 | 343 | 414 | 0 | 1 | 343 | 415 | 0.076 | 0.086* |
| Westbound Right | 0 | 0 | 20 | 0 | 0 | 0 | 20 | 0 | 0.000 | 0.000 |
| Northbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Clearance Interval | | | | | | | | | 0.000* | 0.000* |
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) ——→ | | | | | | | | | 0.34 | 0.41 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | | | | | | | | | A | A |

None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted.

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




PLOT OF INTERSECTION LEG VOLUMES




| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 46 - 24 | 16 - 72 | 52 - 48 | 63 - 43 |
| % of Daily in Peak Hour (AM-PM) | 8 - 10 | 7 - 11 | 10 - 8 | 8 - 10 |

# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

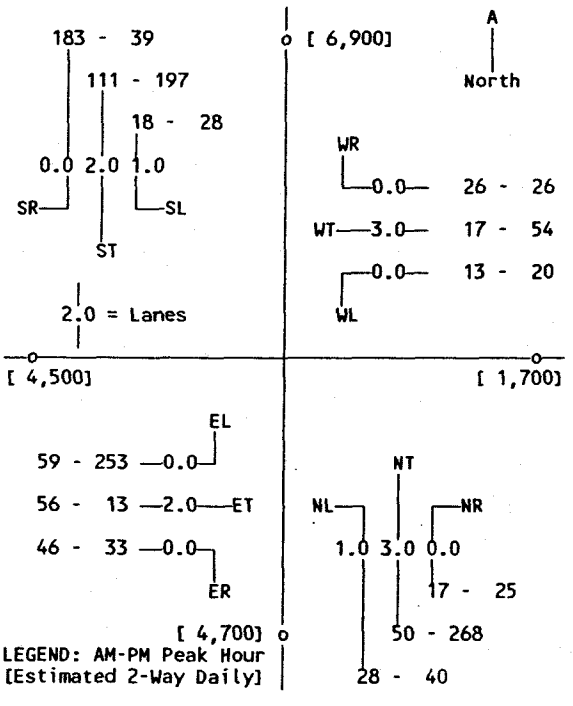
INTERSECTION: SANTA CRUZ DRIVE (NS) and SAN CLEMENTE DRIVE (EW)
LAND USE: EXISTING + APPROVED PROJECTS + PROJECT

COUNT DATE: 01-01-04
GEOMETRICS: Existing

| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 1 | 1600 | 28 | 40 | 0 | 0 | 28 | 40 | 0.018* | 0.025* |
| Northbound Through | 3 | 4800 | 50 | 268 | 0 | 0 | 50 | 268 | 0.014 | 0.061 |
| Northbound Right | 0 | 0 | 17 | 25 | 0 | 0 | 17 | 25 | 0.000 | 0.000 |
| Southbound Left | 1 | 1600 | 18 | 28 | 0 | 0 | 18 | 28 | 0.011 | 0.018 |
| Southbound Through | 2 | 3200 | 111 | 197 | 0 | 0 | 111 | 197 | 0.092* | 0.074* |
| Southbound Right | 0 | 0 | 183 | 38 | 0 | 1 | 183 | 39 | 0.000 | 0.000 |
| Eastbound Left | 0 | 0 | 57 | 252 | 2 | 1 | 59 | 253 | 0.000 | 0.000 |
| Eastbound Through | 2 | 3200 | 56 | 13 | 0 | 0 | 56 | 13 | 0.050* | 0.093* |
| Eastbound Right | 0 | 0 | 46 | 33 | 0 | 0 | 46 | 33 | 0.000 | 0.000 |
| Westbound Left | 0 | 0 | 13 | 20 | 0 | 0 | 13 | 20 | 0.000* | 0.000* |
| Westbound Through | 3 | 4800 | 17 | 54 | 0 | 0 | 17 | 54 | 0.012 | 0.021 |
| Westbound Right | 0 | 0 | 26 | 26 | 0 | 0 | 26 | 26 | 0.000 | 0.000 |
| Northbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Clearance Interval | | | | | | | | | 0.000* | 0.000* |
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) ——→ | | | | | | | | | 0.16 | 0.19 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | | | | | | | | | A | A |

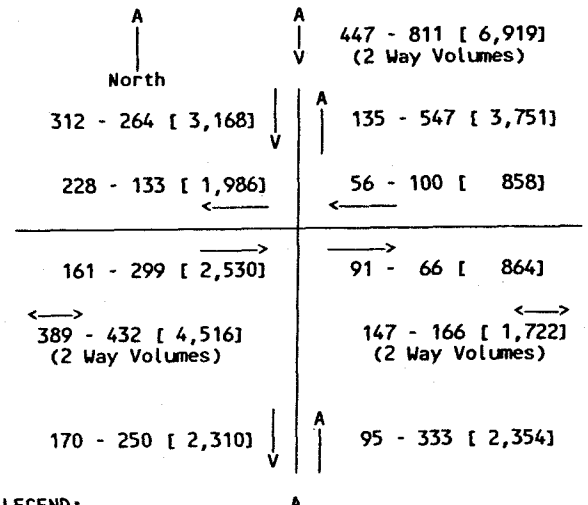
None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted.

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




LEGEND: AM-PM Peak Hour
[Estimated 2-Way Daily]

PLOT OF INTERSECTION LEG VOLUMES




LEGEND:
AM-PM Peak Hour [Daily]
Daily = (AM+PM)* 5.5

| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 70 - 33 | 36 - 57 | 38 - 60 | 41 - 69 |
| % of Daily in Peak Hour (AM-PM) | 6 - 12 | 6 - 13 | 9 - 10 | 9 - 10 |

# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

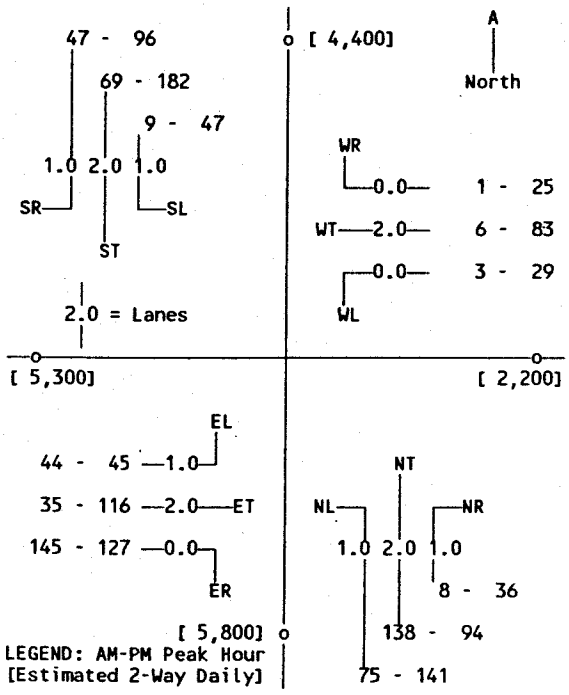
INTERSECTION: NEWPORT CENTER DRIVE (NS) and SANTA BARBARA DRIVE (EW)
LAND USE: EXISTING + APPROVED PROJECTS + PROJECT

COUNT DATE: 01-01-04
GEOMETRICS: Existing

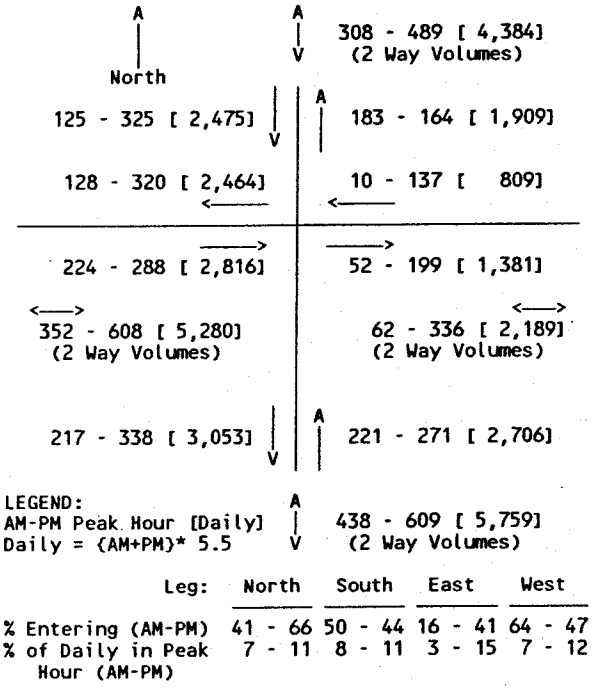
| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 1 | 1600 | 73 | 135 | 2 | 6 | 75 | 141 | 0.047* | 0.088* |
| Northbound Through | 2 | 3200 | 138 | 94 | 0 | 0 | 138 | 94 | 0.043 | 0.029 |
| Northbound Right | 1 | 1600 | 8 | 36 | 0 | 0 | 8 | 36 | 0.005 | 0.023 |
| Southbound Left | 1 | 1600 | 9 | 47 | 0 | 0 | 9 | 47 | 0.006 | 0.029 |
| Southbound Through | 2 | 3200 | 69 | 182 | 0 | 0 | 69 | 182 | 0.022* | 0.057* |
| Southbound Right | 1 | 1600 | 46 | 94 | 1 | 2 | 47 | 96 | 0.029 | 0.060 |
| Eastbound Left | 1 | 1600 | 41 | 43 | 3 | 2 | 44 | 45 | 0.028 | 0.028 |
| Eastbound Through | 2 | 3200 | 33 | 115 | 2 | 1 | 35 | 116 | 0.056* | 0.076* |
| Eastbound Right | 0 | 0 | 136 | 123 | 9 | 4 | 145 | 127 | 0.000 | 0.000 |
| Westbound Left | 0 | 0 | 3 | 29 | 0 | 0 | 3 | 29 | 0.000* | 0.000* |
| Westbound Through | 2 | 3200 | 6 | 82 | 0 | 1 | 6 | 83 | 0.003 | 0.043 |
| Westbound Right | 0 | 0 | 1 | 25 | 0 | 0 | 1 | 25 | 0.000 | 0.000 |
| Northbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Clearance Interval | | | | | | | | | 0.000* | 0.000* |
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) ——> | | | | | | | | | 0.13 | 0.22 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | | | | | | | | | A | A |

None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted.

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




PLOT OF INTERSECTION LEG VOLUMES




| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 41 - 66 | 50 - 44 | 16 - 41 | 64 - 47 |
| % of Daily in Peak Hour (AM-PM) | 7 - 11 | 8 - 11 | 3 - 15 | 7 - 12 |

# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

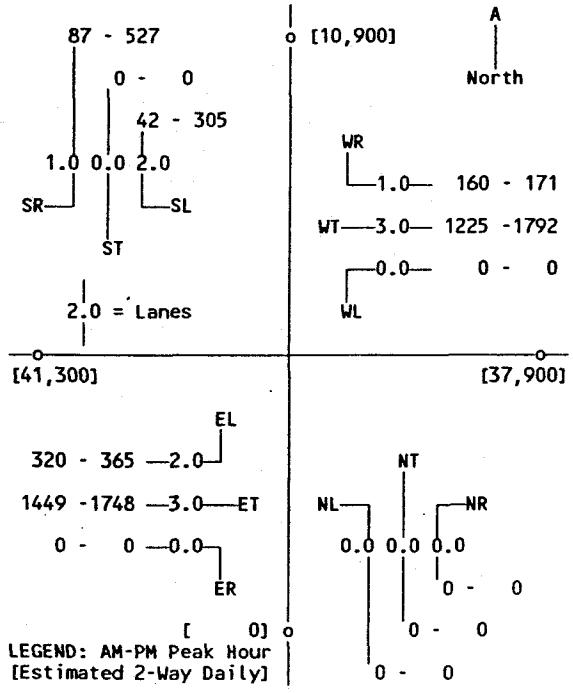
INTERSECTION: NEWPORT CENTER DRIVE (NS) and COAST HIGHWAY (EW)
LAND USE: EXISTING + APPROVED PROJECTS + PROJECT

COUNT DATE: 01-01-04
GEOMETRICS: Existing

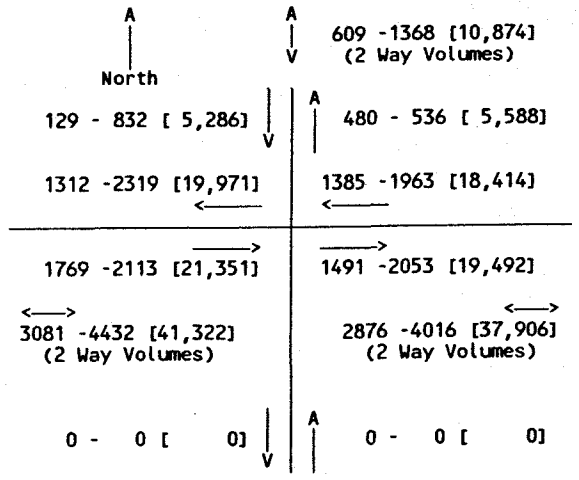
| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000 | 0.000 |
| Northbound Through | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000* | 0.000* |
| Northbound Right | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000 | 0.000 |
| Southbound Left | 2 | 3200 | 37 | 300 | 5 | 5 | 42 | 305 | 0.013* | 0.095* |
| Southbound Through | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000 | 0.000 |
| Southbound Right | Free 1 | 1600 | 78 | 496 | 9 | 31 | 87 | 527 | 0.054 | 0.329 |
| Eastbound Left | 2 | 3200 | 315 | 352 | 5 | 13 | 320 | 365 | 0.100* | 0.114* |
| Eastbound Through | 3 | 4800 | 1428 | 1714 | 21 | 34 | 1449 | 1748 | 0.302 | 0.364 |
| Eastbound Right | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000 | 0.000 |
| Westbound Left | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000 | 0.000 |
| Westbound Through | 3 | 4800 | 1194 | 1774 | 31 | 18 | 1225 | 1792 | 0.255* | 0.373* |
| Westbound Right | Free 1 | 1600 | 158 | 161 | 2 | 10 | 160 | 171 | 0.100 | 0.107 |
| Northbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Clearance Interval | | | | | | | | | 0.000* | 0.000* |
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) ——> | | | | | | | | | 0.37 | 0.58 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | | | | | | | | | A | A |

None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted.

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




PLOT OF INTERSECTION LEG VOLUMES




| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 21 - 61 | 0 - 0 | 48 - 49 | 57 - 48 |
| % of Daily in Peak Hour (AM-PM) | 6 - 13 | 0 - 0 | 8 - 11 | 7 - 11 |

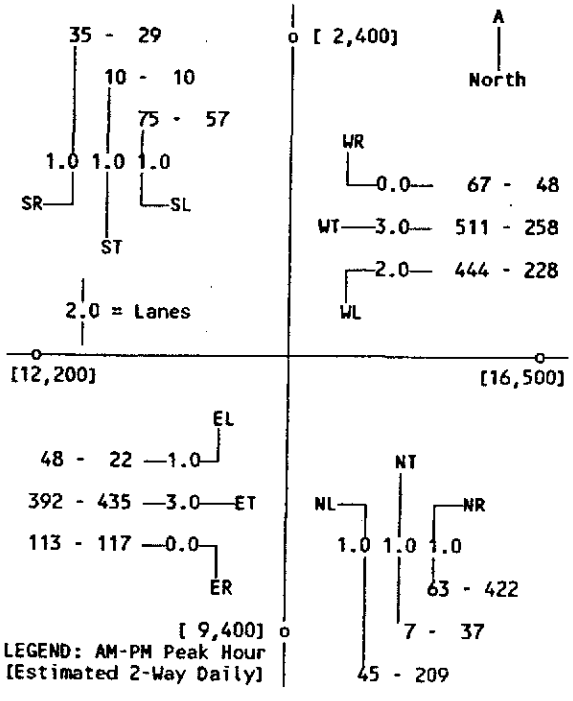
# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

INTERSECTION: SANTA ROSA DRIVE/BIG CANYON DRIVE (NS) and SAN JOAQUIN HILLS ROA — COUNT DATE: 01-01-04
LAND USE: EXISTING + APPROVED PROJECTS + PROJECT — GEOMETRICS: Existing

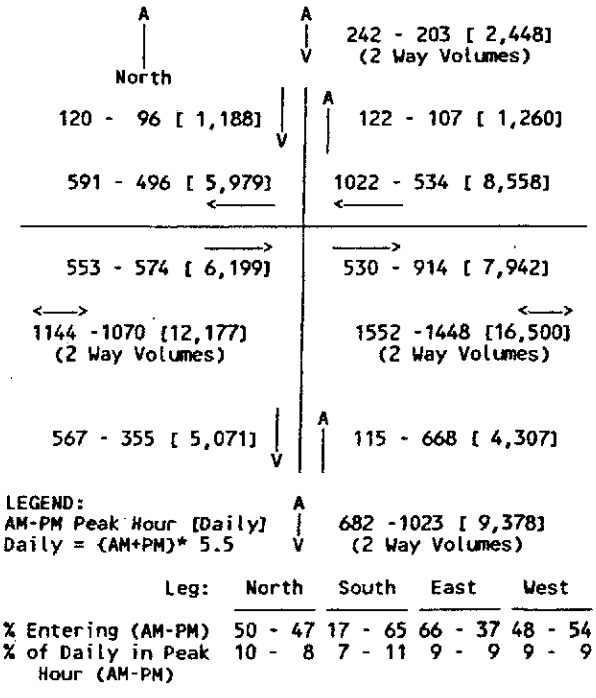
| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 1 | 1600 | 36 | 203 | 9 | 6 | 45 | 209 | 0.028 | 0.131 |
| Northbound Through | 1 | 1600 | 7 | 37 | 0 | 0 | 7 | 37 | 0.004 | 0.023 |
| Northbound Right | 1 | 1600 | 59 | 401 | 4 | 21 | 63 | 422 | 0.039* | 0.264* |
| Southbound Left | 1 | 1600 | 75 | 57 | 0 | 0 | 75 | 57 | 0.047* | 0.036* |
| Southbound Through | 1 | 1600 | 10 | 10 | 0 | 0 | 10 | 10 | 0.006 | 0.006 |
| Southbound Right | 1 | 1600 | 35 | 29 | 0 | 0 | 35 | 29 | 0.022 | 0.018 |
| Eastbound Left | 1 | 1600 | 47 | 22 | 1 | 0 | 48 | 22 | 0.030 | 0.014 |
| Eastbound Through | 3 | 4800 | 389 | 433 | 3 | 2 | 392 | 435 | 0.105* | 0.115* |
| Eastbound Right | 0 | 0 | 107 | 109 | 6 | 8 | 113 | 117 | 0.000 | 0.000 |
| Westbound Left | 2 | 3200 | 443 | 214 | 1 | 14 | 444 | 228 | 0.139* | 0.071* |
| Westbound Through | 3 | 4800 | 510 | 256 | 1 | 2 | 511 | 258 | 0.120 | 0.064 |
| Westbound Right | 0 | 0 | 67 | 48 | 0 | 0 | 67 | 48 | 0.000 | 0.000 |
| Northbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Clearance Interval | | | | | | | | | 0.000* | 0.000* |
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) | | | | | | | | | 0.33 | 0.49 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | | | | | | | | | A | A |

None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted.

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




PLOT OF INTERSECTION LEG VOLUMES




| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 50 - 47 | 17 - 65 | 66 - 37 | 48 - 54 |
| % of Daily in Peak Hour (AM-PM) | 10 - 8 | 7 - 11 | 9 - 9 | 9 - 9 |

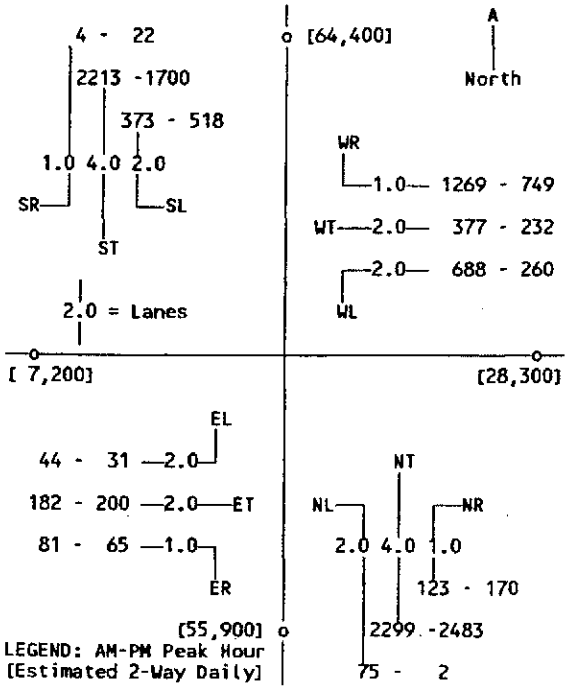
# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

INTERSECTION: MACARTHUR BOULEVARD (NS) and FORD ROAD (EW)
LAND USE: EXISTING + APPROVED PROJECTS + PROJECT

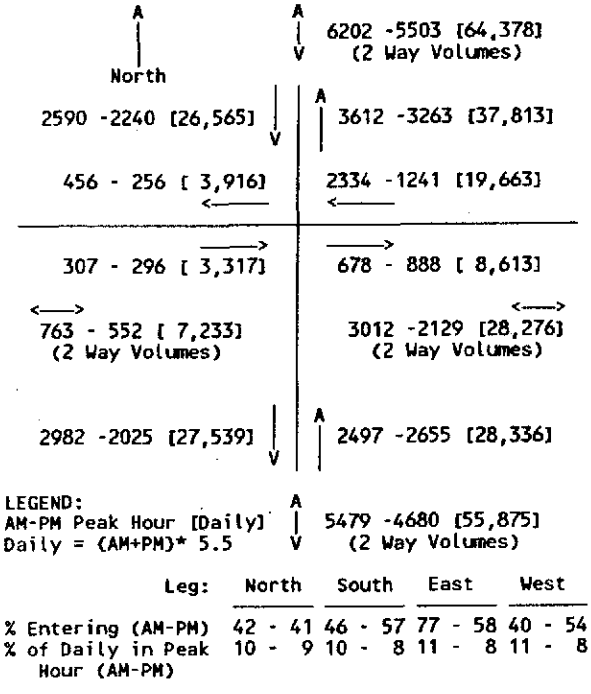
COUNT DATE: 01-01-04
GEOMETRICS: Existing

| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 2 | 3200 | 74 | 0 | 1 | 2 | 75 | 2 | 0.023 | 0.001 |
| Northbound Through | 4 | 6400 | 2296 | 2468 | 3 | 15 | 2299 | 2483 | 0.359* | 0.388* |
| Northbound Right | Free 1 | 1600 | 121 | 161 | 2 | 9 | 123 | 170 | 0.077 | 0.106 |
| Southbound Left | 2 | 3200 | 373 | 517 | 0 | 1 | 373 | 518 | 0.117* | 0.162* |
| Southbound Through | 4 | 6400 | 2210 | 1686 | 3 | 14 | 2213 | 1700 | 0.346 | 0.266 |
| Southbound Right | Free 1 | 1600 | 4 | 21 | 0 | 1 | 4 | 22 | 0.003 | 0.014 |
| Eastbound Left | 2 | 3200 | 43 | 31 | 1 | 0 | 44 | 31 | 0.014 | 0.010 |
| Eastbound Through | 2 | 3200 | 178 | 197 | 4 | 3 | 182 | 200 | 0.057* | 0.063* |
| Eastbound Right | 1 | 1600 | 79 | 64 | 2 | 1 | 81 | 65 | 0.051 | 0.041 |
| Westbound Left | 2 | 3200 | 687 | 257 | 1 | 3 | 688 | 260 | 0.215* | 0.081* |
| Westbound Through | 2 | 3200 | 376 | 229 | 1 | 3 | 377 | 232 | 0.118 | 0.073 |
| Westbound Right | Free 1 | 1600 | 1268 | 749 | 1 | 0 | 1269 | 749 | 0.793 | 0.468 |
| Northbound Right Turn Adjustment | None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted. | | | | | | | | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Clearance Interval | | | | | | | | | 0.000* | 0.000* |
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) ——> | | | | | | | | | 0.75 | 0.69 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | | | | | | | | | C | B |

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




PLOT OF INTERSECTION LEG VOLUMES




| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 42 - 41 | 46 - 57 | 77 - 58 | 40 - 54 |
| % of Daily in Peak Hour (AM-PM) | 10 - 9 | 10 - 8 | 11 - 8 | 11 - 8 |

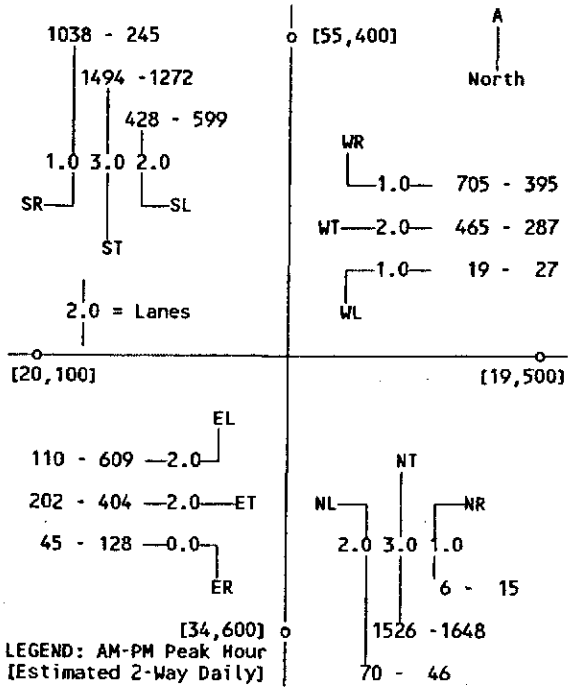
# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

INTERSECTION: MACARTHUR BOULEVARD (NS) and SAN JOAQUIN HILLS ROAD (EW)
LAND USE: EXISTING + APPROVED PROJECTS + PROJECT

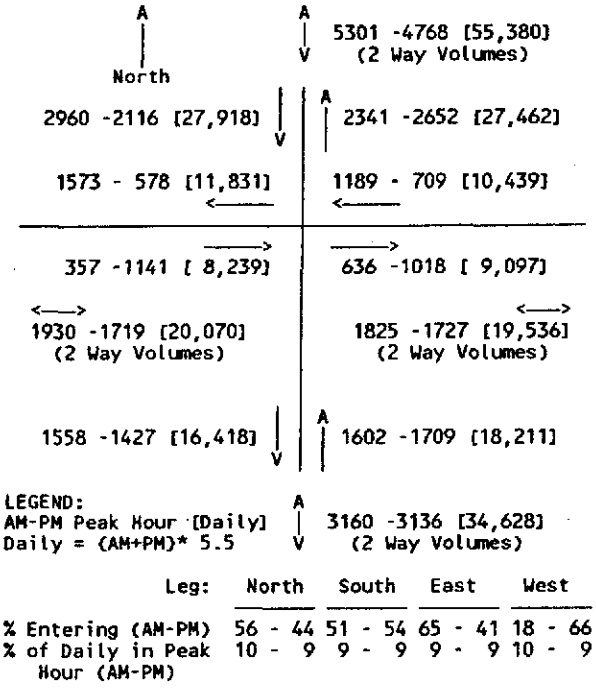
COUNT DATE: 01-01-04
GEOMETRICS: Existing

| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 2 | 3200 | 70 | 46 | 0 | 0 | 70 | 46 | 0.022 | 0.014 |
| Northbound Through | 3 | 4800 | 1526 | 1645 | 0 | 3 | 1526 | 1648 | 0.318* | 0.343* |
| Northbound Right | 1 | 1600 | 6 | 15 | 0 | 0 | 6 | 15 | 0.004 | 0.009 |
| Southbound Left | 2 | 3200 | 428 | 599 | 0 | 0 | 428 | 599 | 0.134* | 0.187* |
| Southbound Through | 3 | 4800 | 1491 | 1269 | 3 | 3 | 1494 | 1272 | 0.311 | 0.265 |
| Southbound Right | Free 1 | 1600 | 1036 | 231 | 2 | 14 | 1038 | 245 | 0.649 | 0.153 |
| Eastbound Left | 2 | 3200 | 107 | 588 | 3 | 21 | 110 | 609 | 0.034* | 0.190* |
| Eastbound Through | 2 | 3200 | 199 | 403 | 3 | 1 | 202 | 404 | 0.077 | 0.166 |
| Eastbound Right | 0 | 0 | 45 | 128 | 0 | 0 | 45 | 128 | 0.000 | 0.000 |
| Westbound Left | 1 | 1600 | 19 | 27 | 0 | 0 | 19 | 27 | 0.012 | 0.017 |
| Westbound Through | 2 | 3200 | 464 | 285 | 1 | 2 | 465 | 287 | 0.145* | 0.090* |
| Westbound Right | Free 1 | 1600 | 705 | 395 | 0 | 0 | 705 | 395 | 0.441 | 0.247 |
| Northbound Right Turn Adjustment | None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted. | | | | | | | | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Clearance Interval | | | | | | | | | 0.000* | 0.000* |
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) ——> | | | | | | | | | 0.63 | 0.81 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | | | | | | | | | B | D |

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




PLOT OF INTERSECTION LEG VOLUMES




| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 56 - 44 | 51 - 54 | 65 - 41 | 18 - 66 |
| % of Daily in Peak Hour (AM-PM) | 10 - 9 | 9 - 9 | 9 - 9 | 10 - 9 |

## Existing + Approved Projects
## + Cumulative Projects

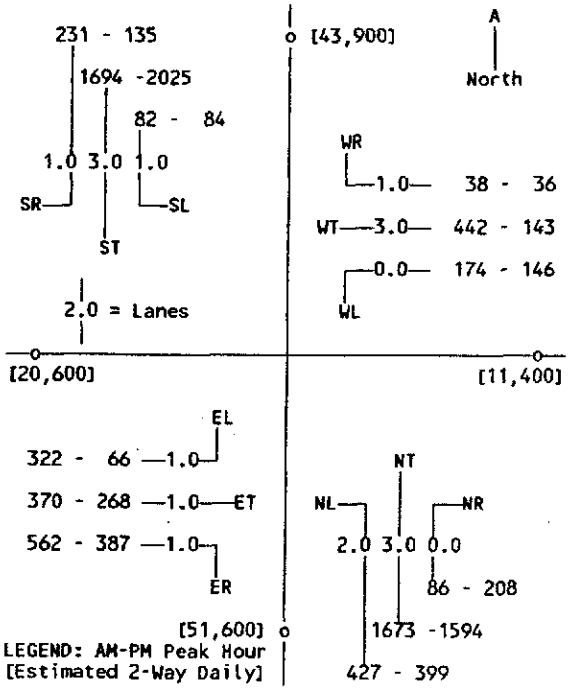
# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

INTERSECTION: JAMBOREE ROAD (NS) and EASTBLUFF DRIVE/FORD ROAD (EW)
LAND USE: EXISTING + APPROVED PROJECTS + CUMULATIVE PROJECTS

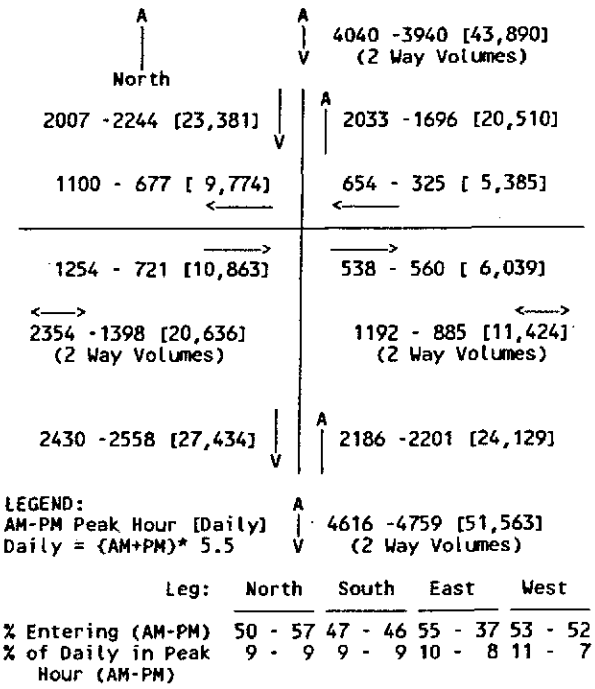
COUNT DATE: 01-01-04
GEOMETRICS: Existing

| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 2 | 3200 | 399 | 388 | 28 | 11 | 427 | 399 | 0.133* | 0.125* |
| Northbound Through | 3 | 4800 | 1388 | 1324 | 285 | 270 | 1673 | 1594 | 0.366 | 0.375 |
| Northbound Right | 0 | 0 | 67 | 146 | 19 | 62 | 86 | 208 | 0.000 | 0.000 |
| Southbound Left | 1 | 1600 | 76 | 61 | 6 | 23 | 82 | 84 | 0.051 | 0.053 |
| Southbound Through | 3 | 4800 | 1517 | 1694 | 177 | 331 | 1694 | 2025 | 0.353* | 0.422* |
| Southbound Right | 1 | 1600 | 215 | 133 | 16 | 2 | 231 | 135 | 0.144 | 0.084 |
| Eastbound Left | 1 | 1600 | 311 | 64 | 11 | 2 | 322 | 66 | 0.201 | 0.041 |
| Eastbound Through | 1 | 1600 | 346 | 204 | 24 | 64 | 370 | 268 | 0.231* | 0.168* |
| Eastbound Right | Free 1 | 1600 | 546 | 373 | 16 | 14 | 562 | 387 | 0.351 | 0.242 |
| Westbound Left | 0 | 0 | 116 | 110 | 58 | 36 | 174 | 146 | 0.000 | 0.000 |
| Westbound Through | 3 | 4800 | 377 | 100 | 65 | 43 | 442 | 143 | 0.128* | 0.060* |
| Westbound Right | 1 | 1600 | 15 | 23 | 23 | 13 | 38 | 36 | 0.024 | 0.023 |
| Northbound Right Turn Adjustment | | | None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted. | | | | | | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Clearance Interval | | | | | | | | | 0.000* | 0.000* |
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) ——> | | | | | | | | | 0.85 | 0.78 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | | | | | | | | | D | C |

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




PLOT OF INTERSECTION LEG VOLUMES




| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 50 - 57 | 47 - 46 | 55 - 37 | 53 - 52 |
| % of Daily in Peak Hour (AM-PM) | 9 - 9 | 9 - 9 | 10 - 8 | 11 - 7 |

# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

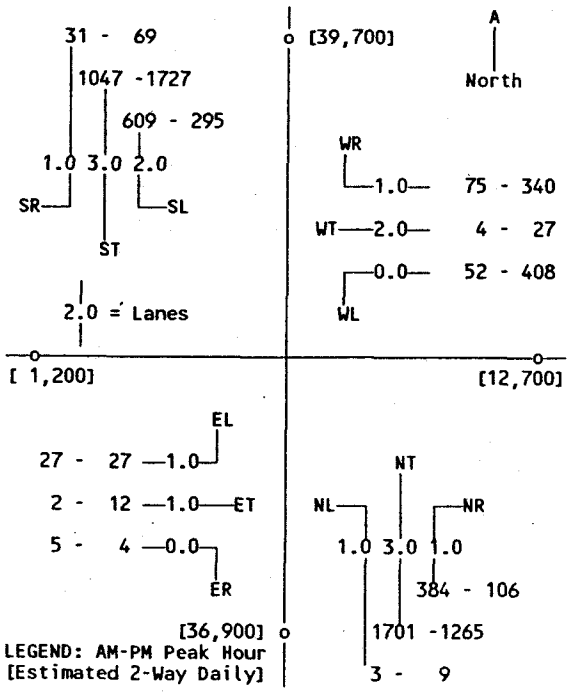
INTERSECTION: JAMBOREE ROAD (NS) and SANTA BARBARA DRIVE (EW)
LAND USE: EXISTING + APPROVED PROJECTS + CUMULATIVE PROJECTS

COUNT DATE: 01-01-04
GEOMETRICS: Existing

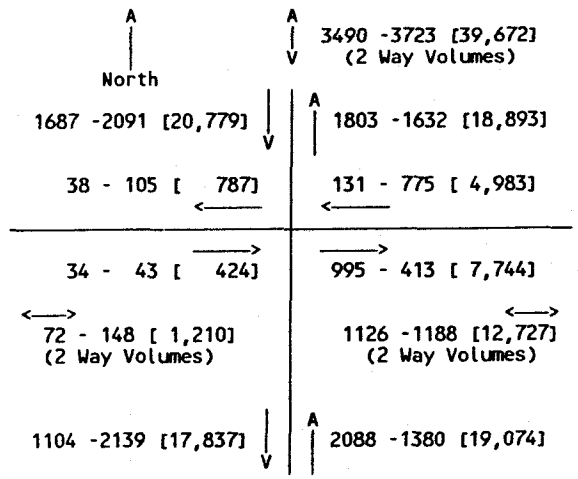
| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 1 | 1600 | 3 | 9 | 0 | 0 | 3 | 9 | 0.002 | 0.006* |
| Northbound Through | 3 | 4800 | 1426 | 990 | 275 | 275 | 1701 | 1265 | 0.354* | 0.264 |
| Northbound Right | 1 | 1600 | 381 | 104 | 3 | 2 | 384 | 106 | 0.240 | 0.066 |
| Southbound Left | 2 | 3200 | 608 | 291 | 1 | 4 | 609 | 295 | 0.190* | 0.092 |
| Southbound Through | 3 | 4800 | 819 | 1415 | 228 | 312 | 1047 | 1727 | 0.218 | 0.360* |
| Southbound Right | 1 | 1600 | 30 | 63 | 1 | 6 | 31 | 69 | 0.019 | 0.043 |
| Eastbound Left | 1 | 1600 | 21 | 25 | 6 | 2 | 27 | 27 | 0.017* | 0.017* |
| Eastbound Through | 1 | 1600 | 2 | 11 | 0 | 1 | 2 | 12 | 0.004 | 0.010 |
| Eastbound Right | 0 | 0 | 5 | 4 | 0 | 0 | 5 | 4 | 0.000 | 0.000 |
| Westbound Left | 0 | 0 | 50 | 406 | 2 | 2 | 52 | 408 | 0.000 | 0.000 |
| Westbound Through | 2 | 3200 | 4 | 26 | 0 | 1 | 4 | 27 | 0.018 | 0.136 |
| Westbound Right | 1 | 1600 | 71 | 339 | 4 | 1 | 75 | 340 | 0.047* | 0.213* |
| Northbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Clearance Interval | | | | | | | | | 0.000* | 0.000* |
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) ——> | | | | | | | | | 0.61 | 0.60 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | | | | | | | | | B | A |

None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted.

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




PLOT OF INTERSECTION LEG VOLUMES




| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 48 - 56 | 65 - 39 | 12 - 65 | 47 - 29 |
| % of Daily in Peak Hour (AM-PM) | 9 - 9 | 9 - 10 | 9 - 9 | 6 - 12 |

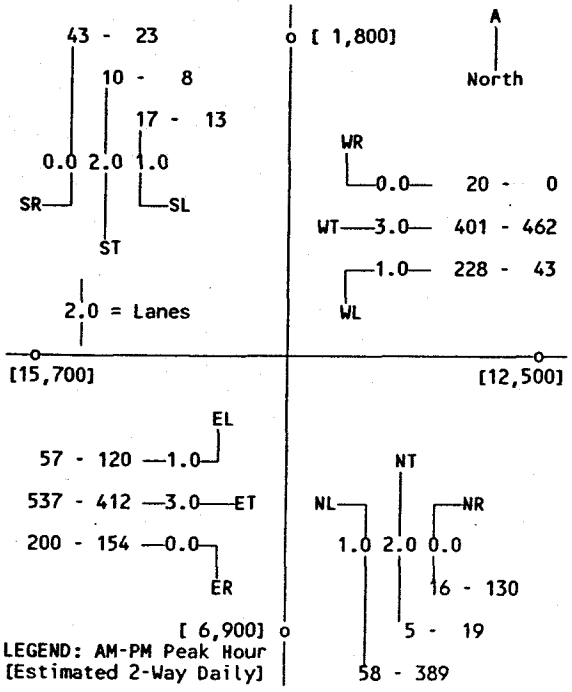
# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

INTERSECTION: SANTA CRUZ DRIVE (NS) and SAN JOAQUIN HILLS ROAD (EW) — COUNT DATE: 01-01-04
LAND USE: EXISTING + APPROVED PROJECTS + CUMULATIVE PROJECTS — GEOMETRICS: Existing

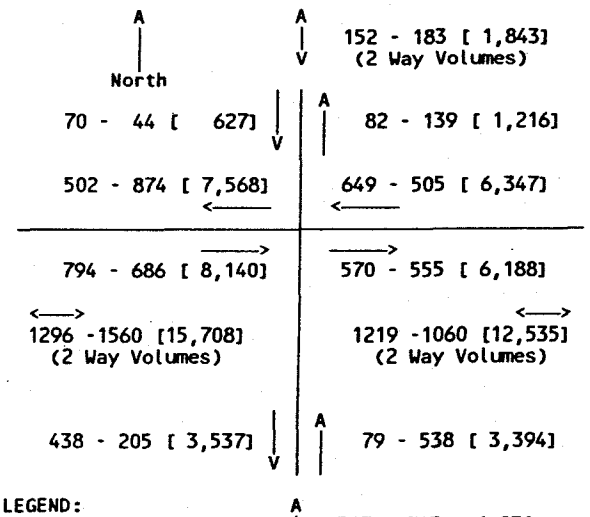
| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 1 | 1600 | 57 | 389 | 1 | 0 | 58 | 389 | 0.036* | 0.243* |
| Northbound Through | 2 | 3200 | 5 | 19 | 0 | 0 | 5 | 19 | 0.007 | 0.047 |
| Northbound Right | 0 | 0 | 15 | 130 | 1 | 0 | 16 | 130 | 0.000 | 0.000 |
| Southbound Left | 1 | 1600 | 17 | 12 | 0 | 1 | 17 | 13 | 0.011 | 0.008 |
| Southbound Through | 2 | 3200 | 9 | 8 | 1 | 0 | 10 | 8 | 0.017* | 0.010* |
| Southbound Right | 0 | 0 | 43 | 23 | 0 | 0 | 43 | 23 | 0.000 | 0.000 |
| Eastbound Left | 1 | 1600 | 57 | 120 | 0 | 0 | 57 | 120 | 0.036 | 0.075* |
| Eastbound Through | 3 | 4800 | 511 | 358 | 26 | 54 | 537 | 412 | 0.154* | 0.118 |
| Eastbound Right | 0 | 0 | 200 | 153 | 0 | 1 | 200 | 154 | 0.000 | 0.000 |
| Westbound Left | 1 | 1600 | 227 | 43 | 1 | 0 | 228 | 43 | 0.143* | 0.027 |
| Westbound Through | 3 | 4800 | 343 | 414 | 58 | 48 | 401 | 462 | 0.088 | 0.096* |
| Westbound Right | 0 | 0 | 20 | 0 | 0 | 0 | 20 | 0 | 0.000 | 0.000 |
| Northbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Clearance Interval | | | | | | | | | 0.000* | 0.000* |
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) ——> | | | | | | | | | 0.35 | 0.42 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | | | | | | | | | A | A |

None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted.

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




PLOT OF INTERSECTION LEG VOLUMES




| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 46 - 24 | 15 - 72 | 53 - 48 | 61 - 44 |
| % of Daily in Peak Hour (AM-PM) | 8 - 10 | 7 - 11 | 10 - 8 | 8 - 10 |

Kunzman Associates

# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

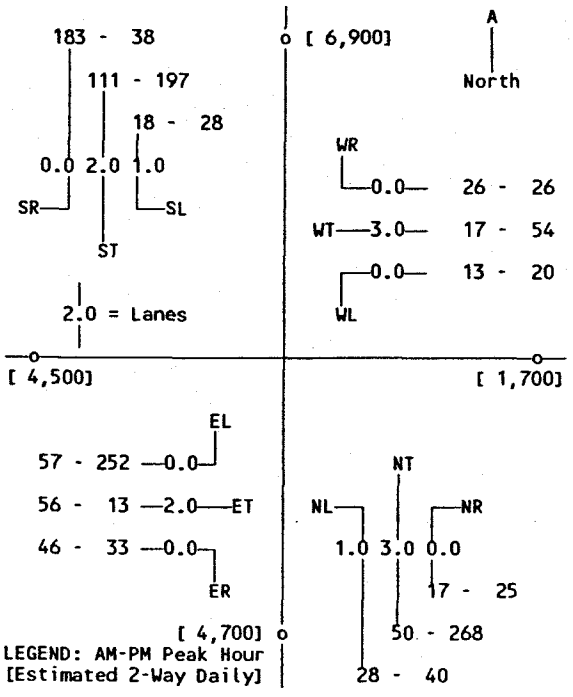
INTERSECTION: SANTA CRUZ DRIVE (NS) and SAN CLEMENTE DRIVE (EW)
LAND USE: EXISTING + APPROVED PROJECTS + CUMULATIVE PROJECTS

COUNT DATE: 01-01-04
GEOMETRICS: Existing

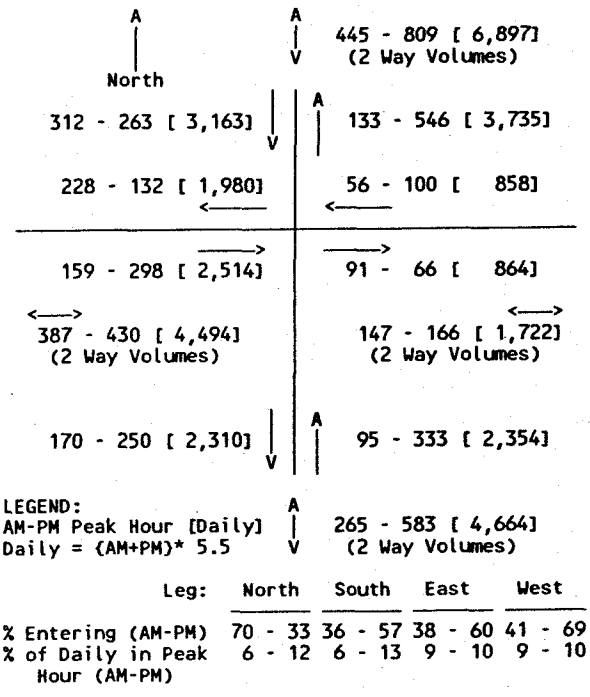
| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 1 | 1600 | 28 | 40 | 0 | 0 | 28 | 40 | 0.018* | 0.025* |
| Northbound Through | 3 | 4800 | 50 | 268 | 0 | 0 | 50 | 268 | 0.014 | 0.061 |
| Northbound Right | 0 | 0 | 17 | 25 | 0 | 0 | 17 | 25 | 0.000 | 0.000 |
| Southbound Left | 1 | 1600 | 18 | 28 | 0 | 0 | 18 | 28 | 0.011 | 0.018 |
| Southbound Through | 2 | 3200 | 111 | 197 | 0 | 0 | 111 | 197 | 0.092* | 0.073* |
| Southbound Right | 0 | 0 | 183 | 38 | 0 | 0 | 183 | 38 | 0.000 | 0.000 |
| Eastbound Left | 0 | 0 | 57 | 252 | 0 | 0 | 57 | 252 | 0.000 | 0.000 |
| Eastbound Through | 2 | 3200 | 56 | 13 | 0 | 0 | 56 | 13 | 0.050* | 0.093* |
| Eastbound Right | 0 | 0 | 46 | 33 | 0 | 0 | 46 | 33 | 0.000 | 0.000 |
| Westbound Left | 0 | 0 | 13 | 20 | 0 | 0 | 13 | 20 | 0.000* | 0.000* |
| Westbound Through | 3 | 4800 | 17 | 54 | 0 | 0 | 17 | 54 | 0.012 | 0.021 |
| Westbound Right | 0 | 0 | 26 | 26 | 0 | 0 | 26 | 26 | 0.000 | 0.000 |
| Northbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Clearance Interval | | | | | | | | | 0.000* | 0.000* |
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) ——> | | | | | | | | | 0.16 | 0.19 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | | | | | | | | | A | A |

None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted.

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




PLOT OF INTERSECTION LEG VOLUMES




| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 70 - 33 | 36 - 57 | 38 - 60 | 41 - 69 |
| % of Daily in Peak Hour (AM-PM) | 6 - 12 | 6 - 13 | 9 - 10 | 9 - 10 |

# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

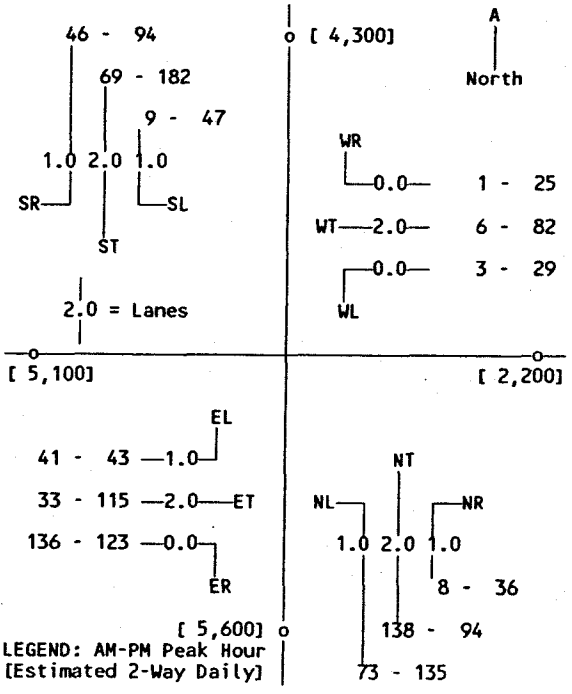
INTERSECTION: NEWPORT CENTER DRIVE (NS) and SANTA BARBARA DRIVE (EW)
LAND USE: EXISTING + APPROVED PROJECTS + CUMULATIVE PROJECTS

COUNT DATE: 01-01-04
GEOMETRICS: Existing

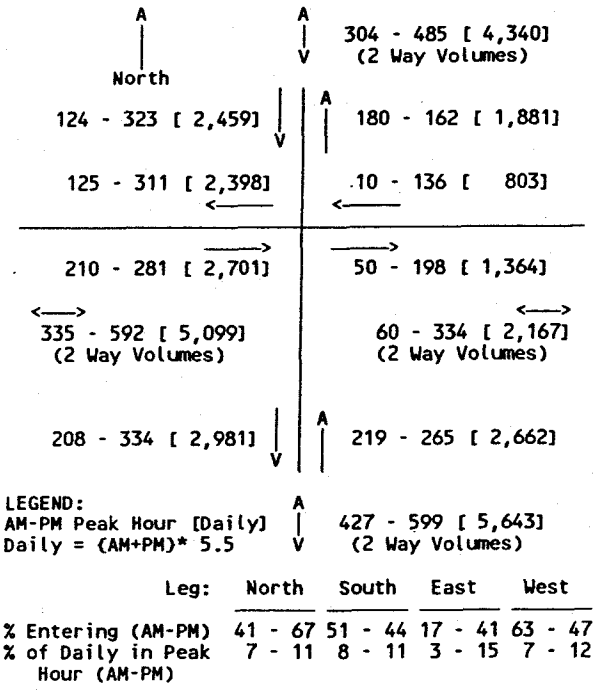
| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 1 | 1600 | 73 | 135 | 0 | 0 | 73 | 135 | 0.046* | 0.084* |
| Northbound Through | 2 | 3200 | 138 | 94 | 0 | 0 | 138 | 94 | 0.043 | 0.029 |
| Northbound Right | 1 | 1600 | 8 | 36 | 0 | 0 | 8 | 36 | 0.005 | 0.023 |
| Southbound Left | 1 | 1600 | 9 | 47 | 0 | 0 | 9 | 47 | 0.006 | 0.029 |
| Southbound Through | 2 | 3200 | 69 | 182 | 0 | 0 | 69 | 182 | 0.022* | 0.057* |
| Southbound Right | 1 | 1600 | 46 | 94 | 0 | 0 | 46 | 94 | 0.029 | 0.059 |
| Eastbound Left | 1 | 1600 | 41 | 43 | 0 | 0 | 41 | 43 | 0.026 | 0.027* |
| Eastbound Through | 2 | 3200 | 33 | 115 | 0 | 0 | 33 | 115 | 0.053* | 0.074 |
| Eastbound Right | 0 | 0 | 136 | 123 | 0 | 0 | 136 | 123 | 0.000 | 0.000 |
| Westbound Left | 0 | 0 | 3 | 29 | 0 | 0 | 3 | 29 | 0.000* | 0.000 |
| Westbound Through | 2 | 3200 | 6 | 82 | 0 | 0 | 6 | 82 | 0.003 | 0.043* |
| Westbound Right | 0 | 0 | 1 | 25 | 0 | 0 | 1 | 25 | 0.000 | 0.000 |
| Northbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Clearance Interval | | | | | | | | | 0.000* | 0.000* |
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) ——> | | | | | | | | | 0.12 | 0.21 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | | | | | | | | | A | A |

None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted.

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




PLOT OF INTERSECTION LEG VOLUMES




| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 41 - 67 | 51 - 44 | 17 - 41 | 63 - 47 |
| % of Daily in Peak Hour (AM-PM) | 7 - 11 | 8 - 11 | 3 - 15 | 7 - 12 |

# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

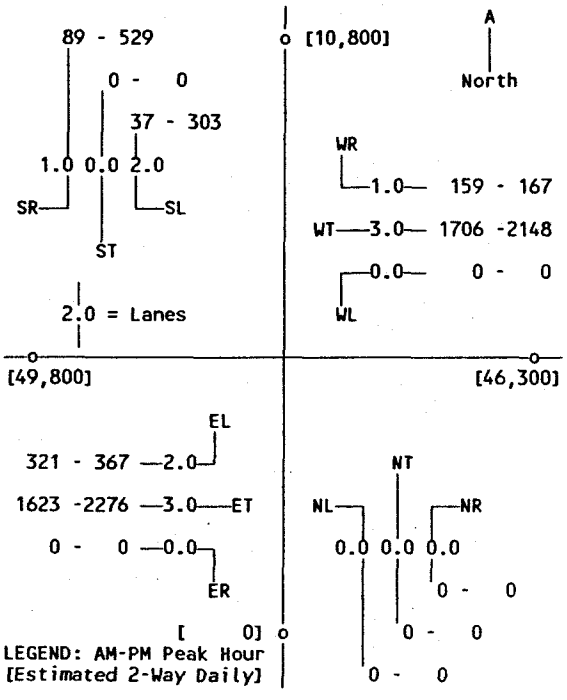
INTERSECTION: NEWPORT CENTER DRIVE (NS) and COAST HIGHWAY (EW)
LAND USE: EXISTING + APPROVED PROJECTS + CUMULATIVE PROJECTS

COUNT DATE: 01-01-04
GEOMETRICS: Existing

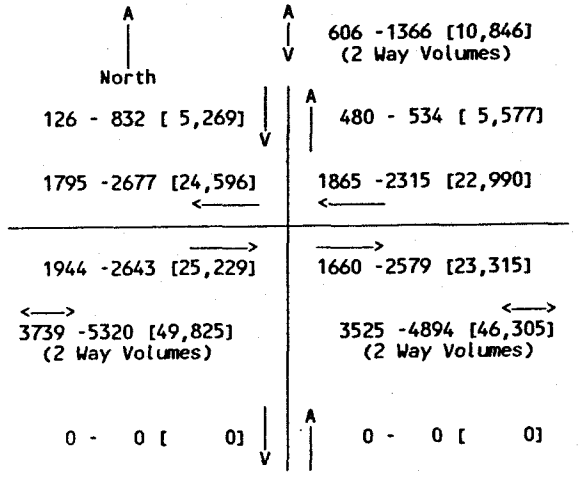
| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000 | 0.000 |
| Northbound Through | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000* | 0.000* |
| Northbound Right | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000 | 0.000 |
| Southbound Left | 2 | 3200 | 37 | 300 | 0 | 3 | 37 | 303 | 0.012* | 0.095* |
| Southbound Through | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000 | 0.000 |
| Southbound Right | Free 1 | 1600 | 78 | 496 | 11 | 33 | 89 | 529 | 0.056 | 0.331 |
| Eastbound Left | 2 | 3200 | 315 | 352 | 6 | 15 | 321 | 367 | 0.100* | 0.115* |
| Eastbound Through | 3 | 4800 | 1428 | 1714 | 195 | 562 | 1623 | 2276 | 0.338 | 0.474 |
| Eastbound Right | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000 | 0.000 |
| Westbound Left | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000 | 0.000 |
| Westbound Through | 3 | 4800 | 1194 | 1774 | 512 | 374 | 1706 | 2148 | 0.355* | 0.448* |
| Westbound Right | Free 1 | 1600 | 158 | 161 | 1 | 6 | 159 | 167 | 0.099 | 0.104 |
| Northbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Clearance Interval | | | | | | | | | 0.000* | 0.000* |
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) ——> | | | | | | | | | 0.47 | 0.66 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | | | | | | | | | A | B |

None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted.

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




PLOT OF INTERSECTION LEG VOLUMES




| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 21 - 61 | 0 - 0 | 53 - 47 | 52 - 50 |
| % of Daily in Peak Hour (AM-PM) | 6 - 13 | 0 - 0 | 8 - 11 | 8 - 11 |

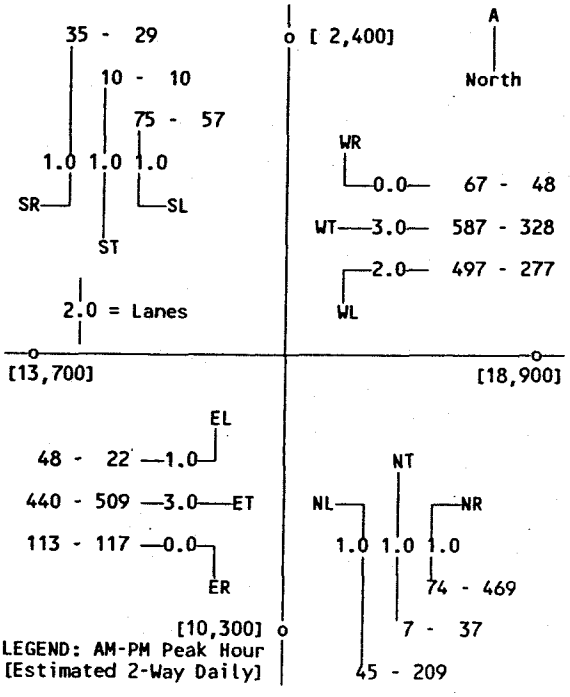
# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

INTERSECTION: SANTA ROSA DRIVE/BIG CANYON DRIVE (NS) and SAN JOAQUIN HILLS ROA — COUNT DATE: 01-01-04
LAND USE: EXISTING + APPROVED PROJECTS + CUMULATIVE PROJECTS — GEOMETRICS: Existing

| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 1 | 1600 | 36 | 203 | 9 | 6 | 45 | 209 | 0.028 | 0.131 |
| Northbound Through | 1 | 1600 | 7 | 37 | 0 | 0 | 7 | 37 | 0.004 | 0.023 |
| Northbound Right | 1 | 1600 | 59 | 401 | 15 | 68 | 74 | 469 | 0.046* | 0.293* |
| Southbound Left | 1 | 1600 | 75 | 57 | 0 | 0 | 75 | 57 | 0.047* | 0.036* |
| Southbound Through | 1 | 1600 | 10 | 10 | 0 | 0 | 10 | 10 | 0.006 | 0.006 |
| Southbound Right | 1 | 1600 | 35 | 29 | 0 | 0 | 35 | 29 | 0.022 | 0.018 |
| Eastbound Left | 1 | 1600 | 47 | 22 | 1 | 0 | 48 | 22 | 0.030 | 0.014 |
| Eastbound Through | 3 | 4800 | 389 | 433 | 51 | 76 | 440 | 509 | 0.115* | 0.130* |
| Eastbound Right | 0 | 0 | 107 | 109 | 6 | 8 | 113 | 117 | 0.000 | 0.000 |
| Westbound Left | 2 | 3200 | 443 | 214 | 54 | 63 | 497 | 277 | 0.155* | 0.087* |
| Westbound Through | 3 | 4800 | 510 | 256 | 77 | 72 | 587 | 328 | 0.136 | 0.078 |
| Westbound Right | 0 | 0 | 67 | 48 | 0 | 0 | 67 | 48 | 0.000 | 0.000 |
| Northbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Clearance Interval | | | | | | | | | 0.000* | 0.000* |
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) ——→ | | | | | | | | | 0.36 | 0.55 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | | | | | | | | | A | A |

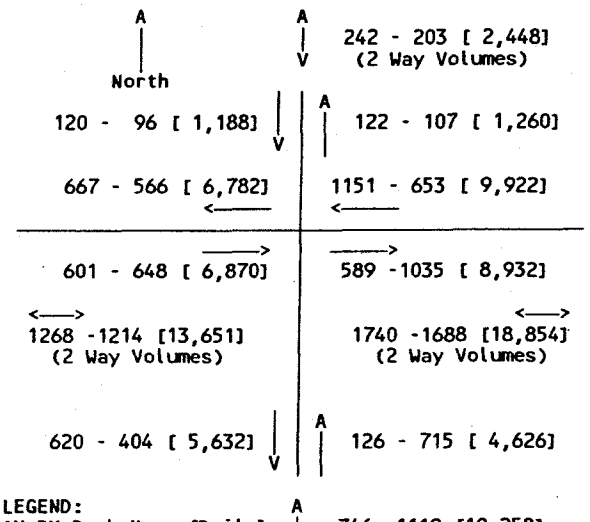
None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted.

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




LEGEND: AM-PM Peak Hour
[Estimated 2-Way Daily]

PLOT OF INTERSECTION LEG VOLUMES




LEGEND:
AM-PM Peak Hour [Daily]
Daily = (AM+PM)* 5.5

| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 50 - 47 | 17 - 64 | 66 - 39 | 47 - 53 |
| % of Daily in Peak Hour (AM-PM) | 10 - 8 | 7 - 11 | 9 - 9 | 9 - 9 |

# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

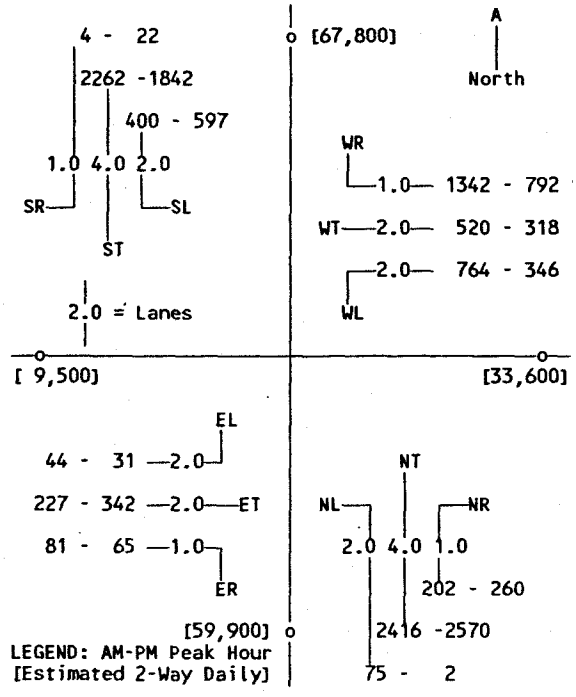
INTERSECTION: MACARTHUR BOULEVARD (NS) and FORD ROAD (EW)
LAND USE: EXISTING + APPROVED PROJECTS + CUMULATIVE PROJECTS

COUNT DATE: 01-01-04
GEOMETRICS: Existing

| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 2 | 3200 | 74 | 0 | 1 | 2 | 75 | 2 | 0.023 | 0.001 |
| Northbound Through | 4 | 6400 | 2296 | 2468 | 120 | 102 | 2416 | 2570 | 0.378* | 0.402* |
| Northbound Right | Free 1 | 1600 | 121 | 161 | 81 | 99 | 202 | 260 | 0.126 | 0.163 |
| Southbound Left | 2 | 3200 | 373 | 517 | 27 | 80 | 400 | 597 | 0.125* | 0.187* |
| Southbound Through | 4 | 6400 | 2210 | 1686 | 52 | 156 | 2262 | 1842 | 0.353 | 0.288 |
| Southbound Right | Free 1 | 1600 | 4 | 21 | 0 | 1 | 4 | 22 | 0.003 | 0.014 |
| Eastbound Left | 2 | 3200 | 43 | 31 | 1 | 0 | 44 | 31 | 0.014 | 0.010 |
| Eastbound Through | 2 | 3200 | 178 | 197 | 49 | 145 | 227 | 342 | 0.071* | 0.107* |
| Eastbound Right | 1 | 1600 | 79 | 64 | 2 | 1 | 81 | 65 | 0.051 | 0.041 |
| Westbound Left | 2 | 3200 | 687 | 257 | 77 | 89 | 764 | 346 | 0.239* | 0.108* |
| Westbound Through | 2 | 3200 | 376 | 229 | 144 | 89 | 520 | 318 | 0.163 | 0.099 |
| Westbound Right | Free 1 | 1600 | 1268 | 749 | 74 | 43 | 1342 | 792 | 0.839 | 0.495 |
| Northbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Clearance Interval | | | | | | | | | 0.000* | 0.000* |
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) | | | | | | | | | 0.81 | 0.80 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | | | | | | | | | D | C |

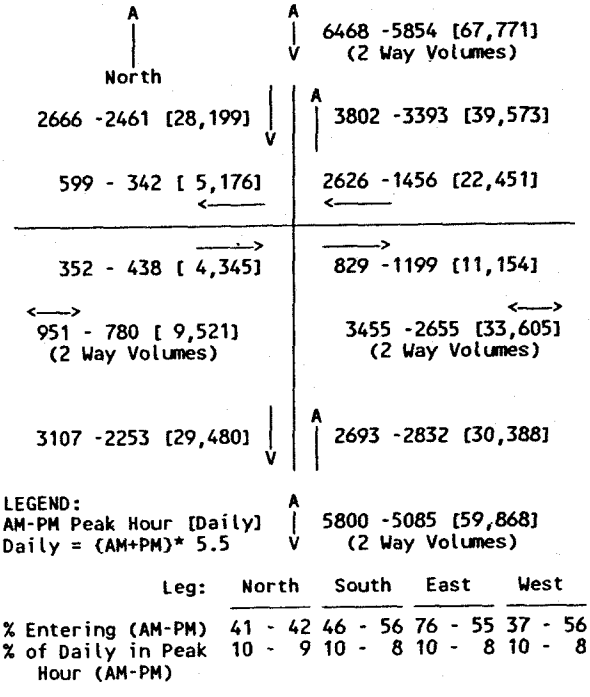
None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted.

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




LEGEND: AM-PM Peak Hour
[Estimated 2-Way Daily]

PLOT OF INTERSECTION LEG VOLUMES




| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 41 - 42 | 46 - 56 | 76 - 55 | 37 - 56 |
| % of Daily in Peak Hour (AM-PM) | 10 - 9 | 10 - 8 | 10 - 8 | 10 - 8 |

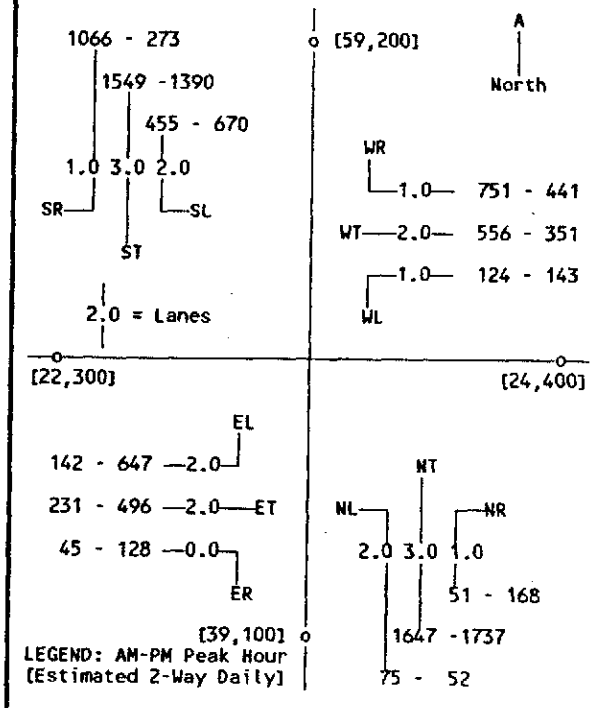
# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

INTERSECTION: MACARTHUR BOULEVARD (NS) and SAN JOAQUIN HILLS ROAD (EW) — COUNT DATE: 01-01-04
LAND USE: EXISTING + APPROVED PROJECTS + CUMULATIVE PROJECTS — GEOMETRICS: Existing

| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 2 | 3200 | 70 | 46 | 5 | 6 | 75 | 52 | 0.023 | 0.016 |
| Northbound Through | 3 | 4800 | 1526 | 1645 | 121 | 92 | 1647 | 1737 | 0.343* | 0.362* |
| Northbound Right | 1 | 1600 | 6 | 15 | 45 | 153 | 51 | 168 | 0.032 | 0.105 |
| Southbound Left | 2 | 3200 | 428 | 599 | 27 | 71 | 455 | 670 | 0.142* | 0.209* |
| Southbound Through | 3 | 4800 | 1491 | 1269 | 58 | 121 | 1549 | 1390 | 0.323 | 0.290 |
| Southbound Right | Free 1 | 1600 | 1036 | 231 | 30 | 42 | 1066 | 273 | 0.666 | 0.171 |
| Eastbound Left | 2 | 3200 | 107 | 588 | 35 | 59 | 142 | 647 | 0.044* | 0.202* |
| Eastbound Through | 2 | 3200 | 199 | 403 | 32 | 93 | 231 | 496 | 0.086 | 0.195 |
| Eastbound Right | 0 | 0 | 45 | 128 | 0 | 0 | 45 | 128 | 0.000 | 0.000 |
| Westbound Left | 1 | 1600 | 19 | 27 | 105 | 116 | 124 | 143 | 0.078 | 0.089 |
| Westbound Through | 2 | 3200 | 464 | 285 | 92 | 66 | 556 | 351 | 0.174* | 0.110* |
| Westbound Right | Free 1 | 1600 | 705 | 395 | 46 | 46 | 751 | 441 | 0.469 | 0.276 |
| Northbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Clearance Interval | | | | | | | | | 0.000* | 0.000* |
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) ——> | | | | | | | | | 0.70 | 0.88 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | | | | | | | | | B | D |

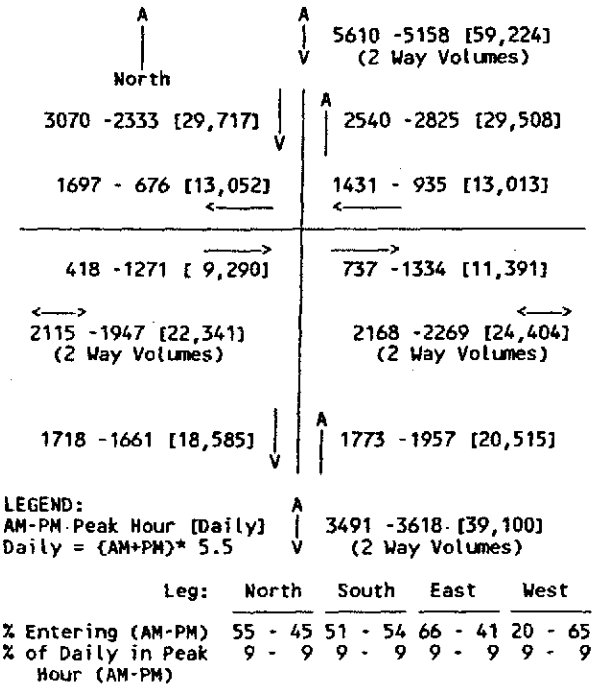
None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted.

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




LEGEND: AM-PM Peak Hour
[Estimated 2-Way Daily]

PLOT OF INTERSECTION LEG VOLUMES




| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 55 - 45 | 51 - 54 | 66 - 41 | 20 - 65 |
| % of Daily in Peak Hour (AM-PM) | 9 - 9 | 9 - 9 | 9 - 9 | 9 - 9 |

Kunzman Associates

**Existing + Approved Projects**
**+ Cumulative Projects + Project**

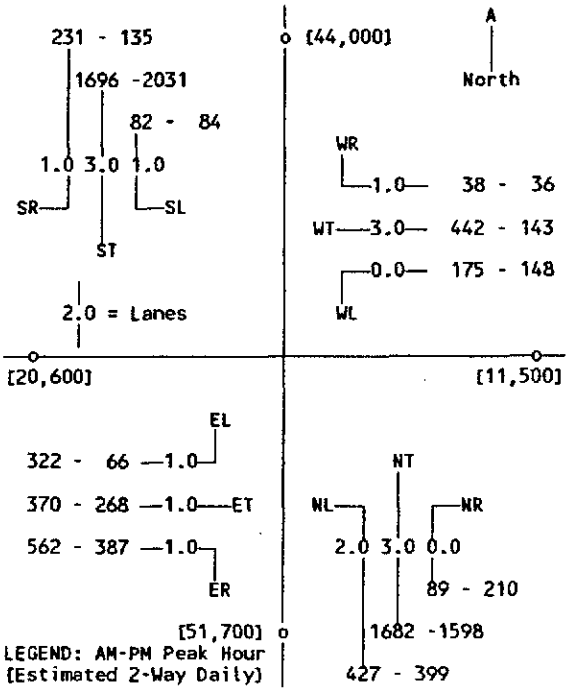
# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

INTERSECTION: JAMBOREE ROAD (NS) and EASTBLUFF DRIVE/FORD ROAD (EW)
LAND USE: EXISTING + APPROVED PROJECTS + CUMULATIVE PROJECTS + PROJECT

COUNT DATE: 01-01-04
GEOMETRICS: Existing

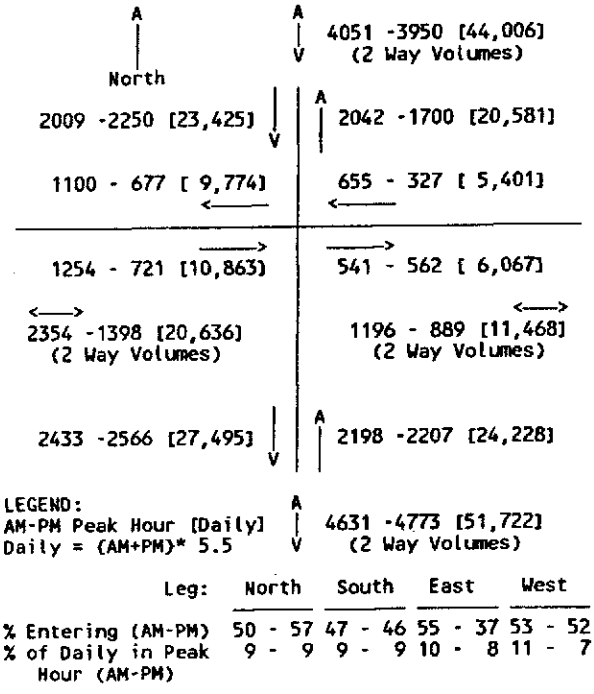
| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 2 | 3200 | 399 | 388 | 28 | 11 | 427 | 399 | 0.133* | 0.125* |
| Northbound Through | 3 | 4800 | 1388 | 1324 | 294 | 274 | 1682 | 1598 | 0.369 | 0.377 |
| Northbound Right | 0 | 0 | 67 | 146 | 22 | 64 | 89 | 210 | 0.000 | 0.000 |
| Southbound Left | 1 | 1600 | 76 | 61 | 6 | 23 | 82 | 84 | 0.051 | 0.053 |
| Southbound Through | 3 | 4800 | 1517 | 1694 | 179 | 337 | 1696 | 2031 | 0.353* | 0.423* |
| Southbound Right | 1 | 1600 | 215 | 133 | 16 | 2 | 231 | 135 | 0.144 | 0.084 |
| Eastbound Left | 1 | 1600 | 311 | 64 | 11 | 2 | 322 | 66 | 0.201 | 0.041 |
| Eastbound Through | 1 | 1600 | 346 | 204 | 24 | 64 | 370 | 268 | 0.231* | 0.168* |
| Eastbound Right | Free 1 | 1600 | 546 | 373 | 16 | 14 | 562 | 387 | 0.351 | 0.242 |
| Westbound Left | 0 | 0 | 116 | 110 | 59 | 38 | 175 | 148 | 0.000 | 0.000 |
| Westbound Through | 3 | 4800 | 377 | 100 | 65 | 43 | 442 | 143 | 0.129* | 0.061* |
| Westbound Right | 1 | 1600 | 15 | 23 | 23 | 13 | 38 | 36 | 0.024 | 0.023 |
| Northbound Right Turn Adjustment | | | None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted. | | | | | | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Clearance Interval | | | | | | | | | 0.000* | 0.000* |
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) ——> | | | | | | | | | 0.85 | 0.78 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | | | | | | | | | D | C |

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




LEGEND: AM-PM Peak Hour
[Estimated 2-Way Daily]

PLOT OF INTERSECTION LEG VOLUMES




| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 50 - 57 | 47 - 46 | 55 - 37 | 53 - 52 |
| % of Daily in Peak Hour (AM-PM) | 9 - 9 | 9 - 9 | 10 - 8 | 11 - 7 |

# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

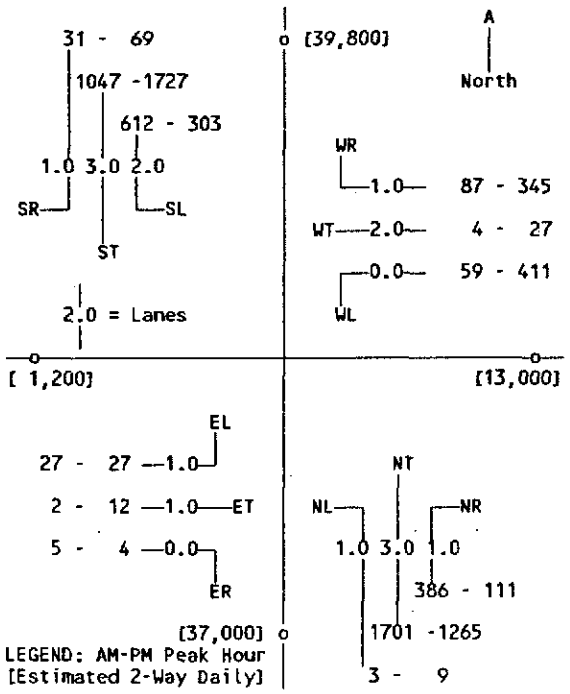
INTERSECTION: JAMBOREE ROAD (NS) and SANTA BARBARA DRIVE (EW)
LAND USE: EXISTING + APPROVED PROJECTS + CUMULATIVE PROJECTS + PROJECT

COUNT DATE: 01-01-04
GEOMETRICS: Existing

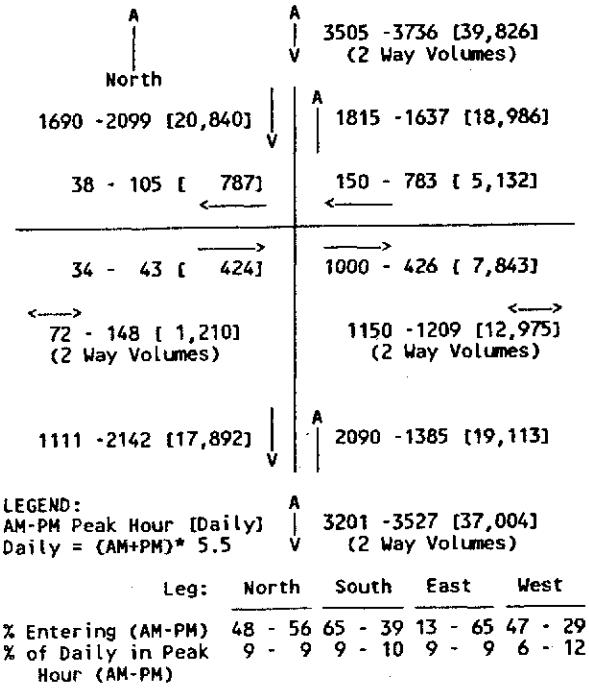
| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 1 | 1600 | 3 | 9 | 0 | 0 | 3 | 9 | 0.002 | 0.006* |
| Northbound Through | 3 | 4800 | 1426 | 990 | 275 | 275 | 1701 | 1265 | 0.354* | 0.264 |
| Northbound Right | 1 | 1600 | 381 | 104 | 5 | 7 | 386 | 111 | 0.241 | 0.069 |
| Southbound Left | 2 | 3200 | 608 | 291 | 4 | 12 | 612 | 303 | 0.191* | 0.095 |
| Southbound Through | 3 | 4800 | 819 | 1415 | 228 | 312 | 1047 | 1727 | 0.218 | 0.360* |
| Southbound Right | 1 | 1600 | 30 | 63 | 1 | 6 | 31 | 69 | 0.019 | 0.043 |
| Eastbound Left | 1 | 1600 | 21 | 25 | 6 | 2 | 27 | 27 | 0.017* | 0.017* |
| Eastbound Through | 1 | 1600 | 2 | 11 | 0 | 1 | 2 | 12 | 0.004 | 0.010 |
| Eastbound Right | 0 | 0 | 5 | 4 | 0 | 0 | 5 | 4 | 0.000 | 0.000 |
| Westbound Left | 0 | 0 | 50 | 406 | 9 | 5 | 59 | 411 | 0.000 | 0.000 |
| Westbound Through | 2 | 3200 | 4 | 26 | 0 | 1 | 4 | 27 | 0.020 | 0.137 |
| Westbound Right | 1 | 1600 | 71 | 339 | 16 | 6 | 87 | 345 | 0.054* | 0.216* |
| Northbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Clearance Interval | | | | | | | | | 0.000* | 0.000* |
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) ——→ | | | | | | | | | 0.62 | 0.60 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | | | | | | | | | B | A |

None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted.

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




PLOT OF INTERSECTION LEG VOLUMES




| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 48 - 56 | 65 - 39 | 13 - 65 | 47 - 29 |
| % of Daily in Peak Hour (AM-PM) | 9 - 9 | 9 - 10 | 9 - 9 | 6 - 12 |

# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

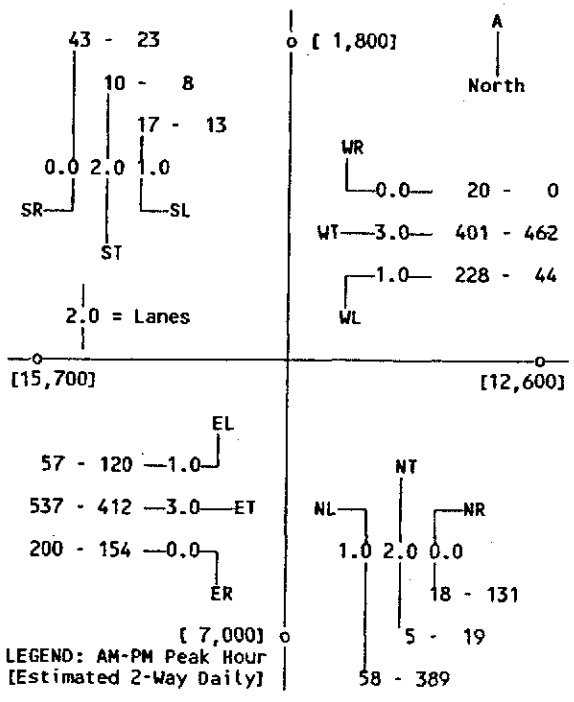
INTERSECTION: SANTA CRUZ DRIVE (NS) and SAN JOAQUIN HILLS ROAD (EW)
LAND USE: EXISTING + APPROVED PROJECTS + CUMULATIVE PROJECTS + PROJECT

COUNT DATE: 01-01-04
GEOMETRICS: Existing

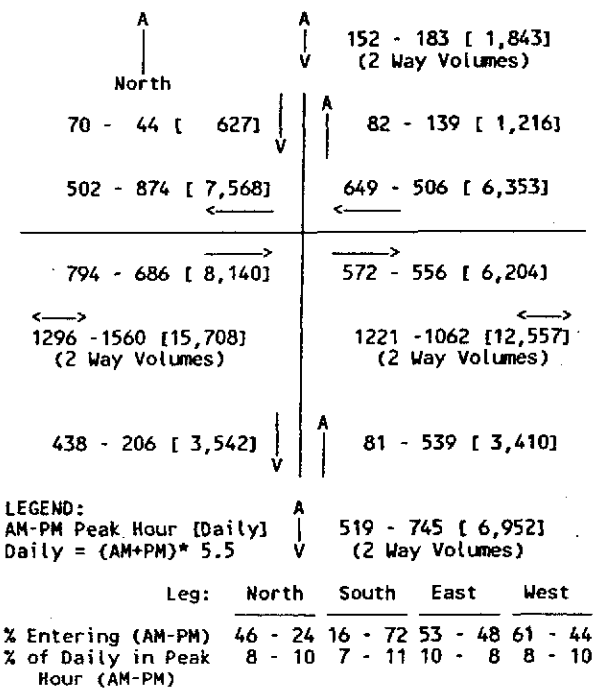
| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 1 | 1600 | 57 | 389 | 1 | 0 | 58 | 389 | 0.036* | 0.243* |
| Northbound Through | 2 | 3200 | 5 | 19 | 0 | 0 | 5 | 19 | 0.007 | 0.047 |
| Northbound Right | 0 | 0 | 15 | 130 | 3 | 1 | 18 | 131 | 0.000 | 0.000 |
| Southbound Left | 1 | 1600 | 17 | 12 | 0 | 1 | 17 | 13 | 0.011 | 0.008 |
| Southbound Through | 2 | 3200 | 9 | 8 | 1 | 0 | 10 | 8 | 0.017* | 0.010* |
| Southbound Right | 0 | 0 | 43 | 23 | 0 | 0 | 43 | 23 | 0.000 | 0.000 |
| Eastbound Left | 1 | 1600 | 57 | 120 | 0 | 0 | 57 | 120 | 0.036 | 0.075* |
| Eastbound Through | 3 | 4800 | 511 | 358 | 26 | 54 | 537 | 412 | 0.154* | 0.118 |
| Eastbound Right | 0 | 0 | 200 | 153 | 0 | 1 | 200 | 154 | 0.000 | 0.000 |
| Westbound Left | 1 | 1600 | 227 | 43 | 1 | 1 | 228 | 44 | 0.143* | 0.028 |
| Westbound Through | 3 | 4800 | 343 | 414 | 58 | 48 | 401 | 462 | 0.088 | 0.096* |
| Westbound Right | 0 | 0 | 20 | 0 | 0 | 0 | 20 | 0 | 0.000 | 0.000 |
| Northbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Clearance Interval | | | | | | | | | 0.000* | 0.000* |
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) | | | | | | | | | 0.35 | 0.42 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | | | | | | | | | A | A |

None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted.

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




PLOT OF INTERSECTION LEG VOLUMES




| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 46 - 24 | 16 - 72 | 53 - 48 | 61 - 44 |
| % of Daily in Peak Hour (AM-PM) | 8 - 10 | 7 - 11 | 10 - 8 | 8 - 10 |

# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

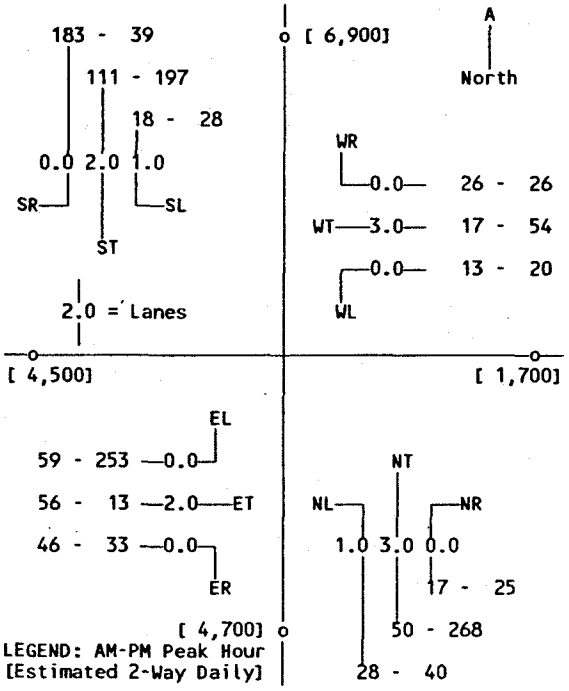
INTERSECTION: SANTA CRUZ DRIVE (NS) and SAN CLEMENTE DRIVE (EW)
LAND USE: EXISTING + APPROVED PROJECTS + CUMULATIVE PROJECTS + PROJECT

COUNT DATE: 01-01-04
GEOMETRICS: Existing

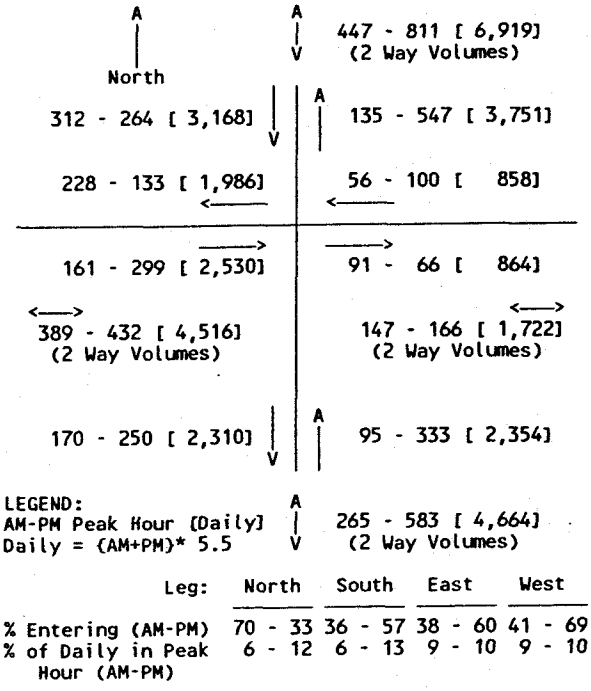
| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 1 | 1600 | 28 | 40 | 0 | 0 | 28 | 40 | 0.018* | 0.025* |
| Northbound Through | 3 | 4800 | 50 | 268 | 0 | 0 | 50 | 268 | 0.014 | 0.061 |
| Northbound Right | 0 | 0 | 17 | 25 | 0 | 0 | 17 | 25 | 0.000 | 0.000 |
| Southbound Left | 1 | 1600 | 18 | 28 | 0 | 0 | 18 | 28 | 0.011 | 0.018 |
| Southbound Through | 2 | 3200 | 111 | 197 | 0 | 0 | 111 | 197 | 0.092* | 0.074* |
| Southbound Right | 0 | 0 | 183 | 38 | 0 | 1 | 183 | 39 | 0.000 | 0.000 |
| Eastbound Left | 0 | 0 | 57 | 252 | 2 | 1 | 59 | 253 | 0.000 | 0.000 |
| Eastbound Through | 2 | 3200 | 56 | 13 | 0 | 0 | 56 | 13 | 0.050* | 0.093* |
| Eastbound Right | 0 | 0 | 46 | 33 | 0 | 0 | 46 | 33 | 0.000 | 0.000 |
| Westbound Left | 0 | 0 | 13 | 20 | 0 | 0 | 13 | 20 | 0.000* | 0.000* |
| Westbound Through | 3 | 4800 | 17 | 54 | 0 | 0 | 17 | 54 | 0.012 | 0.021 |
| Westbound Right | 0 | 0 | 26 | 26 | 0 | 0 | 26 | 26 | 0.000 | 0.000 |

| | | | |
|---|---|---|---|
| Northbound Right Turn Adjustment | None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted. | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | 0.000* | 0.000* |
| Clearance Interval | | 0.000* | 0.000* |
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) ——→ | | 0.16 | 0.19 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | | A | A |

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




PLOT OF INTERSECTION LEG VOLUMES




| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 70 - 33 | 36 - 57 | 38 - 60 | 41 - 69 |
| % of Daily in Peak Hour (AM-PM) | 6 - 12 | 6 - 13 | 9 - 10 | 9 - 10 |

# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

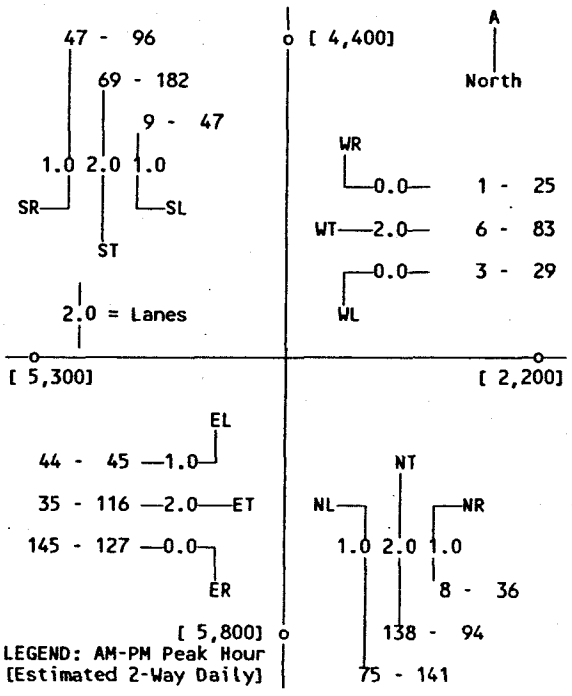
INTERSECTION: NEWPORT CENTER DRIVE (NS) and SANTA BARBARA DRIVE (EW)
LAND USE: EXISTING + APPROVED PROJECTS + CUMULATIVE PROJECTS + PROJECT

COUNT DATE: 01-01-04
GEOMETRICS: Existing

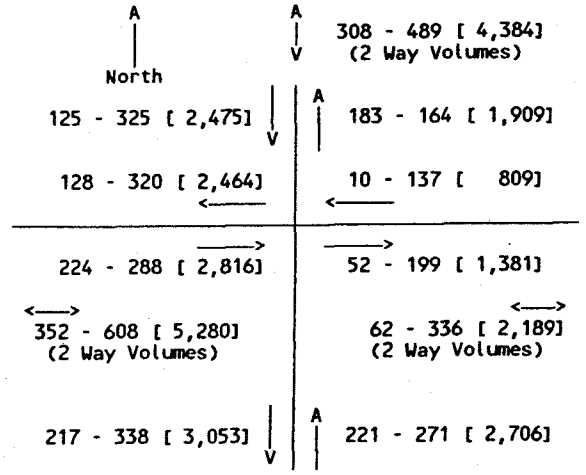
| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 1 | 1600 | 73 | 135 | 2 | 6 | 75 | 141 | 0.047* | 0.088* |
| Northbound Through | 2 | 3200 | 138 | 94 | 0 | 0 | 138 | 94 | 0.043 | 0.029 |
| Northbound Right | 1 | 1600 | 8 | 36 | 0 | 0 | 8 | 36 | 0.005 | 0.023 |
| Southbound Left | 1 | 1600 | 9 | 47 | 0 | 0 | 9 | 47 | 0.006 | 0.029 |
| Southbound Through | 2 | 3200 | 69 | 182 | 0 | 0 | 69 | 182 | 0.022* | 0.057* |
| Southbound Right | 1 | 1600 | 46 | 94 | 1 | 2 | 47 | 96 | 0.029 | 0.060 |
| Eastbound Left | 1 | 1600 | 41 | 43 | 3 | 2 | 44 | 45 | 0.028 | 0.028 |
| Eastbound Through | 2 | 3200 | 33 | 115 | 2 | 1 | 35 | 116 | 0.056* | 0.076* |
| Eastbound Right | 0 | 0 | 136 | 123 | 9 | 4 | 145 | 127 | 0.000 | 0.000 |
| Westbound Left | 0 | 0 | 3 | 29 | 0 | 0 | 3 | 29 | 0.000* | 0.000* |
| Westbound Through | 2 | 3200 | 6 | 82 | 0 | 1 | 6 | 83 | 0.003 | 0.043 |
| Westbound Right | 0 | 0 | 1 | 25 | 0 | 0 | 1 | 25 | 0.000 | 0.000 |
| Northbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Clearance Interval | | | | | | | | | 0.000* | 0.000* |
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) ——> | | | | | | | | | 0.13 | 0.22 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | | | | | | | | | A | A |

None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted.

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




PLOT OF INTERSECTION LEG VOLUMES




| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 41 - 66 | 50 - 44 | 16 - 41 | 64 - 47 |
| % of Daily in Peak Hour (AM-PM) | 7 - 11 | 8 - 11 | 3 - 15 | 7 - 12 |

# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

INTERSECTION: NEWPORT CENTER DRIVE (NS) and COAST HIGHWAY (EW)
LAND USE: EXISTING + APPROVED PROJECTS + CUMULATIVE PROJECTS + PROJECT

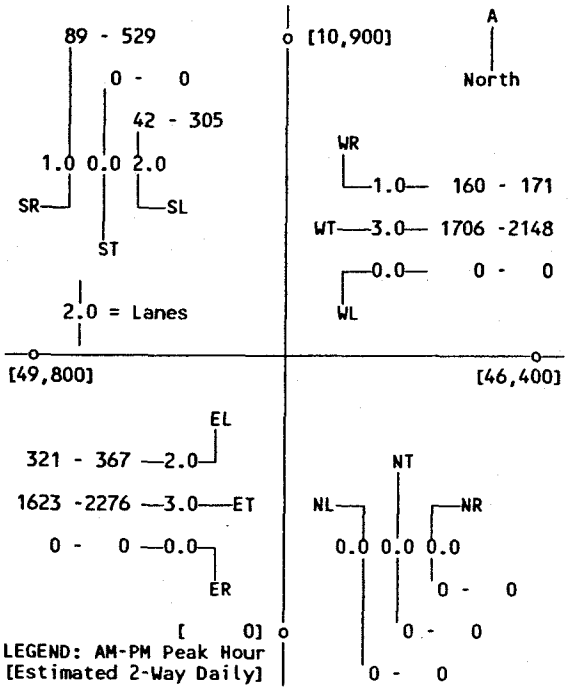
COUNT DATE: 01-01-04
GEOMETRICS: Existing

| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000 | 0.000 |
| Northbound Through | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000* | 0.000* |
| Northbound Right | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000 | 0.000 |
| Southbound Left | 2 | 3200 | 37 | 300 | 5 | 5 | 42 | 305 | 0.013* | 0.095* |
| Southbound Through | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000 | 0.000 |
| Southbound Right Free | 1 | 1600 | 78 | 496 | 11 | 33 | 89 | 529 | 0.056 | 0.331 |
| Eastbound Left | 2 | 3200 | 315 | 352 | 6 | 15 | 321 | 367 | 0.100* | 0.115* |
| Eastbound Through | 3 | 4800 | 1428 | 1714 | 195 | 562 | 1623 | 2276 | 0.338 | 0.474 |
| Eastbound Right | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000 | 0.000 |
| Westbound Left | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000 | 0.000 |
| Westbound Through | 3 | 4800 | 1194 | 1774 | 512 | 374 | 1706 | 2148 | 0.355* | 0.448* |
| Westbound Right Free | 1 | 1600 | 158 | 161 | 2 | 10 | 160 | 171 | 0.100 | 0.107 |
| Northbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Clearance Interval | | | | | | | | | 0.000* | 0.000* |

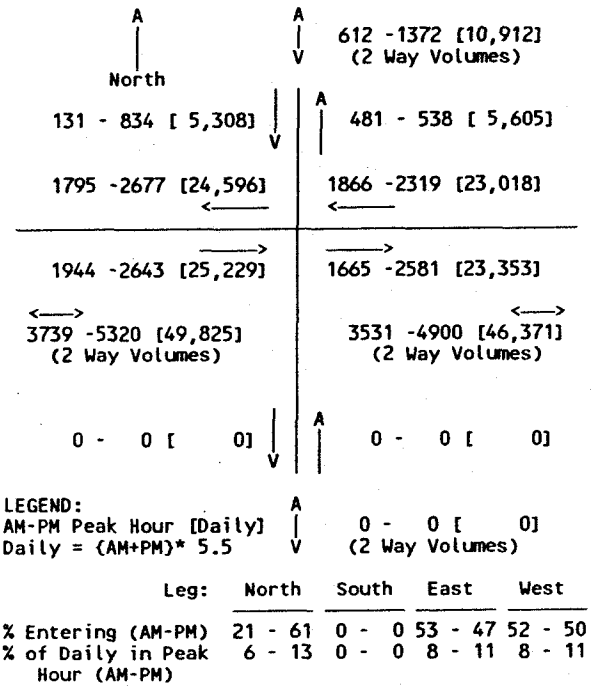
None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted.

| | | |
|---|---|---|
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) ——→ | 0.47 | 0.66 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | A | B |

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




PLOT OF INTERSECTION LEG VOLUMES



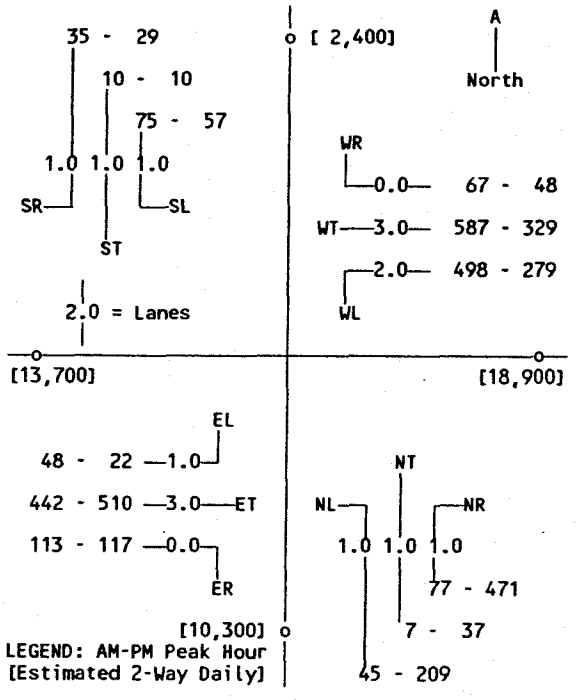

| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 21 - 61 | 0 - 0 | 53 - 47 | 52 - 50 |
| % of Daily in Peak Hour (AM-PM) | 6 - 13 | 0 - 0 | 8 - 11 | 8 - 11 |

# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

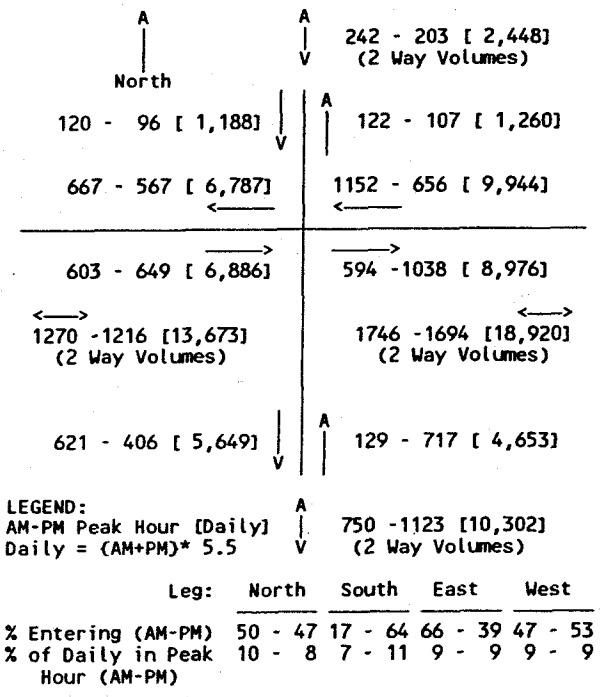
INTERSECTION: SANTA ROSA DRIVE/BIG CANYON DRIVE (NS) and SAN JOAQUIN HILLS ROA — COUNT DATE: 01-01-04
LAND USE: EXISTING + APPROVED PROJECTS + CUMULATIVE PROJECTS + PROJECT — GEOMETRICS: Existing

| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 1 | 1600 | 36 | 203 | 9 | 6 | 45 | 209 | 0.028 | 0.131 |
| Northbound Through | 1 | 1600 | 7 | 37 | 0 | 0 | 7 | 37 | 0.004 | 0.023 |
| Northbound Right | 1 | 1600 | 59 | 401 | 18 | 70 | 77 | 471 | 0.048* | 0.294* |
| Southbound Left | 1 | 1600 | 75 | 57 | 0 | 0 | 75 | 57 | 0.047* | 0.036* |
| Southbound Through | 1 | 1600 | 10 | 10 | 0 | 0 | 10 | 10 | 0.006 | 0.006 |
| Southbound Right | 1 | 1600 | 35 | 29 | 0 | 0 | 35 | 29 | 0.022 | 0.018 |
| Eastbound Left | 1 | 1600 | 47 | 22 | 1 | 0 | 48 | 22 | 0.030 | 0.014 |
| Eastbound Through | 3 | 4800 | 389 | 433 | 53 | 77 | 442 | 510 | 0.116* | 0.131* |
| Eastbound Right | 0 | 0 | 107 | 109 | 6 | 8 | 113 | 117 | 0.000 | 0.000 |
| Westbound Left | 2 | 3200 | 443 | 214 | 55 | 65 | 498 | 279 | 0.156* | 0.087* |
| Westbound Through | 3 | 4800 | 510 | 256 | 77 | 73 | 587 | 329 | 0.136 | 0.079 |
| Westbound Right | 0 | 0 | 67 | 48 | 0 | 0 | 67 | 48 | 0.000 | 0.000 |
| Northbound Right Turn Adjustment | None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted. | | | | | | | | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Clearance Interval | | | | | | | | | 0.000* | 0.000* |
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) ——→ | | | | | | | | | 0.37 | 0.55 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | | | | | | | | | A | A |

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




PLOT OF INTERSECTION LEG VOLUMES




| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 50 - 47 | 17 - 64 | 66 - 39 | 47 - 53 |
| % of Daily in Peak Hour (AM-PM) | 10 - 8 | 7 - 11 | 9 - 9 | 9 - 9 |

# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

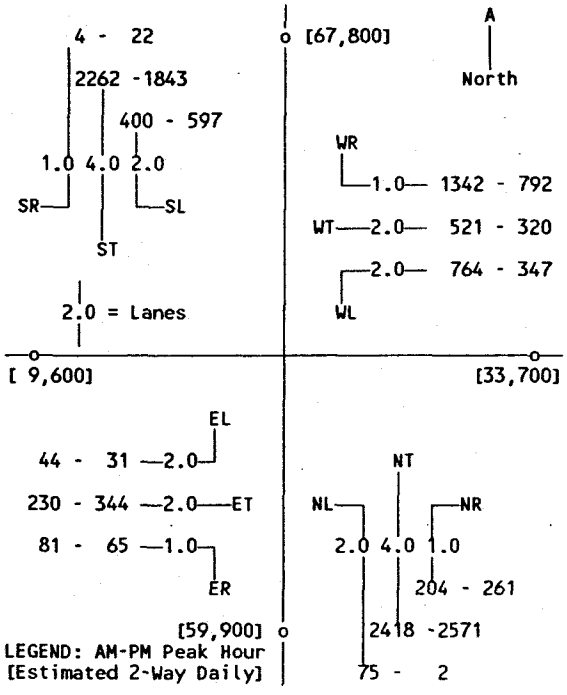
INTERSECTION: MACARTHUR BOULEVARD (NS) and FORD ROAD (EW)
LAND USE: EXISTING + APPROVED PROJECTS + CUMULATIVE PROJECTS + PROJECT

COUNT DATE: 01-01-04
GEOMETRICS: Existing

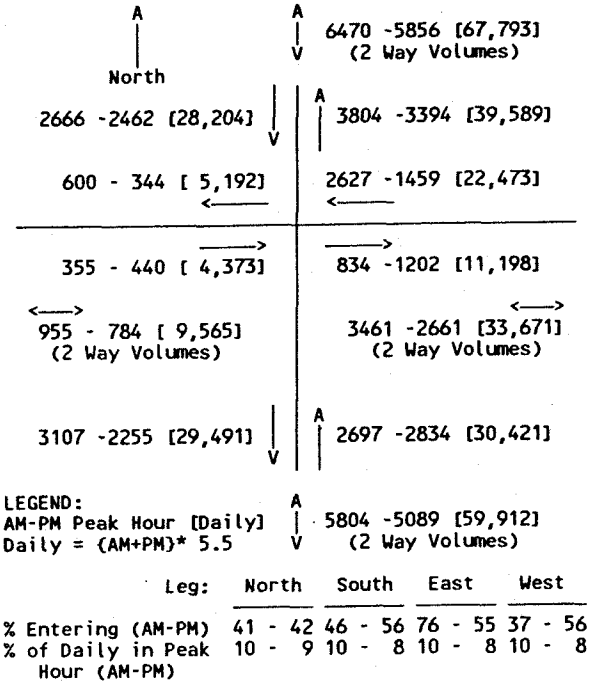
| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 2 | 3200 | 74 | 0 | 1 | 2 | 75 | 2 | 0.023 | 0.001 |
| Northbound Through | 4 | 6400 | 2296 | 2468 | 122 | 103 | 2418 | 2571 | 0.378* | 0.402* |
| Northbound Right | Free 1 | 1600 | 121 | 161 | 83 | 100 | 204 | 261 | 0.128 | 0.163 |
| Southbound Left | 2 | 3200 | 373 | 517 | 27 | 80 | 400 | 597 | 0.125* | 0.187* |
| Southbound Through | 4 | 6400 | 2210 | 1686 | 52 | 157 | 2262 | 1843 | 0.353 | 0.288 |
| Southbound Right | Free 1 | 1600 | 4 | 21 | 0 | 1 | 4 | 22 | 0.003 | 0.014 |
| Eastbound Left | 2 | 3200 | 43 | 31 | 1 | 0 | 44 | 31 | 0.014 | 0.010 |
| Eastbound Through | 2 | 3200 | 178 | 197 | 52 | 147 | 230 | 344 | 0.072* | 0.108* |
| Eastbound Right | 1 | 1600 | 79 | 64 | 2 | 1 | 81 | 65 | 0.051 | 0.041 |
| Westbound Left | 2 | 3200 | 687 | 257 | 77 | 90 | 764 | 347 | 0.239* | 0.108* |
| Westbound Through | 2 | 3200 | 376 | 229 | 145 | 91 | 521 | 320 | 0.163 | 0.100 |
| Westbound Right | Free 1 | 1600 | 1268 | 749 | 74 | 43 | 1342 | 792 | 0.839 | 0.495 |
| Northbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Clearance Interval | | | | | | | | | 0.000* | 0.000* |
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) ——→ | | | | | | | | | 0.81 | 0.81 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | | | | | | | | | D | D |

None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted.

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




PLOT OF INTERSECTION LEG VOLUMES




| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 41 - 42 | 46 - 56 | 76 - 55 | 37 - 56 |
| % of Daily in Peak Hour (AM-PM) | 10 - 9 | 10 - 8 | 10 - 8 | 10 - 8 |

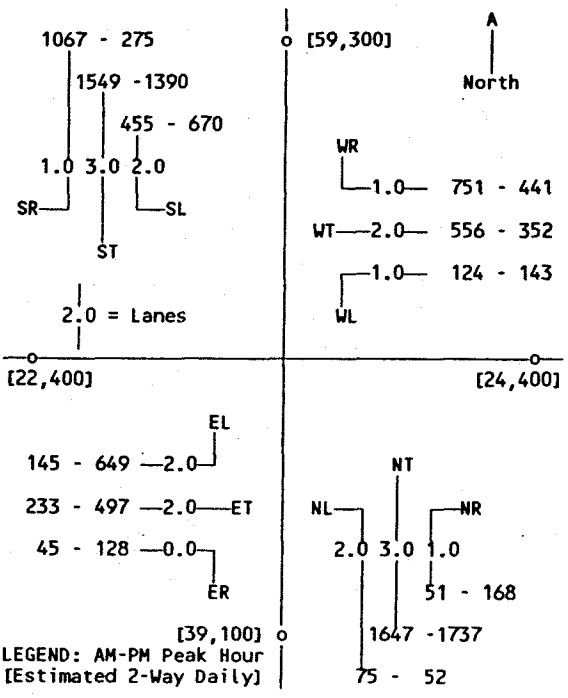
# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

INTERSECTION: MACARTHUR BOULEVARD (NS) and SAN JOAQUIN HILLS ROAD (EW)
LAND USE: EXISTING + APPROVED PROJECTS + CUMULATIVE PROJECTS + PROJECT

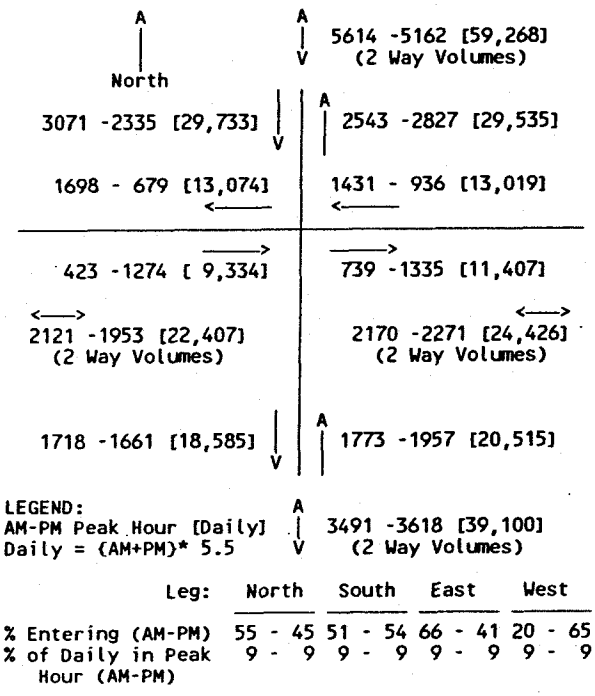
COUNT DATE: 01-01-04
GEOMETRICS: Existing

| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 2 | 3200 | 70 | 46 | 5 | 6 | 75 | 52 | 0.023 | 0.016 |
| Northbound Through | 3 | 4800 | 1526 | 1645 | 121 | 92 | 1647 | 1737 | 0.343* | 0.362* |
| Northbound Right | 1 | 1600 | 6 | 15 | 45 | 153 | 51 | 168 | 0.032 | 0.105 |
| Southbound Left | 2 | 3200 | 428 | 599 | 27 | 71 | 455 | 670 | 0.142* | 0.209* |
| Southbound Through | 3 | 4800 | 1491 | 1269 | 58 | 121 | 1549 | 1390 | 0.323 | 0.290 |
| Southbound Right | Free 1 | 1600 | 1036 | 231 | 31 | 44 | 1067 | 275 | 0.667 | 0.172 |
| Eastbound Left | 2 | 3200 | 107 | 588 | 38 | 61 | 145 | 649 | 0.045* | 0.203* |
| Eastbound Through | 2 | 3200 | 199 | 403 | 34 | 94 | 233 | 497 | 0.087 | 0.195 |
| Eastbound Right | 0 | 0 | 45 | 128 | 0 | 0 | 45 | 128 | 0.000 | 0.000 |
| Westbound Left | 1 | 1600 | 19 | 27 | 105 | 116 | 124 | 143 | 0.078 | 0.089 |
| Westbound Through | 2 | 3200 | 464 | 285 | 92 | 67 | 556 | 352 | 0.174* | 0.110* |
| Westbound Right | Free 1 | 1600 | 705 | 395 | 46 | 46 | 751 | 441 | 0.469 | 0.276 |
| Northbound Right Turn Adjustment | None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted. | | | | | | | | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Clearance Interval | | | | | | | | | 0.000* | 0.000* |
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) ——→ | | | | | | | | | 0.70 | 0.88 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | | | | | | | | | B | D |

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




PLOT OF INTERSECTION LEG VOLUMES




| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 55 - 45 | 51 - 54 | 66 - 41 | 20 - 65 |
| % of Daily in Peak Hour (AM-PM) | 9 - 9 | 9 - 9 | 9 - 9 | 9 - 9 |

# General Plan Buildout Without Project

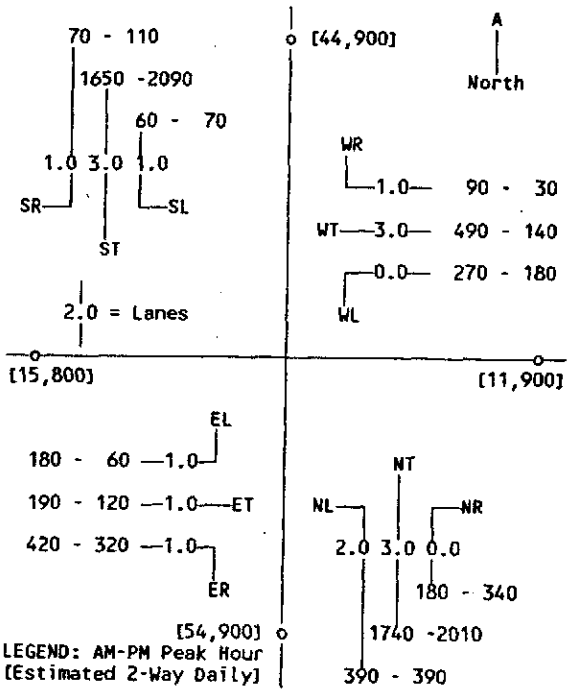
# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

INTERSECTION: JAMBOREE ROAD (NS) and EASTBLUFF DRIVE/FORD ROAD (EW) — COUNT DATE: 01-01-04
LAND USE: GENERAL PLAN BUILDOUT WITHOUT PROJECT — GEOMETRICS: Existing

| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 2 | 3200 | 390 | 390 | 0 | 0 | 390 | 390 | 0.122* | 0.122* |
| Northbound Through | 3 | 4800 | 1740 | 2010 | 0 | 0 | 1740 | 2010 | 0.400 | 0.490 |
| Northbound Right | 0 | 0 | 180 | 340 | 0 | 0 | 180 | 340 | 0.000 | 0.000 |
| Southbound Left | 1 | 1600 | 60 | 70 | 0 | 0 | 60 | 70 | 0.038 | 0.044 |
| Southbound Through | 3 | 4800 | 1650 | 2090 | 0 | 0 | 1650 | 2090 | 0.344* | 0.435* |
| Southbound Right | 1 | 1600 | 70 | 110 | 0 | 0 | 70 | 110 | 0.044 | 0.069 |
| Eastbound Left | 1 | 1600 | 180 | 60 | 0 | 0 | 180 | 60 | 0.113 | 0.038 |
| Eastbound Through | 1 | 1600 | 190 | 120 | 0 | 0 | 190 | 120 | 0.119* | 0.075* |
| Eastbound Right | Free 1 | 1600 | 420 | 320 | 0 | 0 | 420 | 320 | 0.262 | 0.200 |
| Westbound Left | 0 | 0 | 270 | 180 | 0 | 0 | 270 | 180 | 0.000 | 0.000 |
| Westbound Through | 3 | 4800 | 490 | 140 | 0 | 0 | 490 | 140 | 0.158* | 0.067* |
| Westbound Right | 1 | 1600 | 90 | 30 | 0 | 0 | 90 | 30 | 0.056 | 0.019 |
| Northbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Clearance Interval | | | | | | | | | 0.000* | 0.000* |
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) | | | | | | | | | 0.74 | 0.70 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | | | | | | | | | C | B |

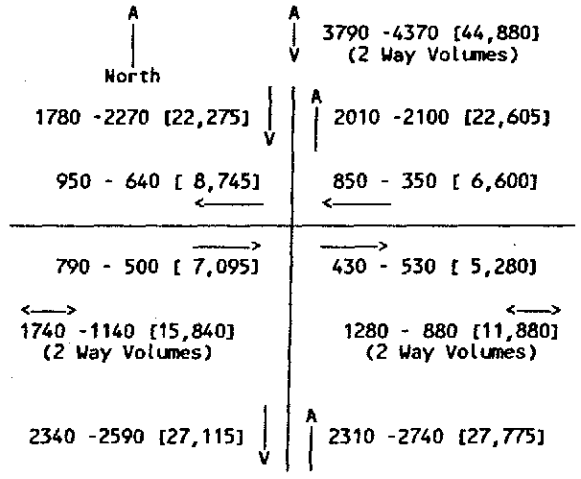
None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted.

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




LEGEND: AM-PM Peak Hour
[Estimated 2-Way Daily]

PLOT OF INTERSECTION LEG VOLUMES




LEGEND:
AM-PM Peak Hour [Daily]
Daily = (AM+PM)* 5.5

A
4650 -5330 [54,890]
(2 Way Volumes)

| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 47 - 52 | 50 - 51 | 66 - 40 | 45 - 44 |
| % of Daily in Peak Hour (AM-PM) | 8 - 10 | 8 - 10 | 11 - 7 | 11 - 7 |

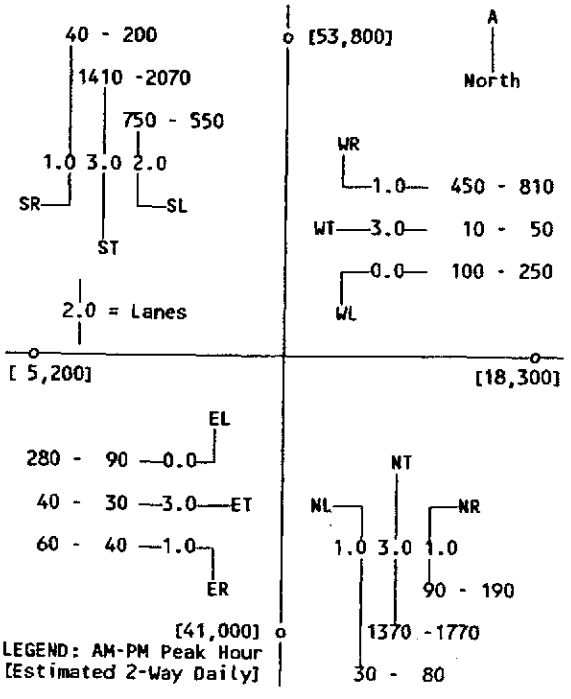
# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

INTERSECTION: JAMBOREE ROAD (NS) and SAN JOAQUIN HILLS ROAD (EW) — COUNT DATE: 01-01-04
LAND USE: GENERAL PLAN BUILDOUT WITHOUT PROJECT — GEOMETRICS: Existing

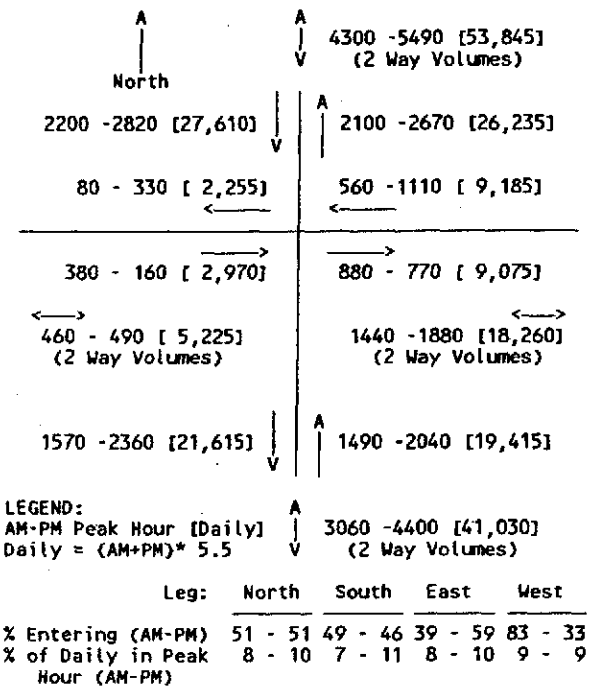
| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 1 | 1600 | 30 | 80 | 0 | 0 | 30 | 80 | 0.019 | 0.050 |
| Northbound Through | 3 | 4800 | 1370 | 1770 | 0 | 0 | 1370 | 1770 | 0.285* | 0.369* |
| Northbound Right | Free 1 | 1600 | 90 | 190 | 0 | 0 | 90 | 190 | 0.056 | 0.119 |
| Southbound Left | 2 | 3200 | 750 | 550 | 0 | 0 | 750 | 550 | 0.234* | 0.172* |
| Southbound Through | 3 | 4800 | 1410 | 2070 | 0 | 0 | 1410 | 2070 | 0.294 | 0.431 |
| Southbound Right | Free 1 | 1600 | 40 | 200 | 0 | 0 | 40 | 200 | 0.025 | 0.125 |
| Eastbound Left | 0 | 0 | 280 | 90 | 0 | 0 | 280 | 90 | 0.000 | 0.000 |
| Eastbound Through | 3 | 4800 | 40 | 30 | 0 | 0 | 40 | 30 | 0.067* | 0.025* |
| Eastbound Right | Free 1 | 1600 | 60 | 40 | 0 | 0 | 60 | 40 | 0.038 | 0.025 |
| Westbound Left | 0 | 0 | 100 | 250 | 0 | 0 | 100 | 250 | 0.000 | 0.000 |
| Westbound Through | 3 | 4800 | 10 | 50 | 0 | 0 | 10 | 50 | 0.023* | 0.063* |
| Westbound Right | 1 | 1600 | 450 | 810 | 0 | 0 | 450 | 810 | 0.281 | 0.506 |
| Northbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Clearance Interval | | | | | | | | | 0.000* | 0.000* |
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) | | | | | | | | | 0.61 | 0.63 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | | | | | | | | | B | B |

None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted.

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




PLOT OF INTERSECTION LEG VOLUMES




| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 51 - 51 | 49 - 46 | 39 - 59 | 83 - 33 |
| % of Daily in Peak Hour (AM-PM) | 8 - 10 | 7 - 11 | 8 - 10 | 9 - 9 |

# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

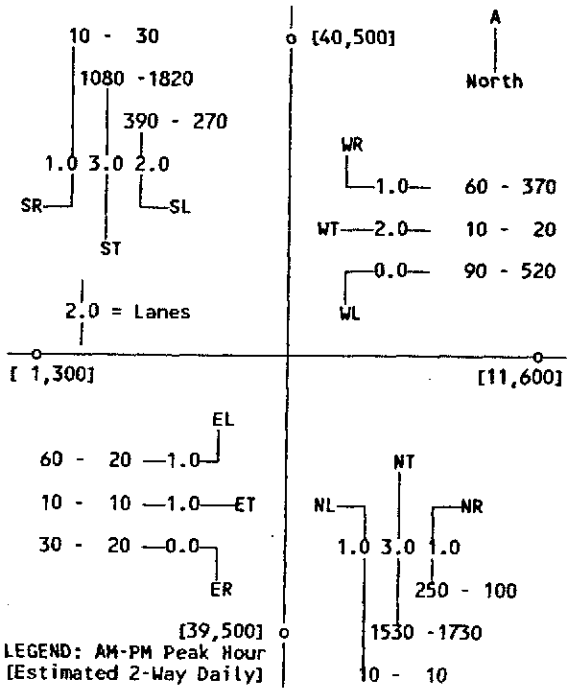
INTERSECTION: JAMBOREE ROAD (NS) and SANTA BARBARA DRIVE (EW)
LAND USE: GENERAL PLAN BUILDOUT WITHOUT PROJECT

COUNT DATE: 01-01-04
GEOMETRICS: Existing

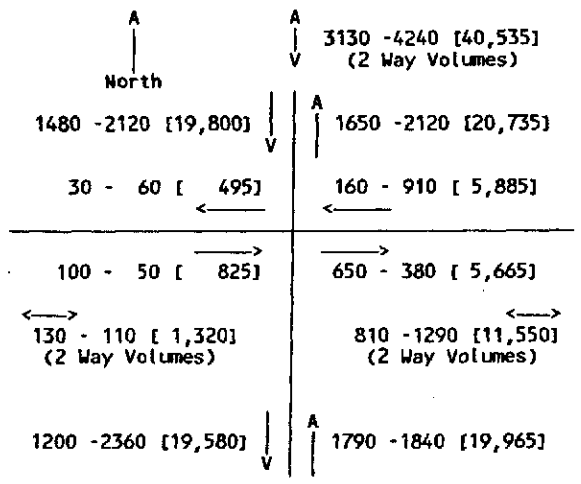
| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 1 | 1600 | 10 | 10 | 0 | 0 | 10 | 10 | 0.006 | 0.006 |
| Northbound Through | 3 | 4800 | 1530 | 1730 | 0 | 0 | 1530 | 1730 | 0.319* | 0.360* |
| Northbound Right | 1 | 1600 | 250 | 100 | 0 | 0 | 250 | 100 | 0.156 | 0.063 |
| Southbound Left | 2 | 3200 | 390 | 270 | 0 | 0 | 390 | 270 | 0.122* | 0.084* |
| Southbound Through | 3 | 4800 | 1080 | 1820 | 0 | 0 | 1080 | 1820 | 0.225 | 0.379 |
| Southbound Right | 1 | 1600 | 10 | 30 | 0 | 0 | 10 | 30 | 0.006 | 0.019 |
| Eastbound Left | 1 | 1600 | 60 | 20 | 0 | 0 | 60 | 20 | 0.038* | 0.013 |
| Eastbound Through | 1 | 1600 | 10 | 10 | 0 | 0 | 10 | 10 | 0.025 | 0.019* |
| Eastbound Right | 0 | 0 | 30 | 20 | 0 | 0 | 30 | 20 | 0.000 | 0.000 |
| Westbound Left | 0 | 0 | 90 | 520 | 0 | 0 | 90 | 520 | 0.000 | 0.000 |
| Westbound Through | 2 | 3200 | 10 | 20 | 0 | 0 | 10 | 20 | 0.031* | 0.169* |
| Westbound Right | 1 | 1600 | 60 | 370 | 0 | 0 | 60 | 370 | 0.038 | 0.231 |
| Northbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | 0.007* | 0.062* |
| Clearance Interval | | | | | | | | | 0.000* | 0.000* |
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) ——→ | | | | | | | | | 0.52 | 0.69 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | | | | | | | | | A | B |

None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted.

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




PLOT OF INTERSECTION LEG VOLUMES




| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 47 - 50 | 60 - 44 | 20 - 71 | 77 - 45 |
| % of Daily in Peak Hour (AM-PM) | 8 - 10 | 8 - 11 | 7 - 11 | 10 - 8 |

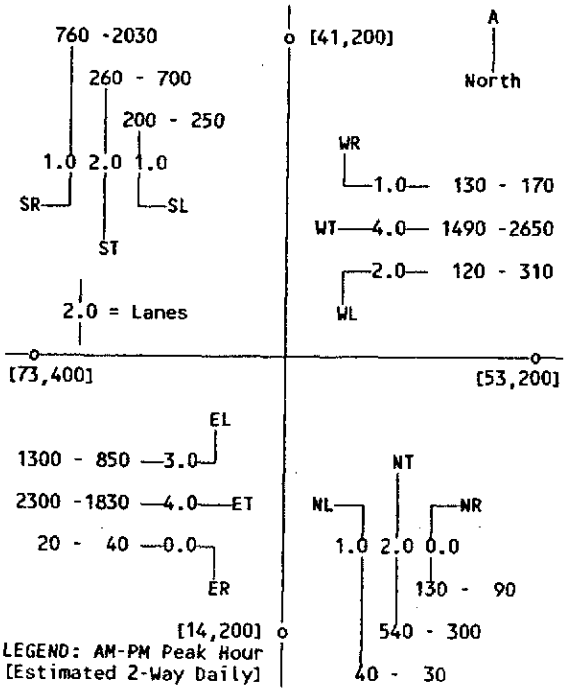
# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

INTERSECTION: JAMBOREE ROAD (NS) and COAST HIGHWAY (EW) — COUNT DATE: 01-01-04
LAND USE: GENERAL PLAN BUILDOUT WITHOUT PROJECT — GEOMETRICS: Existing

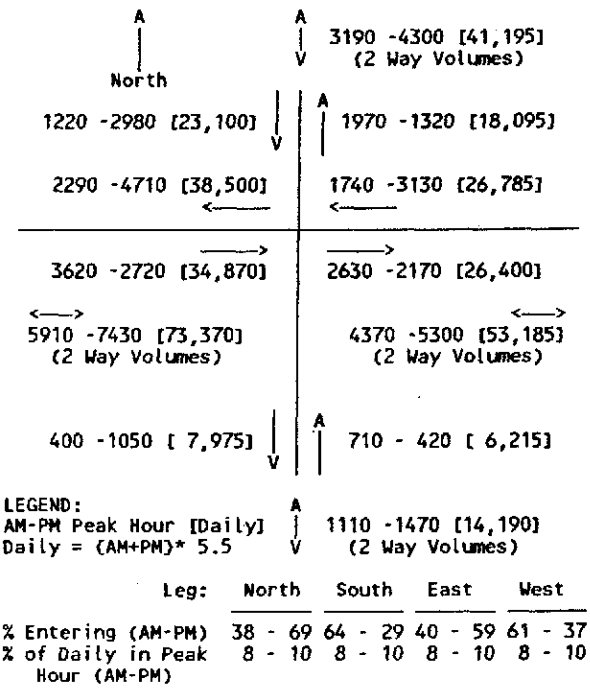
| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 1 | 1600 | 40 | 30 | 0 | 0 | 40 | 30 | 0.025 | 0.019 |
| Northbound Through | 2 | 3200 | 540 | 300 | 0 | 0 | 540 | 300 | 0.209* | 0.122* |
| Northbound Right | 0 | 0 | 130 | 90 | 0 | 0 | 130 | 90 | 0.000 | 0.000 |
| Southbound Left | 1 | 1600 | 200 | 250 | 0 | 0 | 200 | 250 | 0.125* | 0.156* |
| Southbound Through | 2 | 3200 | 260 | 700 | 0 | 0 | 260 | 700 | 0.081 | 0.219 |
| Southbound Right | Free 1 | 1600 | 760 | 2030 | 0 | 0 | 760 | 2030 | 0.475 | 1.269 |
| Eastbound Left | 3 | 4800 | 1300 | 850 | 0 | 0 | 1300 | 850 | 0.271* | 0.177* |
| Eastbound Through | 4 | 6400 | 2300 | 1830 | 0 | 0 | 2300 | 1830 | 0.363 | 0.292 |
| Eastbound Right | 0 | 0 | 20 | 40 | 0 | 0 | 20 | 40 | 0.000 | 0.000 |
| Westbound Left | 2 | 3200 | 120 | 310 | 0 | 0 | 120 | 310 | 0.038 | 0.097 |
| Westbound Through | 4 | 6400 | 1490 | 2650 | 0 | 0 | 1490 | 2650 | 0.233* | 0.414* |
| Westbound Right | Free 1 | 1600 | 130 | 170 | 0 | 0 | 130 | 170 | 0.081 | 0.106 |
| Northbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Clearance Interval | | | | | | | | | 0.000* | 0.000* |
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) | | | | | | | | | 0.84 | 0.87 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | | | | | | | | | D | D |

None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted.

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




PLOT OF INTERSECTION LEG VOLUMES




| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 38 - 69 | 64 - 29 | 40 - 59 | 61 - 37 |
| % of Daily in Peak Hour (AM-PM) | 8 - 10 | 8 - 10 | 8 - 10 | 8 - 10 |

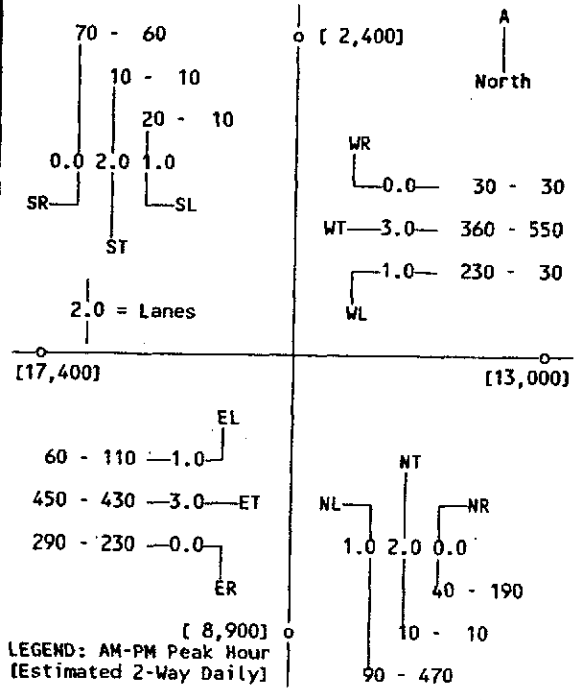
# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

INTERSECTION: SANTA CRUZ DRIVE (NS) and SAN JOAQUIN HILLS ROAD (EW) — COUNT DATE: 01-01-04
LAND USE: GENERAL PLAN BUILDOUT WITHOUT PROJECT — GEOMETRICS: Existing

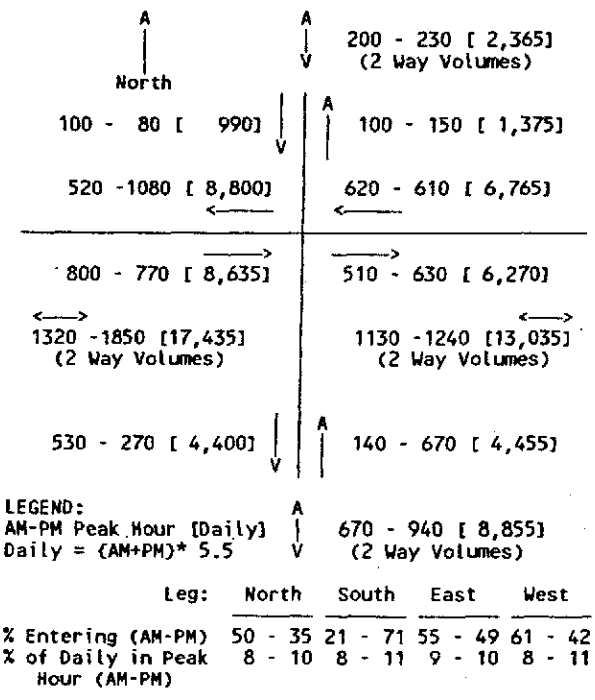
| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 1 | 1600 | 90 | 470 | 0 | 0 | 90 | 470 | 0.056* | 0.294* |
| Northbound Through | 2 | 3200 | 10 | 10 | 0 | 0 | 10 | 10 | 0.016 | 0.063 |
| Northbound Right | 0 | 0 | 40 | 190 | 0 | 0 | 40 | 190 | 0.000 | 0.000 |
| Southbound Left | 1 | 1600 | 20 | 10 | 0 | 0 | 20 | 10 | 0.013 | 0.006 |
| Southbound Through | 2 | 3200 | 10 | 10 | 0 | 0 | 10 | 10 | 0.025* | 0.022* |
| Southbound Right | 0 | 0 | 70 | 60 | 0 | 0 | 70 | 60 | 0.000 | 0.000 |
| Eastbound Left | 1 | 1600 | 60 | 110 | 0 | 0 | 60 | 110 | 0.038 | 0.069* |
| Eastbound Through | 3 | 4800 | 450 | 430 | 0 | 0 | 450 | 430 | 0.154* | 0.138 |
| Eastbound Right | 0 | 0 | 290 | 230 | 0 | 0 | 290 | 230 | 0.000 | 0.000 |
| Westbound Left | 1 | 1600 | 230 | 30 | 0 | 0 | 230 | 30 | 0.144* | 0.019 |
| Westbound Through | 3 | 4800 | 360 | 550 | 0 | 0 | 360 | 550 | 0.081 | 0.121* |
| Westbound Right | 0 | 0 | 30 | 30 | 0 | 0 | 30 | 30 | 0.000 | 0.000 |
| Northbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Clearance Interval | | | | | | | | | 0.000* | 0.000* |
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) | | | | | | | | | 0.38 | 0.51 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | | | | | | | | | A | A |

None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted.

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




PLOT OF INTERSECTION LEG VOLUMES




| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 50 - 35 | 21 - 71 | 55 - 49 | 61 - 42 |
| % of Daily in Peak Hour (AM-PM) | 8 - 10 | 8 - 11 | 9 - 10 | 8 - 11 |

# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

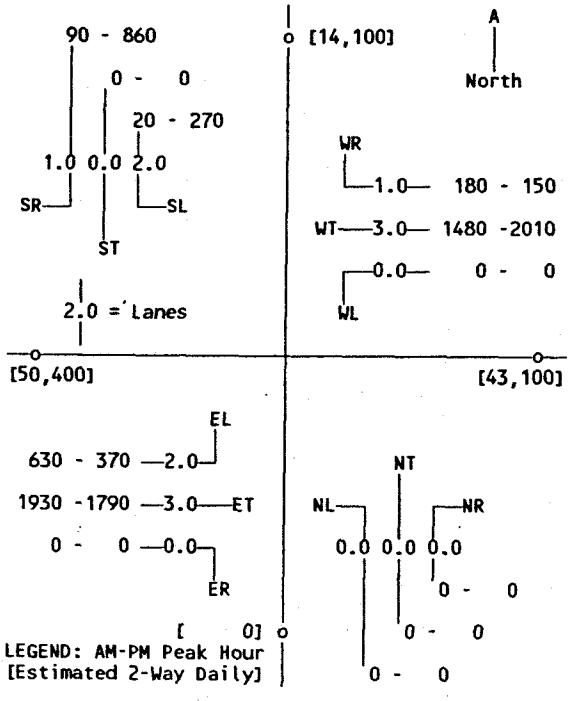
INTERSECTION: NEWPORT CENTER DRIVE (NS) and COAST HIGHWAY (EW)
LAND USE: GENERAL PLAN BUILDOUT WITHOUT PROJECT

COUNT DATE: 01-01-04
GEOMETRICS: Existing

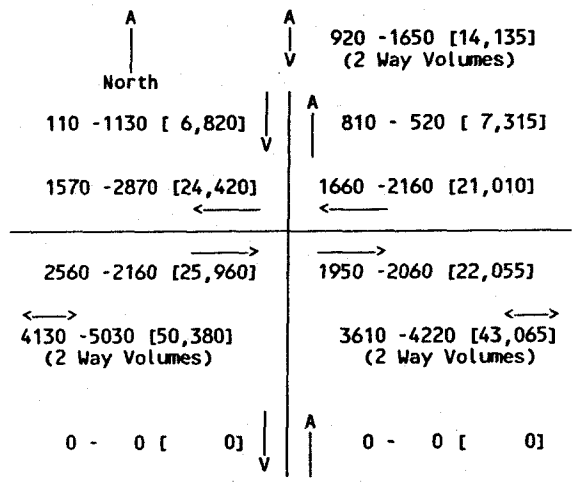
| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000 | 0.000 |
| Northbound Through | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000* | 0.000* |
| Northbound Right | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000 | 0.000 |
| Southbound Left | 2 | 3200 | 20 | 270 | 0 | 0 | 20 | 270 | 0.006* | 0.084* |
| Southbound Through | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000 | 0.000 |
| Southbound Right | Free 1 | 1600 | 90 | 860 | 0 | 0 | 90 | 860 | 0.056 | 0.538 |
| Eastbound Left | 2 | 3200 | 630 | 370 | 0 | 0 | 630 | 370 | 0.197* | 0.116* |
| Eastbound Through | 3 | 4800 | 1930 | 1790 | 0 | 0 | 1930 | 1790 | 0.402 | 0.373 |
| Eastbound Right | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000 | 0.000 |
| Westbound Left | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000 | 0.000 |
| Westbound Through | 3 | 4800 | 1480 | 2010 | 0 | 0 | 1480 | 2010 | 0.308* | 0.419* |
| Westbound Right | Free 1 | 1600 | 180 | 150 | 0 | 0 | 180 | 150 | 0.113 | 0.094 |
| Northbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Clearance Interval | | | | | | | | | 0.000* | 0.000* |
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) ——> | | | | | | | | | 0.51 | 0.62 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | | | | | | | | | A | B |

None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted.

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




PLOT OF INTERSECTION LEG VOLUMES




| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 12 - 68 | 0 - 0 | 46 - 51 | 62 - 43 |
| % of Daily in Peak Hour (AM-PM) | 7 - 12 | 0 - 0 | 8 - 10 | 8 - 10 |

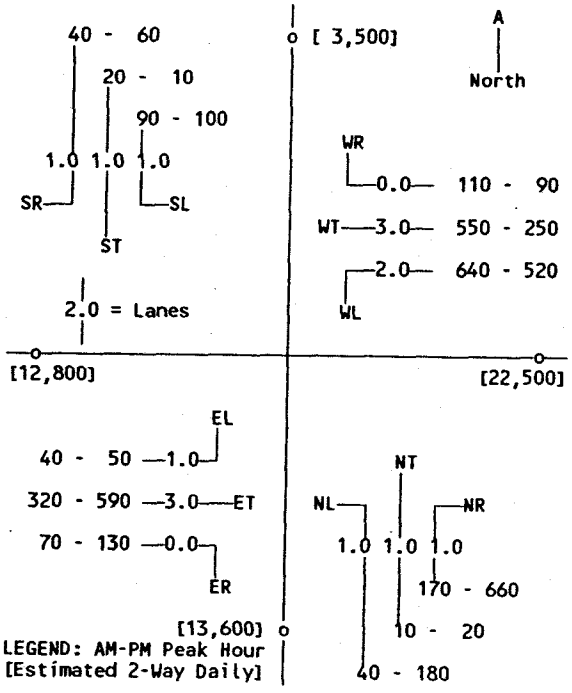
# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

INTERSECTION: SANTA ROSA DRIVE/BIG CANYON DRIVE (NS) and SAN JOAQUIN HILLS ROA — COUNT DATE: 01-01-04
LAND USE: GENERAL PLAN BUILDOUT WITHOUT PROJECT — GEOMETRICS: Existing

| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 1 | 1600 | 40 | 180 | 0 | 0 | 40 | 180 | 0.025 | 0.113* |
| Northbound Through | 1 | 1600 | 10 | 20 | 0 | 0 | 10 | 20 | 0.006* | 0.013 |
| Northbound Right | 1 | 1600 | 170 | 660 | 0 | 0 | 170 | 660 | 0.106 | 0.413 |
| Southbound Left | 1 | 1600 | 90 | 100 | 0 | 0 | 90 | 100 | 0.056* | 0.063 |
| Southbound Through | 1 | 1600 | 20 | 10 | 0 | 0 | 20 | 10 | 0.013 | 0.006* |
| Southbound Right | 1 | 1600 | 40 | 60 | 0 | 0 | 40 | 60 | 0.025 | 0.038 |
| Eastbound Left | 1 | 1600 | 40 | 50 | 0 | 0 | 40 | 50 | 0.025 | 0.031 |
| Eastbound Through | 3 | 4800 | 320 | 590 | 0 | 0 | 320 | 590 | 0.081* | 0.150* |
| Eastbound Right | 0 | 0 | 70 | 130 | 0 | 0 | 70 | 130 | 0.000 | 0.000 |
| Westbound Left | 2 | 3200 | 640 | 520 | 0 | 0 | 640 | 520 | 0.200* | 0.163* |
| Westbound Through | 3 | 4800 | 550 | 250 | 0 | 0 | 550 | 250 | 0.138 | 0.071 |
| Westbound Right | 0 | 0 | 110 | 90 | 0 | 0 | 110 | 90 | 0.000 | 0.000 |
| Northbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.226* |
| Southbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Clearance Interval | | | | | | | | | 0.000* | 0.000* |
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) ——→ | | | | | | | | | 0.34 | 0.66 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | | | | | | | | | A | B |

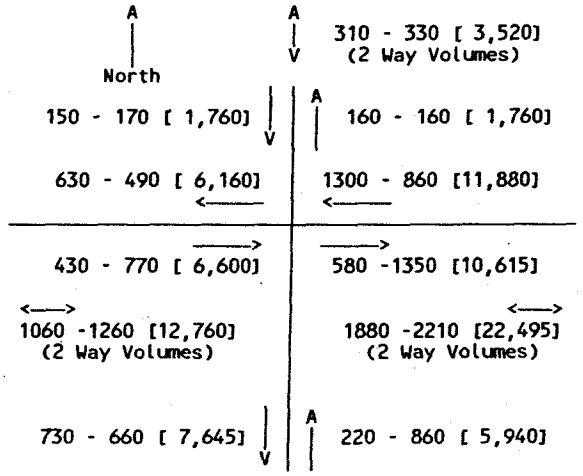
None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted.

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




LEGEND: AM-PM Peak Hour
[Estimated 2-Way Daily]

PLOT OF INTERSECTION LEG VOLUMES




LEGEND:
AM-PM Peak Hour [Daily] — 950 -1520 [13,585]
Daily = (AM+PM)* 5.5 — (2 Way Volumes)

| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 48 - 52 | 23 - 57 | 69 - 39 | 41 - 61 |
| % of Daily in Peak Hour (AM-PM) | 9 - 9 | 7 - 11 | 8 - 10 | 8 - 10 |

# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

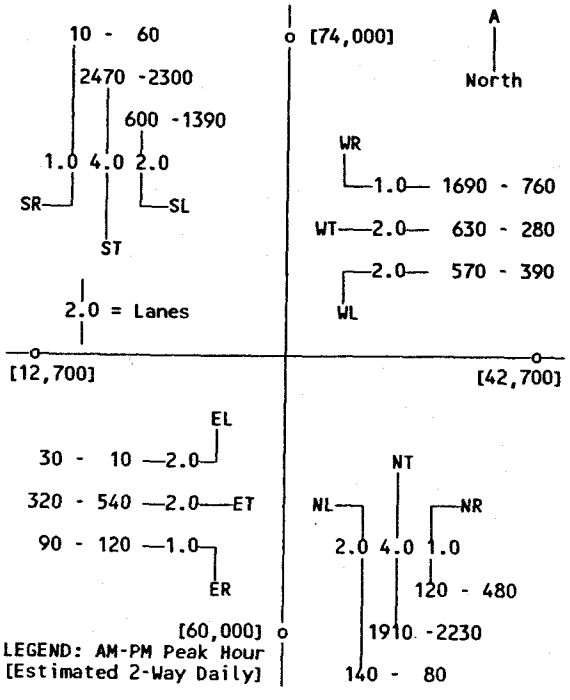
INTERSECTION: MACARTHUR BOULEVARD (NS) and FORD ROAD (EW)
LAND USE: GENERAL PLAN BUILDOUT WITHOUT PROJECT

COUNT DATE: 01-01-04
GEOMETRICS: Existing

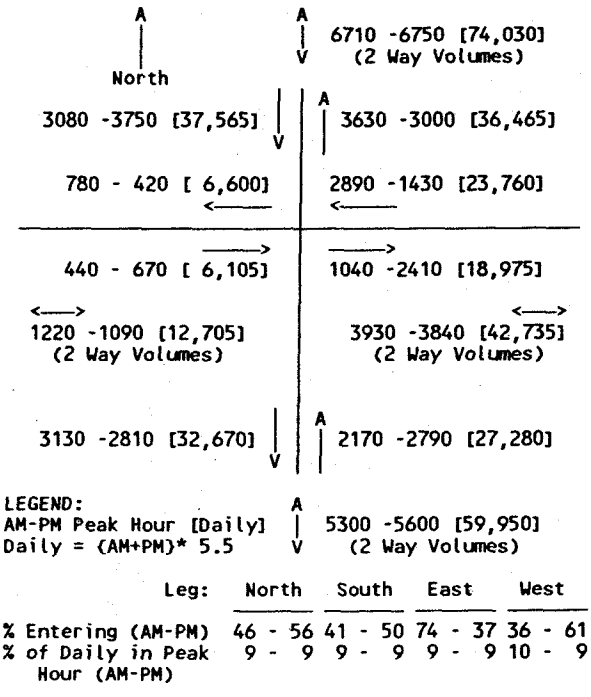
| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 2 | 3200 | 140 | 80 | 0 | 0 | 140 | 80 | 0.044 | 0.025 |
| Northbound Through | 4 | 6400 | 1910 | 2230 | 0 | 0 | 1910 | 2230 | 0.298* | 0.348* |
| Northbound Right | Free 1 | 1600 | 120 | 480 | 0 | 0 | 120 | 480 | 0.075 | 0.300 |
| Southbound Left | 2 | 3200 | 600 | 1390 | 0 | 0 | 600 | 1390 | 0.188* | 0.434* |
| Southbound Through | 4 | 6400 | 2470 | 2300 | 0 | 0 | 2470 | 2300 | 0.386 | 0.359 |
| Southbound Right | Free 1 | 1600 | 10 | 60 | 0 | 0 | 10 | 60 | 0.006 | 0.038 |
| Eastbound Left | 2 | 3200 | 30 | 10 | 0 | 0 | 30 | 10 | 0.009 | 0.003 |
| Eastbound Through | 2 | 3200 | 320 | 540 | 0 | 0 | 320 | 540 | 0.100* | 0.169* |
| Eastbound Right | 1 | 1600 | 90 | 120 | 0 | 0 | 90 | 120 | 0.056 | 0.075 |
| Westbound Left | 2 | 3200 | 570 | 390 | 0 | 0 | 570 | 390 | 0.178* | 0.122* |
| Westbound Through | 2 | 3200 | 630 | 280 | 0 | 0 | 630 | 280 | 0.197 | 0.088 |
| Westbound Right | Free 1 | 1600 | 1690 | 760 | 0 | 0 | 1690 | 760 | 1.056 | 0.475 |
| Northbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Clearance Interval | | | | | | | | | 0.000* | 0.000* |
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) ——→ | | | | | | | | | 0.76 | 1.07 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | | | | | | | | | C | F |

None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted.

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




PLOT OF INTERSECTION LEG VOLUMES



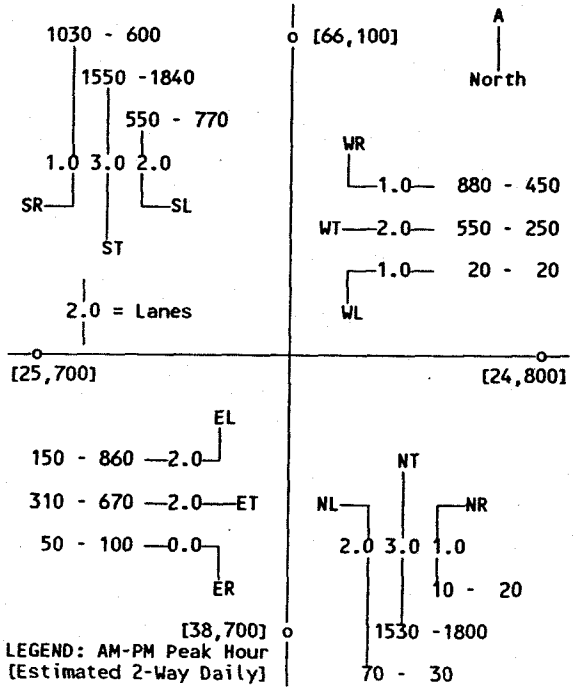

| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 46 - 56 | 41 - 50 | 74 - 37 | 36 - 61 |
| % of Daily in Peak Hour (AM-PM) | 9 - 9 | 9 - 9 | 9 - 9 | 10 - 9 |

# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

INTERSECTION: MACARTHUR BOULEVARD (NS) and SAN JOAQUIN HILLS ROAD (EW) — COUNT DATE: 01-01-04
LAND USE: GENERAL PLAN BUILDOUT WITHOUT PROJECT — GEOMETRICS: Existing

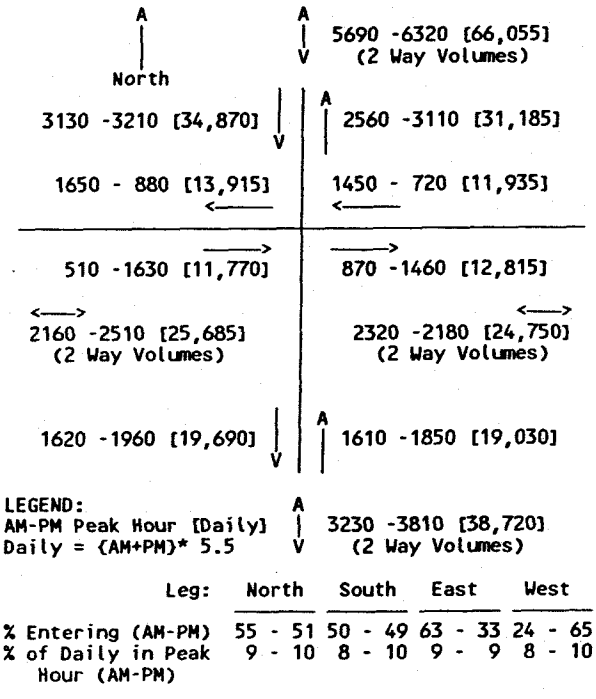
| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 2 | 3200 | 70 | 30 | 0 | 0 | 70 | 30 | 0.022 | 0.009 |
| Northbound Through | 3 | 4800 | 1530 | 1800 | 0 | 0 | 1530 | 1800 | 0.319* | 0.375* |
| Northbound Right | 1 | 1600 | 10 | 20 | 0 | 0 | 10 | 20 | 0.006 | 0.013 |
| Southbound Left | 2 | 3200 | 550 | 770 | 0 | 0 | 550 | 770 | 0.172* | 0.241* |
| Southbound Through | 3 | 4800 | 1550 | 1840 | 0 | 0 | 1550 | 1840 | 0.323 | 0.383 |
| Southbound Right | Free 1 | 1600 | 1030 | 600 | 0 | 0 | 1030 | 600 | 0.644 | 0.375 |
| Eastbound Left | 2 | 3200 | 150 | 860 | 0 | 0 | 150 | 860 | 0.047* | 0.269* |
| Eastbound Through | 2 | 3200 | 310 | 670 | 0 | 0 | 310 | 670 | 0.113 | 0.241 |
| Eastbound Right | 0 | 0 | 50 | 100 | 0 | 0 | 50 | 100 | 0.000 | 0.000 |
| Westbound Left | 1 | 1600 | 20 | 20 | 0 | 0 | 20 | 20 | 0.013 | 0.013 |
| Westbound Through | 2 | 3200 | 550 | 250 | 0 | 0 | 550 | 250 | 0.172* | 0.078* |
| Westbound Right | Free 1 | 1600 | 880 | 450 | 0 | 0 | 880 | 450 | 0.550 | 0.281 |
| Northbound Right Turn Adjustment | None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted. | | | | | | | | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Clearance Interval | | | | | | | | | 0.000* | 0.000* |
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) ——> | | | | | | | | | 0.71 | 0.96 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | | | | | | | | | C | E |

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




LEGEND: AM-PM Peak Hour
[Estimated 2-Way Daily]

PLOT OF INTERSECTION LEG VOLUMES




| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 55 - 51 | 50 - 49 | 63 - 33 | 24 - 65 |
| % of Daily in Peak Hour (AM-PM) | 9 - 10 | 8 - 10 | 9 - 9 | 8 - 10 |

# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

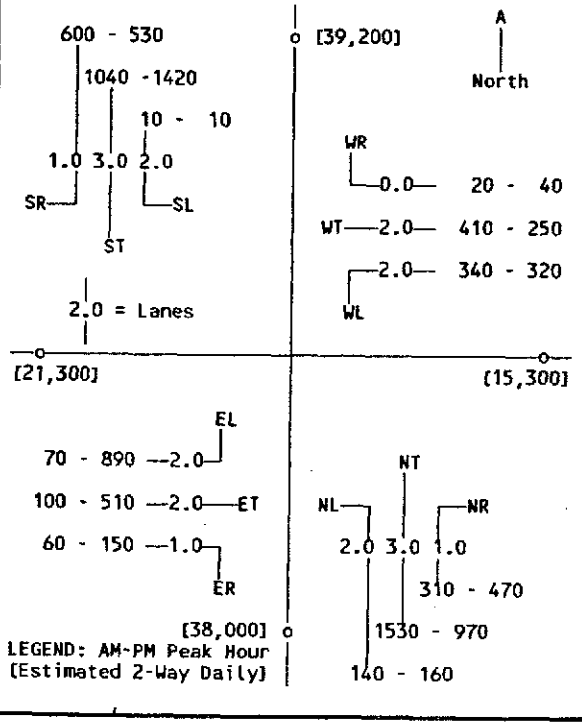
INTERSECTION: MACARTHUR BOULEVARD (NS) and SAN MIGUEL DRIVE (EW)
LAND USE: GENERAL PLAN BUILDOUT WITHOUT PROJECT

COUNT DATE: 01-01-04
GEOMETRICS: Existing

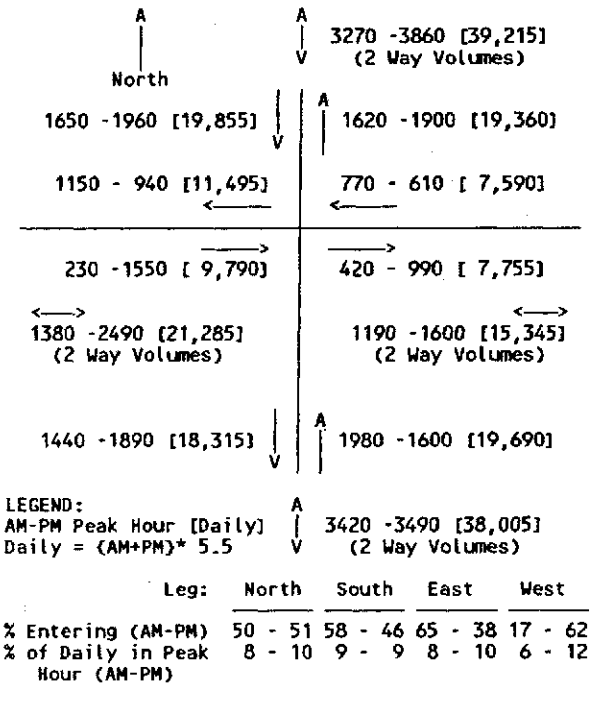
| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 2 | 3200 | 140 | 160 | 0 | 0 | 140 | 160 | 0.044 | 0.050* |
| Northbound Through | 3 | 4800 | 1530 | 970 | 0 | 0 | 1530 | 970 | 0.319* | 0.202 |
| Northbound Right | 1 | 1600 | 310 | 470 | 0 | 0 | 310 | 470 | 0.194 | 0.294 |
| Southbound Left | 2 | 3200 | 10 | 10 | 0 | 0 | 10 | 10 | 0.003* | 0.003 |
| Southbound Through | 3 | 4800 | 1040 | 1420 | 0 | 0 | 1040 | 1420 | 0.217 | 0.296* |
| Southbound Right | 1 | 1600 | 600 | 530 | 0 | 0 | 600 | 530 | 0.375 | 0.331 |
| Eastbound Left | 2 | 3200 | 70 | 890 | 0 | 0 | 70 | 890 | 0.022* | 0.278* |
| Eastbound Through | 2 | 3200 | 100 | 510 | 0 | 0 | 100 | 510 | 0.031 | 0.159 |
| Eastbound Right | 1 | 1600 | 60 | 150 | 0 | 0 | 60 | 150 | 0.038 | 0.094 |
| Westbound Left | 2 | 3200 | 340 | 320 | 0 | 0 | 340 | 320 | 0.106 | 0.100 |
| Westbound Through | 2 | 3200 | 410 | 250 | 0 | 0 | 410 | 250 | 0.134* | 0.091* |
| Westbound Right | 0 | 0 | 20 | 40 | 0 | 0 | 20 | 40 | 0.000 | 0.000 |
| Northbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | | | | | | | | 0.097* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Clearance Interval | | | | | | | | | 0.000* | 0.000* |
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) | | | | | | | | | 0.58 | 0.72 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | | | | | | | | | A | C |

None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted.

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




PLOT OF INTERSECTION LEG VOLUMES




| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 50 - 51 | 58 - 46 | 65 - 38 | 17 - 62 |
| % of Daily in Peak Hour (AM-PM) | 8 - 10 | 9 - 9 | 8 - 10 | 6 - 12 |

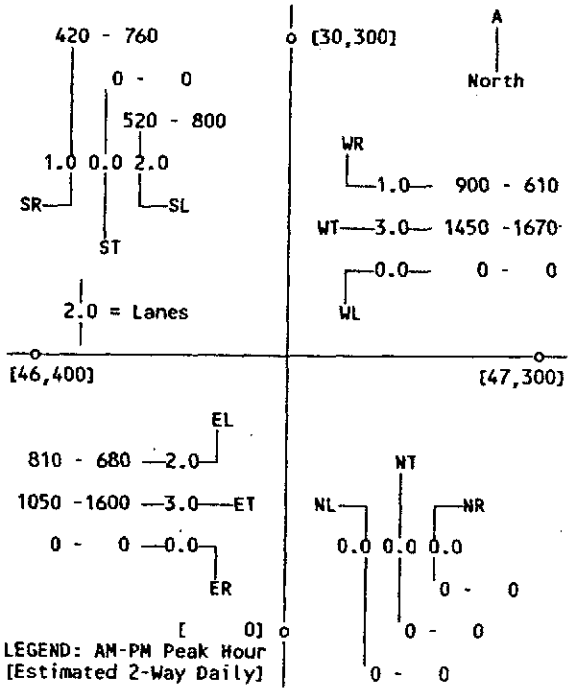
# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

INTERSECTION: MACARTHUR BOULEVARD (NS) and COAST HIGHWAY (EW)
LAND USE: GENERAL PLAN BUILDOUT WITHOUT PROJECT

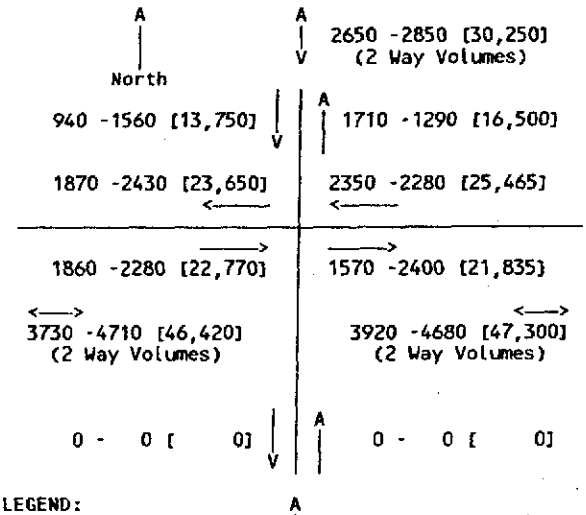
COUNT DATE: 01-01-04
GEOMETRICS: Existing

| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000 | 0.000 |
| Northbound Through | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000* | 0.000* |
| Northbound Right | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000 | 0.000 |
| Southbound Left | 2 | 3200 | 520 | 800 | 0 | 0 | 520 | 800 | 0.163* | 0.250* |
| Southbound Through | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000 | 0.000 |
| Southbound Right | Free 1 | 1600 | 420 | 760 | 0 | 0 | 420 | 760 | 0.262 | 0.475 |
| Eastbound Left | 2 | 3200 | 810 | 680 | 0 | 0 | 810 | 680 | 0.253* | 0.213* |
| Eastbound Through | 3 | 4800 | 1050 | 1600 | 0 | 0 | 1050 | 1600 | 0.219 | 0.333 |
| Eastbound Right | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000 | 0.000 |
| Westbound Left | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000 | 0.000 |
| Westbound Through | 3 | 4800 | 1450 | 1670 | 0 | 0 | 1450 | 1670 | 0.302* | 0.348* |
| Westbound Right | Free 1 | 1600 | 900 | 610 | 0 | 0 | 900 | 610 | 0.563 | 0.381 |
| Northbound Right Turn Adjustment | None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted. | | | | | | | | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Clearance Interval | | | | | | | | | 0.000* | 0.000* |
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) ——> | | | | | | | | | 0.72 | 0.81 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | | | | | | | | | C | D |

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




PLOT OF INTERSECTION LEG VOLUMES




| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 35 - 55 | 0 - 0 | 60 - 49 | 50 - 48 |
| % of Daily in Peak Hour (AM-PM) | 9 - 9 | 0 - 0 | 8 - 10 | 8 - 10 |

# General Plan Buildout With Project

# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

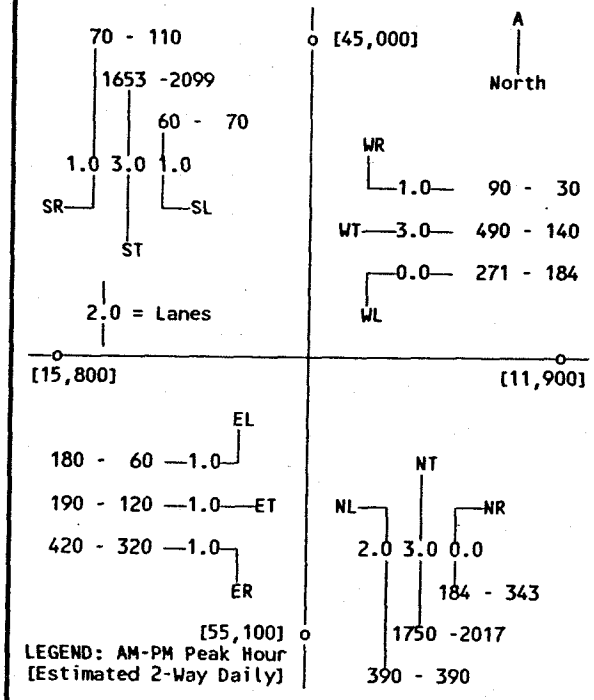
INTERSECTION: JAMBOREE ROAD (NS) and EASTBLUFF DRIVE/FORD ROAD (EW)
LAND USE: GENERAL PLAN BUILDOUT WITH PROJECT

COUNT DATE: 01-01-04
GEOMETRICS: Existing

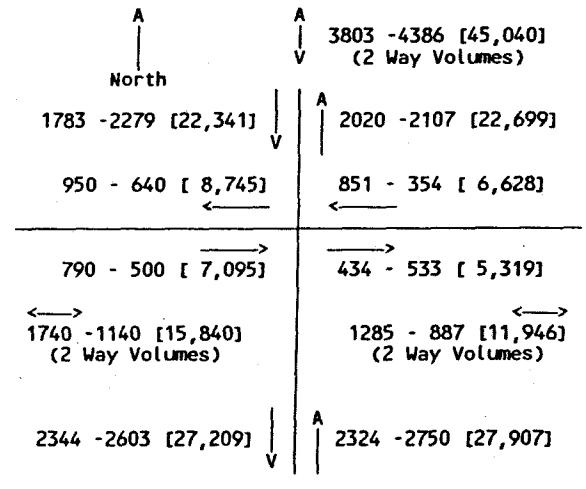
| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 2 | 3200 | 390 | 390 | 0 | 0 | 390 | 390 | 0.122* | 0.122* |
| Northbound Through | 3 | 4800 | 1740 | 2010 | 10 | 7 | 1750 | 2017 | 0.403 | 0.492 |
| Northbound Right | 0 | 0 | 180 | 340 | 4 | 3 | 184 | 343 | 0.000 | 0.000 |
| Southbound Left | 1 | 1600 | 60 | 70 | 0 | 0 | 60 | 70 | 0.038 | 0.044 |
| Southbound Through | 3 | 4800 | 1650 | 2090 | 3 | 9 | 1653 | 2099 | 0.344* | 0.437* |
| Southbound Right | 1 | 1600 | 70 | 110 | 0 | 0 | 70 | 110 | 0.044 | 0.069 |
| Eastbound Left | 1 | 1600 | 180 | 60 | 0 | 0 | 180 | 60 | 0.113 | 0.038 |
| Eastbound Through | 1 | 1600 | 190 | 120 | 0 | 0 | 190 | 120 | 0.119* | 0.075* |
| Eastbound Right | Free 1 | 1600 | 420 | 320 | 0 | 0 | 420 | 320 | 0.262 | 0.200 |
| Westbound Left | 0 | 0 | 270 | 180 | 1 | 4 | 271 | 184 | 0.000 | 0.000 |
| Westbound Through | 3 | 4800 | 490 | 140 | 0 | 0 | 490 | 140 | 0.159* | 0.068* |
| Westbound Right | 1 | 1600 | 90 | 30 | 0 | 0 | 90 | 30 | 0.056 | 0.019 |
| Northbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Clearance Interval | | | | | | | | | 0.000* | 0.000* |
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) ——> | | | | | | | | | 0.74 | 0.70 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | | | | | | | | | C | B |

None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted.

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




PLOT OF INTERSECTION LEG VOLUMES



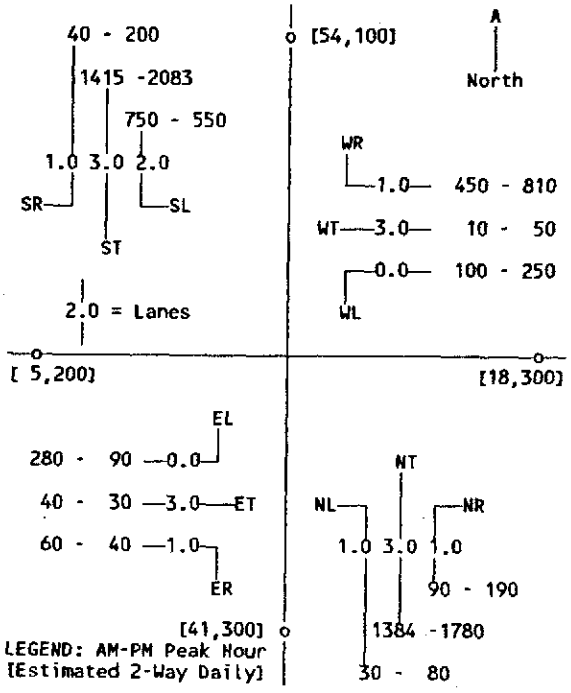

| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 47 - 52 | 50 - 51 | 66 - 40 | 45 - 44 |
| % of Daily in Peak Hour (AM-PM) | 8 - 10 | 8 - 10 | 11 - 7 | 11 - 7 |

# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

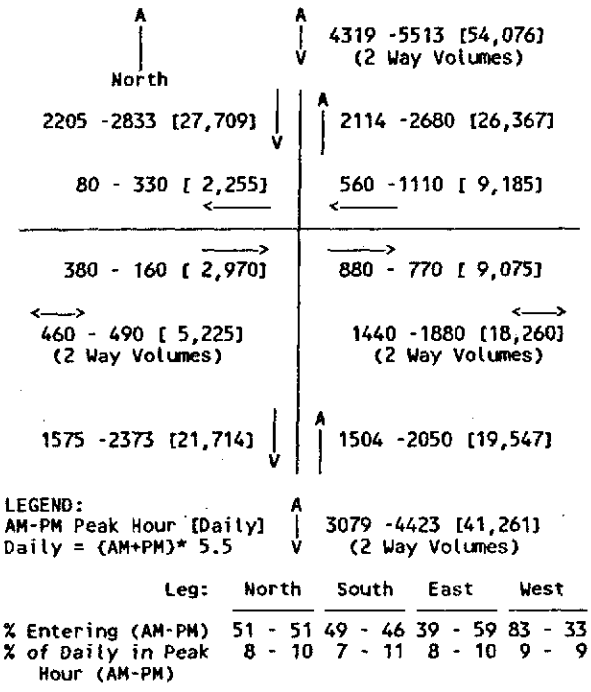
INTERSECTION: JAMBOREE ROAD (NS) and SAN JOAQUIN HILLS ROAD (EW) — COUNT DATE: 01-01-04
LAND USE: GENERAL PLAN BUILDOUT WITH PROJECT — GEOMETRICS: Existing

| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 1 | 1600 | 30 | 80 | 0 | 0 | 30 | 80 | 0.019 | 0.050 |
| Northbound Through | 3 | 4800 | 1370 | 1770 | 14 | 10 | 1384 | 1780 | 0.288* | 0.371* |
| Northbound Right | Free 1 | 1600 | 90 | 190 | 0 | 0 | 90 | 190 | 0.056 | 0.119 |
| Southbound Left | 2 | 3200 | 750 | 550 | 0 | 0 | 750 | 550 | 0.234* | 0.172* |
| Southbound Through | 3 | 4800 | 1410 | 2070 | 5 | 13 | 1415 | 2083 | 0.295 | 0.434 |
| Southbound Right | Free 1 | 1600 | 40 | 200 | 0 | 0 | 40 | 200 | 0.025 | 0.125 |
| Eastbound Left | 0 | 0 | 280 | 90 | 0 | 0 | 280 | 90 | 0.000 | 0.000 |
| Eastbound Through | 3 | 4800 | 40 | 30 | 0 | 0 | 40 | 30 | 0.067* | 0.025* |
| Eastbound Right | Free 1 | 1600 | 60 | 40 | 0 | 0 | 60 | 40 | 0.038 | 0.025 |
| Westbound Left | 0 | 0 | 100 | 250 | 0 | 0 | 100 | 250 | 0.000 | 0.000 |
| Westbound Through | 3 | 4800 | 10 | 50 | 0 | 0 | 10 | 50 | 0.023* | 0.063* |
| Westbound Right | 1 | 1600 | 450 | 810 | 0 | 0 | 450 | 810 | 0.281 | 0.506 |
| Northbound Right Turn Adjustment | None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted. | | | | | | | | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Clearance Interval | | | | | | | | | 0.000* | 0.000* |
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) ——→ | | | | | | | | | 0.61 | 0.63 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | | | | | | | | | B | B |

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




PLOT OF INTERSECTION LEG VOLUMES




| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 51 - 51 | 49 - 46 | 39 - 59 | 83 - 33 |
| % of Daily in Peak Hour (AM-PM) | 8 - 10 | 7 - 11 | 8 - 10 | 9 - 9 |

# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

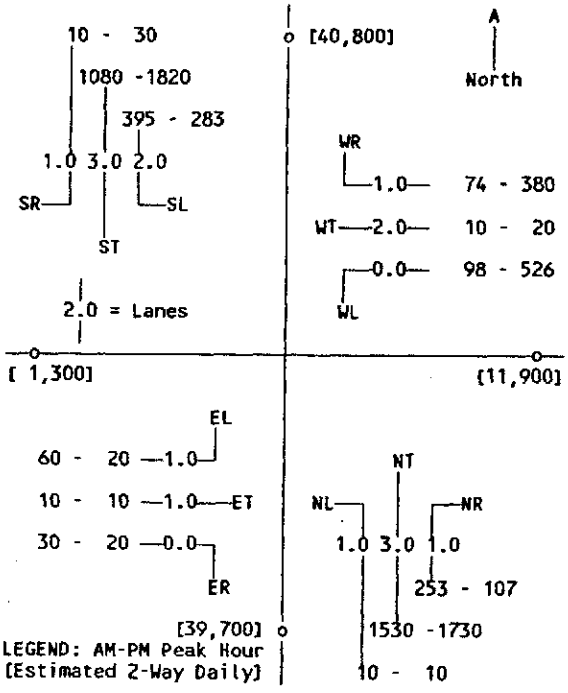
INTERSECTION: JAMBOREE ROAD (NS) and SANTA BARBARA DRIVE (EW)
LAND USE: GENERAL PLAN BUILDOUT WITH PROJECT

COUNT DATE: 01-01-04
GEOMETRICS: Existing

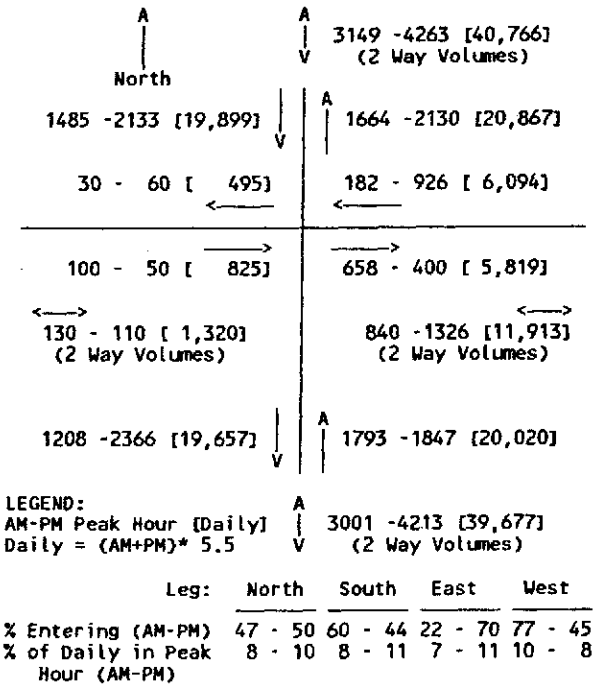
| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 1 | 1600 | 10 | 10 | 0 | 0 | 10 | 10 | 0.006 | 0.006 |
| Northbound Through | 3 | 4800 | 1530 | 1730 | 0 | 0 | 1530 | 1730 | 0.319* | 0.360* |
| Northbound Right | 1 | 1600 | 250 | 100 | 3 | 7 | 253 | 107 | 0.158 | 0.067 |
| Southbound Left | 2 | 3200 | 390 | 270 | 5 | 13 | 395 | 283 | 0.123* | 0.088* |
| Southbound Through | 3 | 4800 | 1080 | 1820 | 0 | 0 | 1080 | 1820 | 0.225 | 0.379 |
| Southbound Right | 1 | 1600 | 10 | 30 | 0 | 0 | 10 | 30 | 0.006 | 0.019 |
| Eastbound Left | 1 | 1600 | 60 | 20 | 0 | 0 | 60 | 20 | 0.038* | 0.013 |
| Eastbound Through | 1 | 1600 | 10 | 10 | 0 | 0 | 10 | 10 | 0.025 | 0.019* |
| Eastbound Right | 0 | 0 | 30 | 20 | 0 | 0 | 30 | 20 | 0.000 | 0.000 |
| Westbound Left | 0 | 0 | 90 | 520 | 8 | 6 | 98 | 526 | 0.000 | 0.000 |
| Westbound Through | 2 | 3200 | 10 | 20 | 0 | 0 | 10 | 20 | 0.034* | 0.171* |
| Westbound Right | 1 | 1600 | 60 | 370 | 14 | 10 | 74 | 380 | 0.046 | 0.238 |
| Northbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | 0.012* | 0.067* |
| Clearance Interval | | | | | | | | | 0.000* | 0.000* |
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) ——> | | | | | | | | | 0.53 | 0.71 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | | | | | | | | | A | C |

None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted.

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




PLOT OF INTERSECTION LEG VOLUMES




| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 47 - 50 | 60 - 44 | 22 - 70 | 77 - 45 |
| % of Daily in Peak Hour (AM-PM) | 8 - 10 | 8 - 11 | 7 - 11 | 10 - 8 |

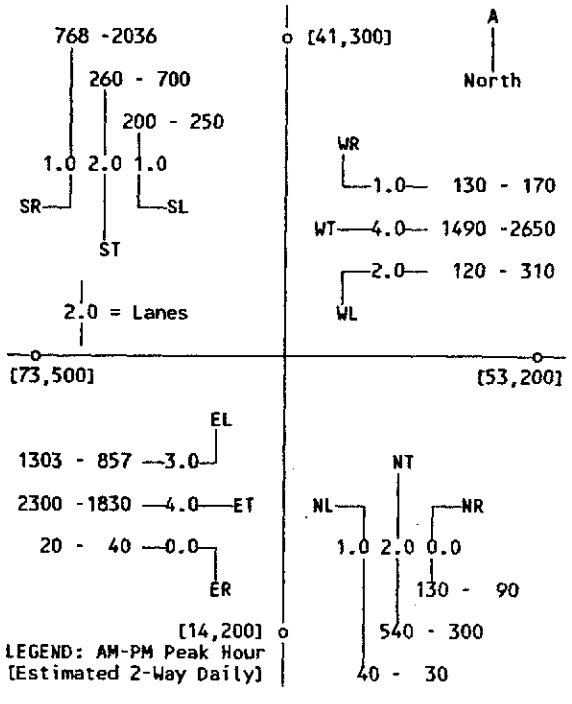
# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

INTERSECTION: JAMBOREE ROAD (NS) and COAST HIGHWAY (EW)
LAND USE: GENERAL PLAN BUILDOUT WITH PROJECT

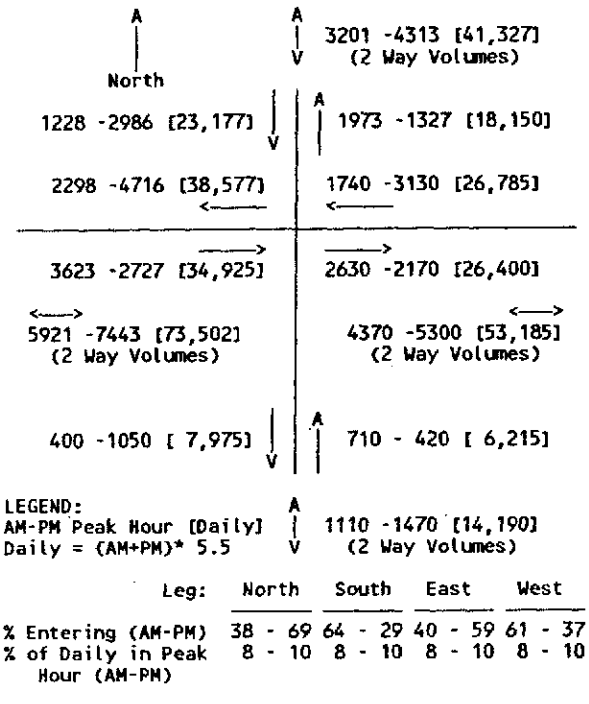
COUNT DATE: 01-01-04
GEOMETRICS: Existing

| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 1 | 1600 | 40 | 30 | 0 | 0 | 40 | 30 | 0.025 | 0.019 |
| Northbound Through | 2 | 3200 | 540 | 300 | 0 | 0 | 540 | 300 | 0.209* | 0.122* |
| Northbound Right | 0 | 0 | 130 | 90 | 0 | 0 | 130 | 90 | 0.000 | 0.000 |
| Southbound Left | 1 | 1600 | 200 | 250 | 0 | 0 | 200 | 250 | 0.125* | 0.156* |
| Southbound Through | 2 | 3200 | 260 | 700 | 0 | 0 | 260 | 700 | 0.081 | 0.219 |
| Southbound Right | Free 1 | 1600 | 760 | 2030 | 8 | 6 | 768 | 2036 | 0.480 | 1.273 |
| Eastbound Left | 3 | 4800 | 1300 | 850 | 3 | 7 | 1303 | 857 | 0.271* | 0.179* |
| Eastbound Through | 4 | 6400 | 2300 | 1830 | 0 | 0 | 2300 | 1830 | 0.363 | 0.292 |
| Eastbound Right | 0 | 0 | 20 | 40 | 0 | 0 | 20 | 40 | 0.000 | 0.000 |
| Westbound Left | 2 | 3200 | 120 | 310 | 0 | 0 | 120 | 310 | 0.038 | 0.097 |
| Westbound Through | 4 | 6400 | 1490 | 2650 | 0 | 0 | 1490 | 2650 | 0.233* | 0.414* |
| Westbound Right | Free 1 | 1600 | 130 | 170 | 0 | 0 | 130 | 170 | 0.081 | 0.106 |
| Northbound Right Turn Adjustment | | | None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted. | | | | | | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Clearance Interval | | | | | | | | | 0.000* | 0.000* |
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) ——→ | | | | | | | | | 0.84 | 0.87 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | | | | | | | | | D | D |

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




PLOT OF INTERSECTION LEG VOLUMES




| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 38 - 69 | 64 - 29 | 40 - 59 | 61 - 37 |
| % of Daily in Peak Hour (AM-PM) | 8 - 10 | 8 - 10 | 8 - 10 | 8 - 10 |

# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

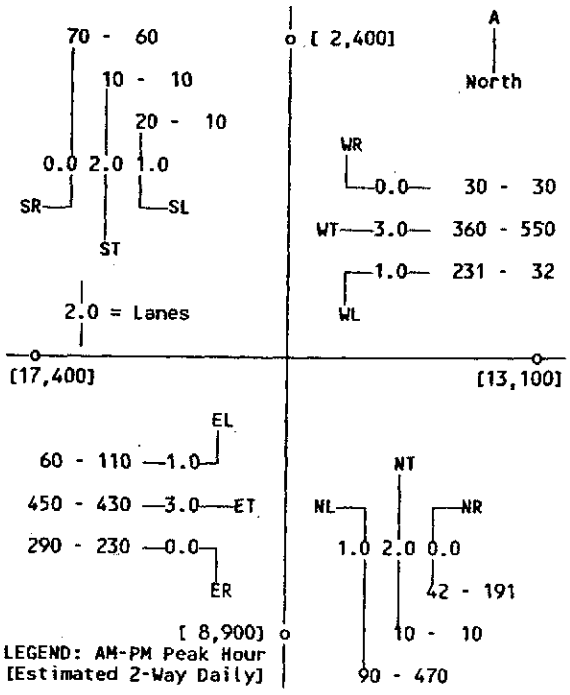
INTERSECTION: SANTA CRUZ DRIVE (NS) and SAN JOAQUIN HILLS ROAD (EW)
LAND USE: GENERAL PLAN BUILDOUT WITH PROJECT

COUNT DATE: 01-01-04
GEOMETRICS: Existing

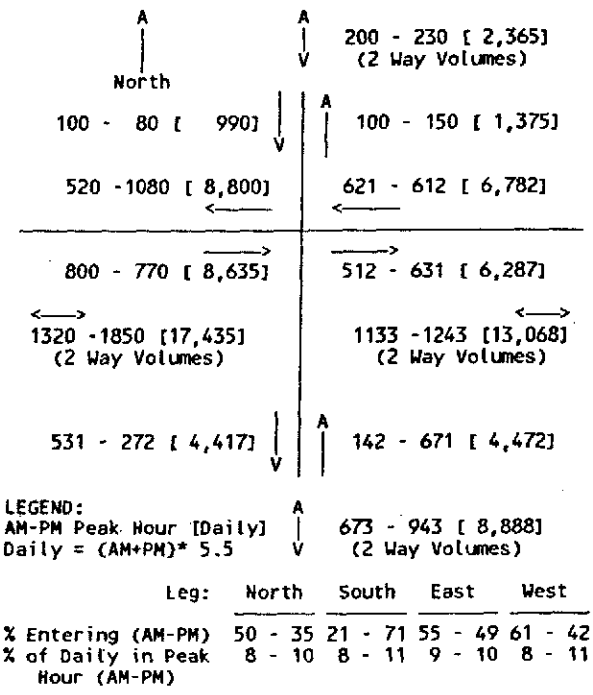
| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 1 | 1600 | 90 | 470 | 0 | 0 | 90 | 470 | 0.056* | 0.294* |
| Northbound Through | 2 | 3200 | 10 | 10 | 0 | 0 | 10 | 10 | 0.016 | 0.063 |
| Northbound Right | 0 | 0 | 40 | 190 | 2 | 1 | 42 | 191 | 0.000 | 0.000 |
| Southbound Left | 1 | 1600 | 20 | 10 | 0 | 0 | 20 | 10 | 0.013 | 0.006 |
| Southbound Through | 2 | 3200 | 10 | 10 | 0 | 0 | 10 | 10 | 0.025* | 0.022* |
| Southbound Right | 0 | 0 | 70 | 60 | 0 | 0 | 70 | 60 | 0.000 | 0.000 |
| Eastbound Left | 1 | 1600 | 60 | 110 | 0 | 0 | 60 | 110 | 0.038 | 0.069* |
| Eastbound Through | 3 | 4800 | 450 | 430 | 0 | 0 | 450 | 430 | 0.154* | 0.138 |
| Eastbound Right | 0 | 0 | 290 | 230 | 0 | 0 | 290 | 230 | 0.000 | 0.000 |
| Westbound Left | 1 | 1600 | 230 | 30 | 1 | 2 | 231 | 32 | 0.144* | 0.020 |
| Westbound Through | 3 | 4800 | 360 | 550 | 0 | 0 | 360 | 550 | 0.081 | 0.121* |
| Westbound Right | 0 | 0 | 30 | 30 | 0 | 0 | 30 | 30 | 0.000 | 0.000 |
| Northbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Clearance Interval | | | | | | | | | 0.000* | 0.000* |
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) | | | | | | | | | 0.38 | 0.51 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | | | | | | | | | A | A |

None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted.

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




PLOT OF INTERSECTION LEG VOLUMES




| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 50 - 35 | 21 - 71 | 55 - 49 | 61 - 42 |
| % of Daily in Peak Hour (AM-PM) | 8 - 10 | 8 - 11 | 9 - 10 | 8 - 11 |

# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

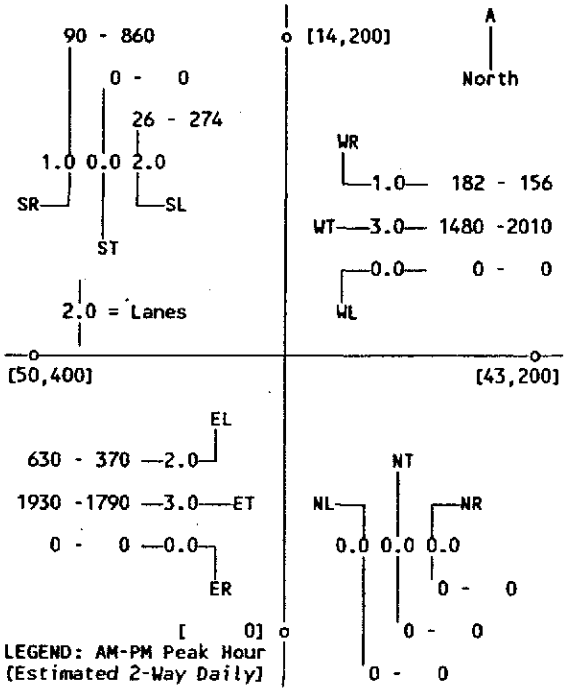
INTERSECTION: NEWPORT CENTER DRIVE (NS) and COAST HIGHWAY (EW)
LAND USE: GENERAL PLAN BUILDOUT WITH PROJECT

COUNT DATE: 01-01-04
GEOMETRICS: Existing

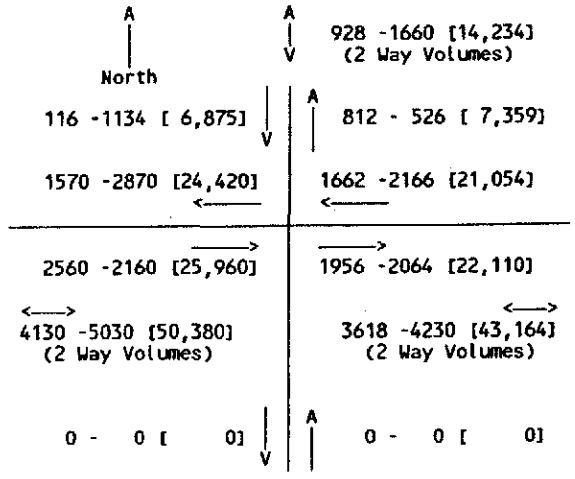
| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000 | 0.000 |
| Northbound Through | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000* | 0.000* |
| Northbound Right | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000 | 0.000 |
| Southbound Left | 2 | 3200 | 20 | 270 | 6 | 4 | 26 | 274 | 0.008* | 0.086* |
| Southbound Through | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000 | 0.000 |
| Southbound Right | Free 1 | 1600 | 90 | 860 | 0 | 0 | 90 | 860 | 0.056 | 0.538 |
| Eastbound Left | 2 | 3200 | 630 | 370 | 0 | 0 | 630 | 370 | 0.197* | 0.116* |
| Eastbound Through | 3 | 4800 | 1930 | 1790 | 0 | 0 | 1930 | 1790 | 0.402 | 0.373 |
| Eastbound Right | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000 | 0.000 |
| Westbound Left | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000 | 0.000 |
| Westbound Through | 3 | 4800 | 1480 | 2010 | 0 | 0 | 1480 | 2010 | 0.308* | 0.419* |
| Westbound Right | Free 1 | 1600 | 180 | 150 | 2 | 6 | 182 | 156 | 0.114 | 0.098 |
| Northbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Clearance Interval | | | | | | | | | 0.000* | 0.000* |
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) | | | | | | | | | 0.51 | 0.62 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | | | | | | | | | A | B |

None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted.

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




PLOT OF INTERSECTION LEG VOLUMES




| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 13 - 68 | 0 - 0 | 46 - 51 | 62 - 43 |
| % of Daily in Peak Hour (AM-PM) | 7 - 12 | 0 - 0 | 8 - 10 | 8 - 10 |

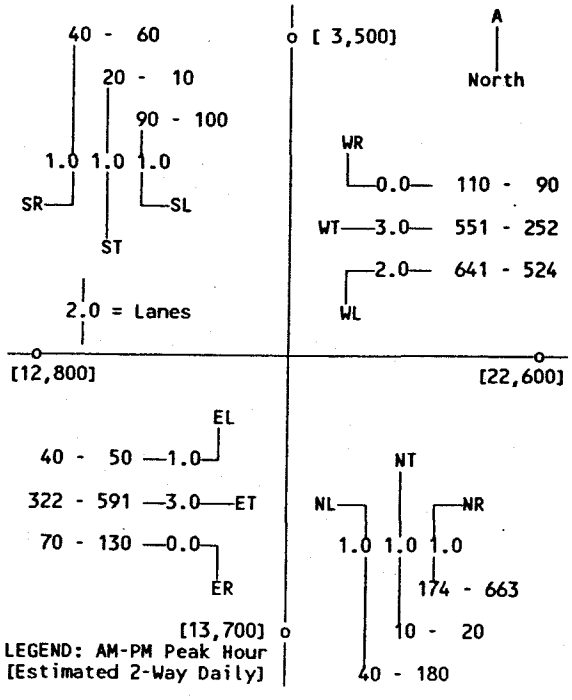
# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

INTERSECTION: SANTA ROSA DRIVE/BIG CANYON DRIVE (NS) and SAN JOAQUIN HILLS ROA — COUNT DATE: 01-01-04
LAND USE: GENERAL PLAN BUILDOUT WITH PROJECT — GEOMETRICS: Existing

| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 1 | 1600 | 40 | 180 | 0 | 0 | 40 | 180 | 0.025 | 0.113* |
| Northbound Through | 1 | 1600 | 10 | 20 | 0 | 0 | 10 | 20 | 0.006* | 0.013 |
| Northbound Right | 1 | 1600 | 170 | 660 | 4 | 3 | 174 | 663 | 0.109 | 0.414 |
| Southbound Left | 1 | 1600 | 90 | 100 | 0 | 0 | 90 | 100 | 0.056* | 0.063 |
| Southbound Through | 1 | 1600 | 20 | 10 | 0 | 0 | 20 | 10 | 0.013 | 0.006* |
| Southbound Right | 1 | 1600 | 40 | 60 | 0 | 0 | 40 | 60 | 0.025 | 0.038 |
| Eastbound Left | 1 | 1600 | 40 | 50 | 0 | 0 | 40 | 50 | 0.025 | 0.031 |
| Eastbound Through | 3 | 4800 | 320 | 590 | 2 | 1 | 322 | 591 | 0.082* | 0.150* |
| Eastbound Right | 0 | 0 | 70 | 130 | 0 | 0 | 70 | 130 | 0.000 | 0.000 |
| Westbound Left | 2 | 3200 | 640 | 520 | 1 | 4 | 641 | 524 | 0.200* | 0.164* |
| Westbound Through | 3 | 4800 | 550 | 250 | 1 | 2 | 551 | 252 | 0.138 | 0.071 |
| Westbound Right | 0 | 0 | 110 | 90 | 0 | 0 | 110 | 90 | 0.000 | 0.000 |
| Northbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.227* |
| Southbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Clearance Interval | | | | | | | | | 0.000* | 0.000* |
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) ——> | | | | | | | | | 0.34 | 0.66 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | | | | | | | | | A | B |

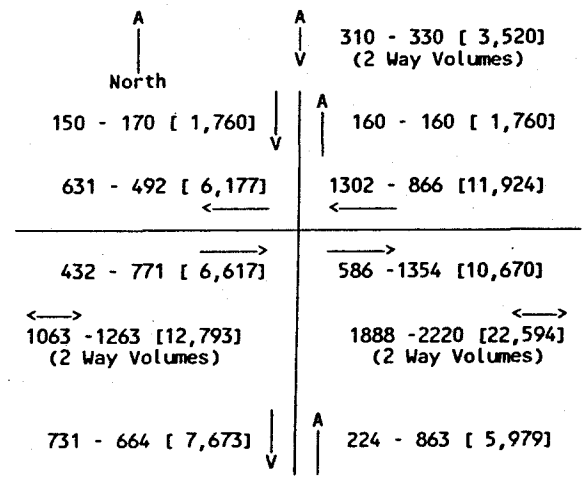
None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted.

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




LEGEND: AM-PM Peak Hour
[Estimated 2-Way Daily]

PLOT OF INTERSECTION LEG VOLUMES




LEGEND:
AM-PM Peak Hour [Daily]
Daily = (AM+PM)* 5.5

A
V
955 -1527 [13,651]
(2 Way Volumes)

| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 48 - 52 | 23 - 57 | 69 - 39 | 41 - 61 |
| % of Daily in Peak Hour (AM-PM) | 9 - 9 | 7 - 11 | 8 - 10 | 8 - 10 |

# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

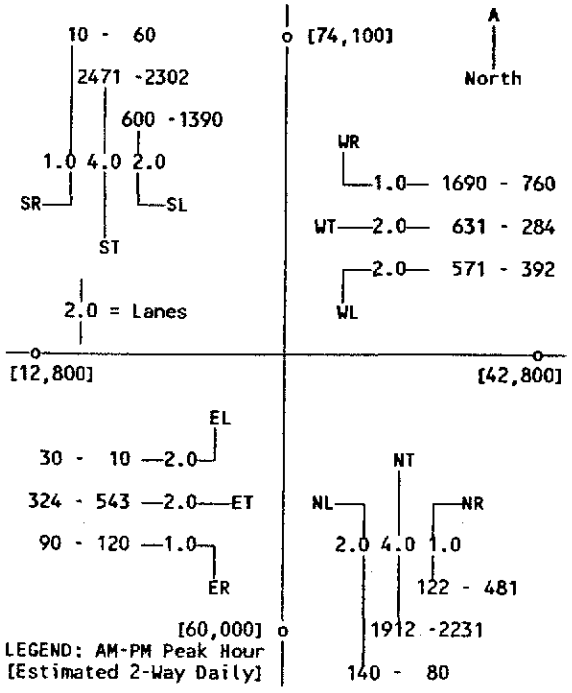
INTERSECTION: MACARTHUR BOULEVARD (NS) and FORD ROAD (EW)
LAND USE: GENERAL PLAN BUILDOUT WITH PROJECT

COUNT DATE: 01-01-04
GEOMETRICS: Existing

| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 2 | 3200 | 140 | 80 | 0 | 0 | 140 | 80 | 0.044 | 0.025 |
| Northbound Through | 4 | 6400 | 1910 | 2230 | 2 | 1 | 1912 | 2231 | 0.299* | 0.349* |
| Northbound Right | Free 1 | 1600 | 120 | 480 | 2 | 1 | 122 | 481 | 0.076 | 0.301 |
| Southbound Left | 2 | 3200 | 600 | 1390 | 0 | 0 | 600 | 1390 | 0.188* | 0.434* |
| Southbound Through | 4 | 6400 | 2470 | 2300 | 1 | 2 | 2471 | 2302 | 0.386 | 0.360 |
| Southbound Right | Free 1 | 1600 | 10 | 60 | 0 | 0 | 10 | 60 | 0.006 | 0.038 |
| Eastbound Left | 2 | 3200 | 30 | 10 | 0 | 0 | 30 | 10 | 0.009 | 0.003 |
| Eastbound Through | 2 | 3200 | 320 | 540 | 4 | 3 | 324 | 543 | 0.101* | 0.170* |
| Eastbound Right | 1 | 1600 | 90 | 120 | 0 | 0 | 90 | 120 | 0.056 | 0.075 |
| Westbound Left | 2 | 3200 | 570 | 390 | 1 | 2 | 571 | 392 | 0.178* | 0.123* |
| Westbound Through | 2 | 3200 | 630 | 280 | 1 | 4 | 631 | 284 | 0.197 | 0.089 |
| Westbound Right | Free 1 | 1600 | 1690 | 760 | 0 | 0 | 1690 | 760 | 1.056 | 0.475 |
| Northbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Clearance Interval | | | | | | | | | 0.000* | 0.000* |
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) ——→ | | | | | | | | | 0.77 | 1.08 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | | | | | | | | | C | F |

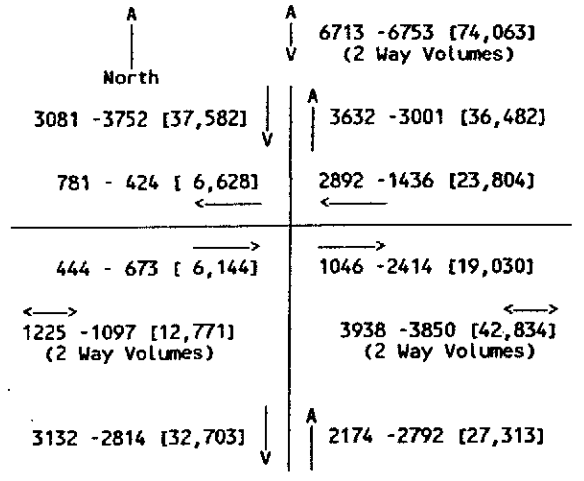
None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted.

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




LEGEND: AM-PM Peak Hour
[Estimated 2-Way Daily]

PLOT OF INTERSECTION LEG VOLUMES




LEGEND:
AM-PM Peak Hour [Daily]
Daily = (AM+PM)* 5.5

A
5306 -5606 [60,016]
(2 Way Volumes)

| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 46 - 56 | 41 - 50 | 73 - 37 | 36 - 61 |
| % of Daily in Peak Hour (AM-PM) | 9 - 9 | 9 - 9 | 9 - 9 | 10 - 9 |

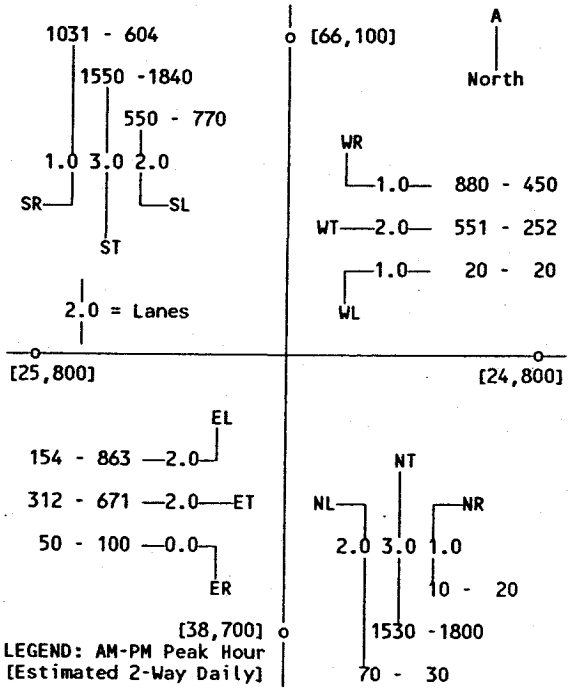
# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

INTERSECTION: MACARTHUR BOULEVARD (NS) and SAN JOAQUIN HILLS ROAD (EW) — COUNT DATE: 01-01-04
LAND USE: GENERAL PLAN BUILDOUT WITH PROJECT — GEOMETRICS: Existing

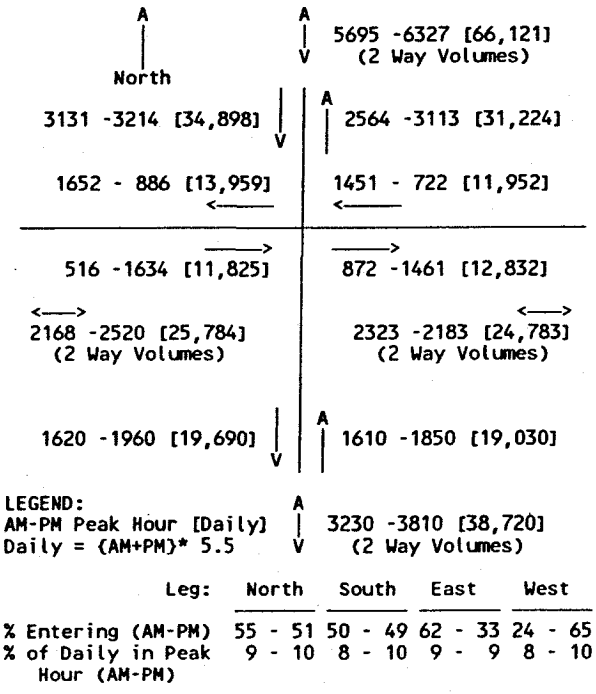
| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 2 | 3200 | 70 | 30 | 0 | 0 | 70 | 30 | 0.022 | 0.009 |
| Northbound Through | 3 | 4800 | 1530 | 1800 | 0 | 0 | 1530 | 1800 | 0.319* | 0.375* |
| Northbound Right | 1 | 1600 | 10 | 20 | 0 | 0 | 10 | 20 | 0.006 | 0.013 |
| Southbound Left | 2 | 3200 | 550 | 770 | 0 | 0 | 550 | 770 | 0.172* | 0.241* |
| Southbound Through | 3 | 4800 | 1550 | 1840 | 0 | 0 | 1550 | 1840 | 0.323 | 0.383 |
| Southbound Right | Free 1 | 1600 | 1030 | 600 | 1 | 4 | 1031 | 604 | 0.644 | 0.378 |
| Eastbound Left | 2 | 3200 | 150 | 860 | 4 | 3 | 154 | 863 | 0.048* | 0.270* |
| Eastbound Through | 2 | 3200 | 310 | 670 | 2 | 1 | 312 | 671 | 0.113 | 0.241 |
| Eastbound Right | 0 | 0 | 50 | 100 | 0 | 0 | 50 | 100 | 0.000 | 0.000 |
| Westbound Left | 1 | 1600 | 20 | 20 | 0 | 0 | 20 | 20 | 0.013 | 0.013 |
| Westbound Through | 2 | 3200 | 550 | 250 | 1 | 2 | 551 | 252 | 0.172* | 0.079* |
| Westbound Right | Free 1 | 1600 | 880 | 450 | 0 | 0 | 880 | 450 | 0.550 | 0.281 |
| Northbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Clearance Interval | | | | | | | | | 0.000* | 0.000* |
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) ——> | | | | | | | | | 0.71 | 0.97 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | | | | | | | | | C | E |

None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted.

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




PLOT OF INTERSECTION LEG VOLUMES




| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 55 - 51 | 50 - 49 | 62 - 33 | 24 - 65 |
| % of Daily in Peak Hour (AM-PM) | 9 - 10 | 8 - 10 | 9 - 9 | 8 - 10 |

# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

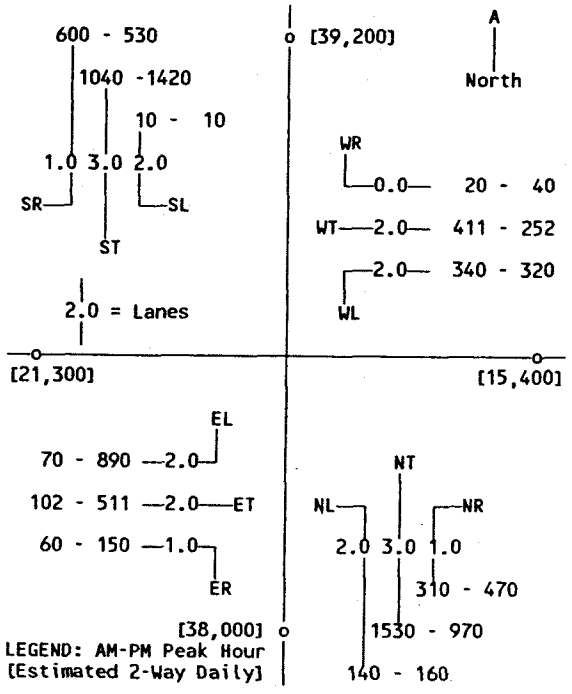
INTERSECTION: MACARTHUR BOULEVARD (NS) and SAN MIGUEL DRIVE (EW) — COUNT DATE: 01-01-04
LAND USE: GENERAL PLAN BUILDOUT WITH PROJECT — GEOMETRICS: Existing

| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 2 | 3200 | 140 | 160 | 0 | 0 | 140 | 160 | 0.044 | 0.050* |
| Northbound Through | 3 | 4800 | 1530 | 970 | 0 | 0 | 1530 | 970 | 0.319* | 0.202 |
| Northbound Right | 1 | 1600 | 310 | 470 | 0 | 0 | 310 | 470 | 0.194 | 0.294 |
| Southbound Left | 2 | 3200 | 10 | 10 | 0 | 0 | 10 | 10 | 0.003* | 0.003 |
| Southbound Through | 3 | 4800 | 1040 | 1420 | 0 | 0 | 1040 | 1420 | 0.217 | 0.296* |
| Southbound Right | 1 | 1600 | 600 | 530 | 0 | 0 | 600 | 530 | 0.375 | 0.331 |
| Eastbound Left | 2 | 3200 | 70 | 890 | 0 | 0 | 70 | 890 | 0.022* | 0.278* |
| Eastbound Through | 2 | 3200 | 100 | 510 | 2 | 1 | 102 | 511 | 0.032 | 0.160 |
| Eastbound Right | 1 | 1600 | 60 | 150 | 0 | 0 | 60 | 150 | 0.038 | 0.094 |
| Westbound Left | 2 | 3200 | 340 | 320 | 0 | 0 | 340 | 320 | 0.106 | 0.100 |
| Westbound Through | 2 | 3200 | 410 | 250 | 1 | 2 | 411 | 252 | 0.135* | 0.091* |
| Westbound Right | 0 | 0 | 20 | 40 | 0 | 0 | 20 | 40 | 0.000 | 0.000 |

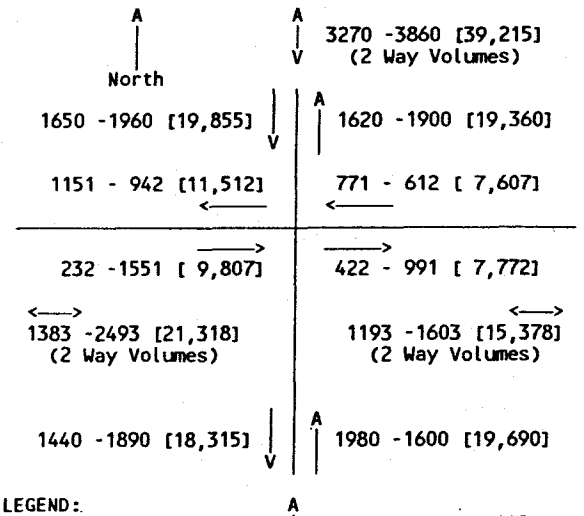
| | | | |
|---|---|---|---|
| Northbound Right Turn Adjustment | None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted. | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | 0.097* | 0.000* |
| Eastbound Right Turn Adjustment | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | 0.000* | 0.000* |
| Clearance Interval | | 0.000* | 0.000* |

| | | |
|---|---|---|
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) ——→ | 0.58 | 0.72 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | A | C |

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




PLOT OF INTERSECTION LEG VOLUMES




| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 50 - 51 | 58 - 46 | 65 - 38 | 17 - 62 |
| % of Daily in Peak Hour (AM-PM) | 8 - 10 | 9 - 9 | 8 - 10 | 6 - 12 |

# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

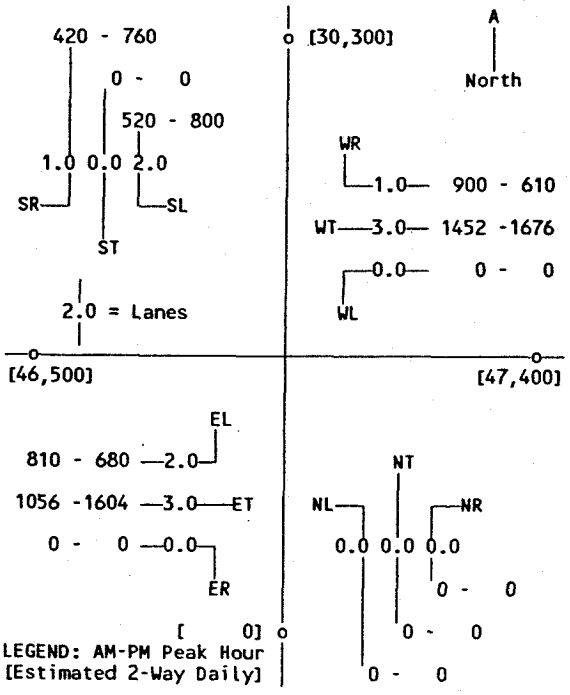
INTERSECTION: MACARTHUR BOULEVARD (NS) and COAST HIGHWAY (EW)
LAND USE: GENERAL PLAN BUILDOUT WITH PROJECT

COUNT DATE: 01-01-04
GEOMETRICS: Existing

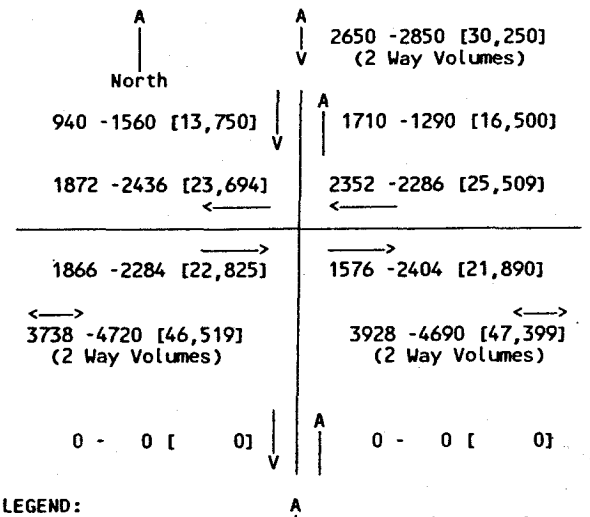
| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000 | 0.000 |
| Northbound Through | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000* | 0.000* |
| Northbound Right | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000 | 0.000 |
| Southbound Left | 2 | 3200 | 520 | 800 | 0 | 0 | 520 | 800 | 0.163* | 0.250* |
| Southbound Through | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000 | 0.000 |
| Southbound Right | Free 1 | 1600 | 420 | 760 | 0 | 0 | 420 | 760 | 0.262 | 0.475 |
| Eastbound Left | 2 | 3200 | 810 | 680 | 0 | 0 | 810 | 680 | 0.253* | 0.213* |
| Eastbound Through | 3 | 4800 | 1050 | 1600 | 6 | 4 | 1056 | 1604 | 0.220 | 0.334 |
| Eastbound Right | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000 | 0.000 |
| Westbound Left | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000 | 0.000 |
| Westbound Through | 3 | 4800 | 1450 | 1670 | 2 | 6 | 1452 | 1676 | 0.303* | 0.349* |
| Westbound Right | Free 1 | 1600 | 900 | 610 | 0 | 0 | 900 | 610 | 0.563 | 0.381 |
| Northbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Clearance Interval | | | | | | | | | 0.000* | 0.000* |
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) ——> | | | | | | | | | 0.72 | 0.81 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | | | | | | | | | C | D |

None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted.

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




PLOT OF INTERSECTION LEG VOLUMES




| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 35 - 55 | 0 - 0 | 60 - 49 | 50 - 48 |
| % of Daily in Peak Hour (AM-PM) | 9 - 9 | 0 - 0 | 8 - 10 | 8 - 10 |

PA 2004-169

# CITY OF NEWPORT BEACH

# SANTA BARBARA CONDOMINIUM PROJECT

# TRAFFIC IMPACT ANALYSIS (REVISED)

**Prepared by:**

**Carl Ballard and**
**William Kunzman, P.E.**

William Kunzman

**February 14, 2005**

KUNZMAN ASSOCIATES
1111 Town & Country Road, Suite 34
Orange, CA 92868-4667
Phone: (714) 973-8383
Fax: (714) 973-8821
Email: mail@traffic-engineer.com
Web: www.traffic-engineer.com

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# City of Newport Beach

# Santa Barbara Condominium Project

# Traffic Impact Analysis (Revised)

This report contains the revised traffic impact analysis for the Santa Barbara Condominium project. The project site is located at 900 Newport Center Drive adjacent to the existing Marriott Hotel. The proposed condominium project is located southerly of Santa Barbara Drive between Jamboree Road and Newport Center Drive. The proposed development consists of 79 condominium dwelling units.

The traffic report contains documentation of existing traffic conditions, traffic generated by the project, distribution of the project traffic to roads outside the project, and an analysis of future traffic conditions. Each of these topics is contained in a separate section of the report. The first section is "Findings", and subsequent sections expand upon the findings. In this way, information on any particular aspect of the study can be easily located by the reader.

Although this is a technical report, every effort has been made to write the report clearly and concisely. To assist the reader with those terms unique to transportation engineering, a glossary of terms is provided in Appendix A.

# 1. Findings

This section summarizes the existing traffic conditions, project traffic impacts, and the proposed mitigation measures.

**Existing Traffic Conditions**

a. The existing use is a tennis club (includes 8 tennis courts) and is an ancillary use to the Marriott Hotel.

b. The project site currently has access to Santa Barbara Drive.

c. Pursuant to discussions with City of Newport Beach staff, the study area includes the following intersections:

Jamboree Road (NS) at:
- Eastbluff Drive/Ford Road (EW)
- San Joaquin Hills Road (EW)
- Santa Barbara Drive (EW)
- Coast Highway (EW)

Santa Cruz Road (NS) at:
- San Joaquin Hills Road (EW)
- San Clemente Drive (EW)

Newport Center Drive (NS) at:
- Santa Barbara Drive (EW)
- Coast Highway (EW)

Santa Rosa Drive/Big Canyon Drive (NS) at:
- San Joaquin Hills Road (EW)

Avocado Avenue (NS) at:
- Coast Highway (EW)

MacArthur Boulevard (NS) at:
- Ford Road (EW)
- San Joaquin Hills Road (EW)
- San Miguel Drive (EW)
- Coast Highway (EW)

## Traffic Impacts

a. The proposed project consists of 79 condominium dwelling units.

b. The proposed development is projected to generate approximately 640 daily vehicle trips, 52 of which will occur during the morning peak hour and 65 of which will occur during the evening peak hour. As shown in Table 1, the proposed development compared to the existing development is projected to generate approximately 330 more daily vehicle trips, 42 more of which will occur during the morning peak hour and 39 more of which will occur during the evening peak hour.

c. The City of Newport Beach staff provided the approved and cumulative projects in the study area. The approved projects consist of development that has been approved but are not fully completed. Cumulative projects are known, but not approved project developments that are reasonably expected to be completed or nearly completed at the same time as the proposed project.

d. The Traffic Phasing Ordinance (TPO) analysis resulted in the following study area intersections exceeding the one-percent threshold and requiring additional analysis:

Jamboree Road (NS) at:
- Eastbluff Drive/Ford Road (EW)
- Santa Barbara Drive (EW)

Santa Cruz Road (NS) at:
- San Joaquin Hills Road (EW)
- San Clemente Drive (EW)

Newport Center Drive (NS) at:
- Santa Barbara Drive (EW)
- Coast Highway (EW)

Santa Rosa Drive/Big Canyon Drive (NS) at:
- San Joaquin Hills Road (EW)

MacArthur Boulevard (NS) at:
- Ford Road (EW)
- San Joaquin Hills Road (EW)

e. The California Environmental Quality Act (CEQA) analysis (this part of the analysis is consistent with CEQA) included analysis of the same study area intersections as the TPO analysis.

f. The GPA analysis included ICU calculations at the following study area intersections:

Jamboree Road (NS) at:
- Eastbluff Drive/Ford Road (EW)
- San Joaquin Hills Road (EW)
- Santa Barbara Drive (EW)
- Coast Highway (EW)

Santa Cruz Road (NS) at:
- San Joaquin Hills Road (EW)

Newport Center Drive (NS) at:
- Coast Highway (EW)

Santa Rosa Drive/Big Canyon Drive (NS) at:
- San Joaquin Hills Road (EW)

MacArthur Boulevard (NS) at:
- Ford Road (EW)
- San Joaquin Hills Road (EW)
- San Miguel Drive (EW)
- Coast Highway (EW)

Comparison of the one-percent increase in the General Plan Buildout ICU between the without project and with project traffic conditions (see Table 7) resulted in no study area intersections exceeding the one-percent threshold.

**Recommended Improvements**

The following measures are recommended to mitigate the impact of the project on traffic circulation:

a. Site-specific circulation and access recommendations are depicted on Figure 27.

b. An existing two-way left turn lane on Santa Barbara Drive provides adequate left turn storage for vehicles desiring to turn left into the project site.

c. On-site parking should be provided to meet City of Newport Beach parking code requirements.

d. Sight distance at the project accesses should be reviewed with respect to Caltrans/City of Newport Beach standards in conjunction with the preparation of final grading, landscape, and street improvement plans.

e. On-site traffic signing and striping should be implemented in conjunction with detailed construction plans for the project.

f. The parking garage design shall meet all City requirements regarding parking stall width, parking stall depth, parking aisle width, parking aisle grade, and parking aisle-turning radii.

g. Each parking level should have large numbers on the pillars or walls designating on which floor level the user has parked. Letters can also be added to designate what area within a parking level the person has parked, such as 2B.

h. The parking garage shall be lighted to meet City code requirements.

i. The project site did not cause a significant impact at the study area intersections (increase of one-percent or more at a study area intersection operating at worse than Level of Service D during the peak hours); therefore, no improvements are recommended at the study area intersections.

j. As is the case for any roadway design, the City of Newport Beach should periodically review traffic operations in the vicinity of the project once the project is constructed to assure that the traffic operations are satisfactory.

# 2. Project Description

This section discusses the project's location, proposed development, and traffic characteristics of such a development. Figure 1 shows the project location map and Figure 2 illustrates the site plan.

## Location

The project site is located at 900 Newport Center Drive adjacent to the existing Marriott Hotel. The existing use is a tennis club (includes 8 tennis courts) and is an ancillary use to the Marriott Hotel. The proposed condominium project is located southerly of Santa Barbara Drive between Jamboree Road and Newport Center Drive.

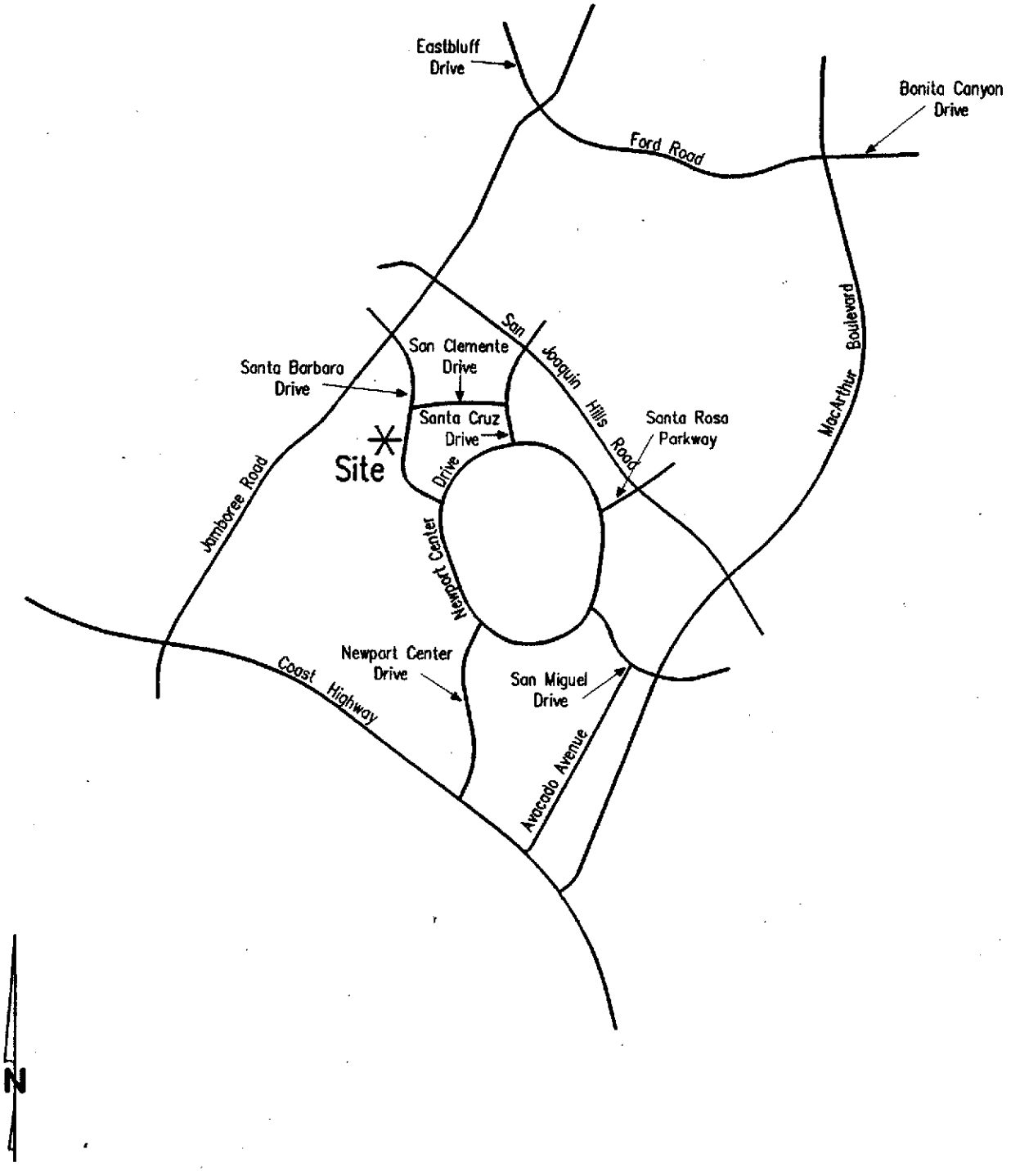
## Proposed Development

The proposed development consists of 79 condominium dwelling units.

The following describes the proposed land use from a traffic-engineering viewpoint:

Condominiums: The traffic characteristics of this type of development reflect the smaller family sizes generally found in attached dwellings. Fewer trips result per dwelling in the peak hours and daily than would result from detached residential dwellings.

# Figure 1
# Project Location Map




*Kunzman Associates*

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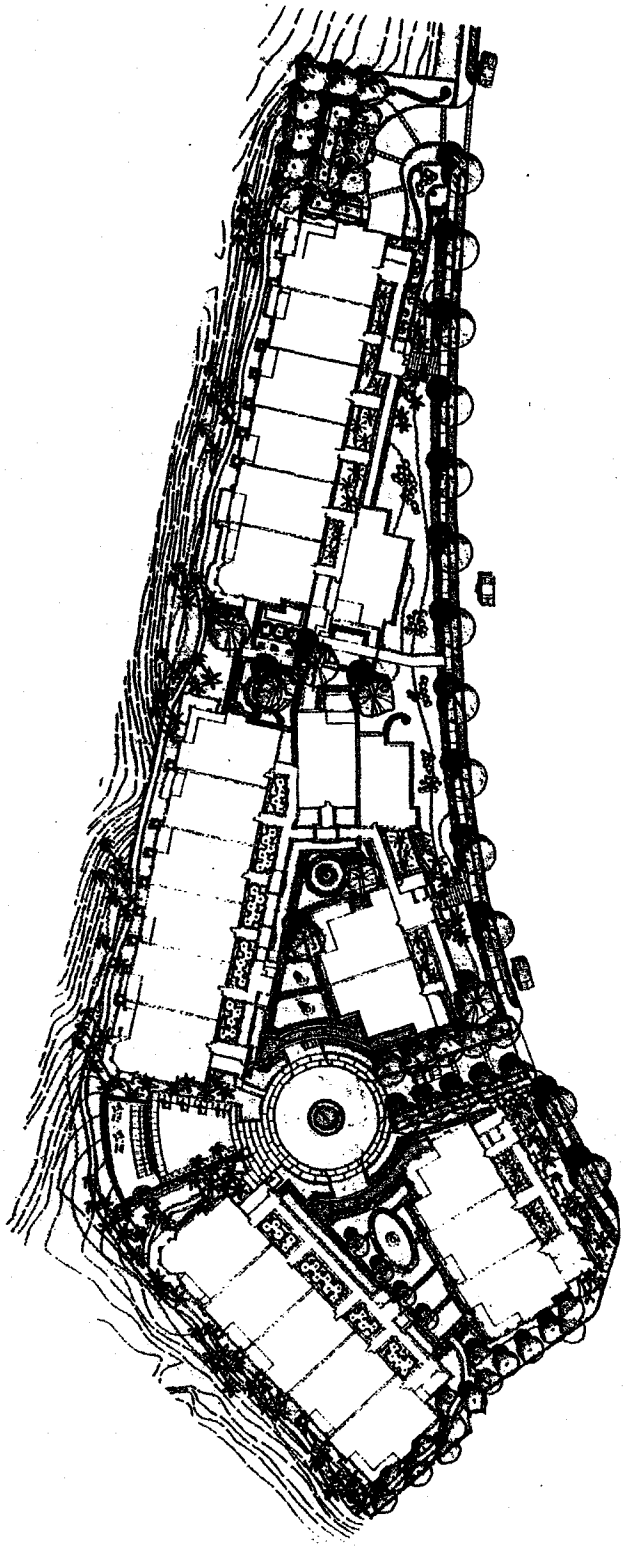
# Figure 2
# Site Plan



*Kunzman Associates*

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# 3. Existing Traffic Conditions

The traffic conditions as they exist today are discussed below and illustrated on Figures 3 to 7.

## Study Area Intersections

Pursuant to discussions with City of Newport Beach staff, the study area includes the following intersections:

Jamboree Road (NS) at:
- Eastbluff Drive/Ford Road (EW)
- San Joaquin Hills Road (EW)
- Santa Barbara Drive (EW)
- Coast Highway (EW)

Santa Cruz Road (NS) at:
- San Joaquin Hills Road (EW)
- San Clemente Drive (EW)

Newport Center Drive (NS) at:
- Santa Barbara Drive (EW)
- Coast Highway (EW)

Santa Rosa Drive/Big Canyon Drive (NS) at:
- San Joaquin Hills Road (EW)

Avocado Avenue (NS) at:
- Coast Highway (EW)

MacArthur Boulevard (NS) at:
- Ford Road (EW)
- San Joaquin Hills Road (EW)
- San Miguel Drive (EW)
- Coast Highway (EW)

## Existing Travel Lanes and Intersection Controls

Figure 3 identifies the existing roadway conditions for arterials near the site. The number of through lanes for existing roadways and the existing intersection controls are identified.

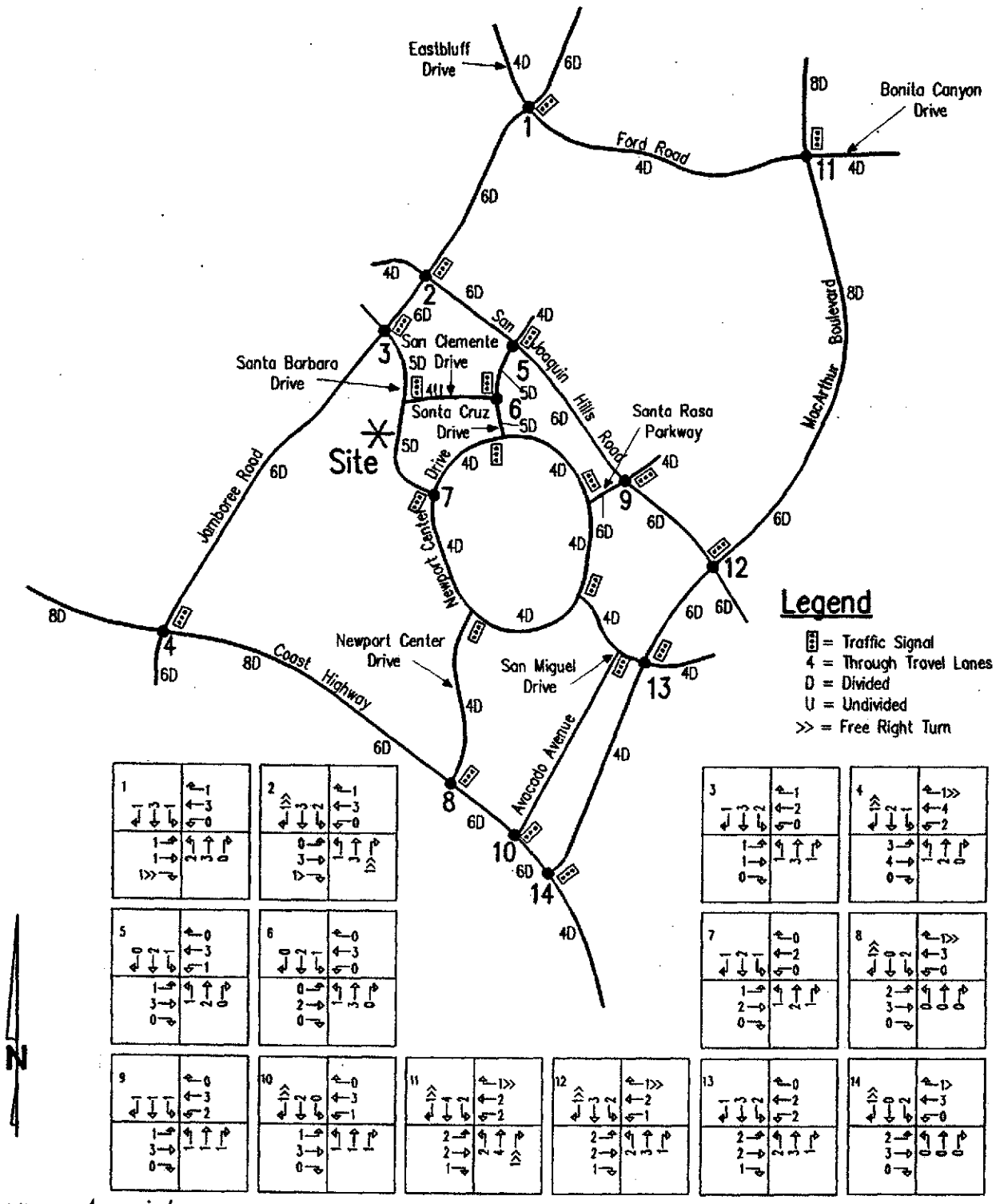
## Existing Master Plan of Arterial Highways

Figure 4 exhibits the current City of Newport Beach General Plan Circulation Element. Both existing and future roadways are included in the Circulation Element of the General Plan and are graphically depicted on Figure 4. This figure shows the nature and extent of arterial highways that are needed to serve adequately the ultimate development depicted by the Land Use Element of the General Plan. Figure 5 shows the City of Newport Beach General Plan roadway cross-sections.

## Existing Traffic Volumes

The City of Newport Beach staff provided the Year 2003/2004 morning and evening peak hour approach volumes at each study area intersection (see Appendix B). Existing morning and evening peak hour intersection turning movement volumes are shown on Figures 6 and 7, respectively.

# Figure 3
## Existing Through Travel Lanes and Intersection Controls




Kunzman Associates

Intersection reference numbers are in upper left corner of turning movement boxes.

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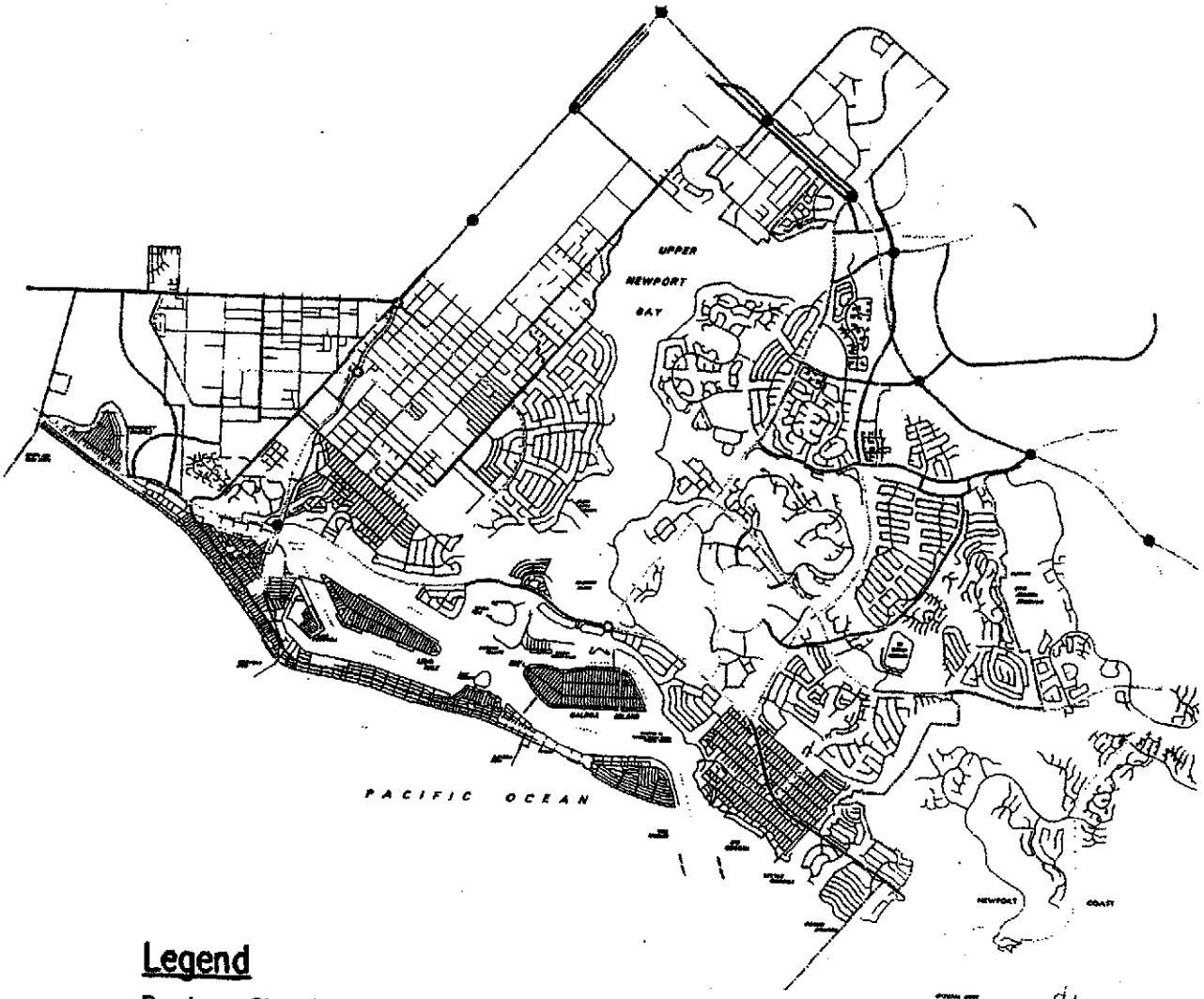
# Figure 4
# City of Newport Beach General Plan Circulation Element




## Legend

**Roadway Classification**

- Commuter Roadway (Two Lane Undivided)
- Secondary Road (Four Lane Undivided)
- Primary Road (Four Lane Divided)
- Primary Augmented Road
- Major Road (Six Lane Divided)
- Major Augmented Road
- Eight Lane Road (Divided)
- San Joaquin Hills Transportation Corridor
- Adopted Freeway Routes
- Future Freeway Extension
- Routes Requiring Further Coordination

**Interchange**

- Adopted Interchange
- Proposed Interchange

- City Boundary
- Newport Beach Sphere of Influence

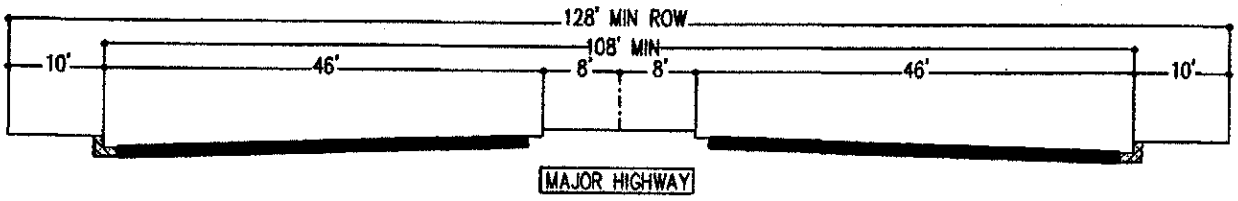
N

*Kunzman Associates*

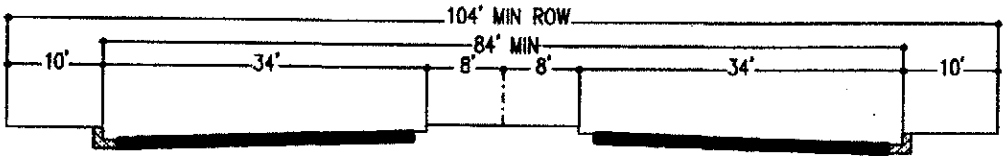
Source: City of Newport Beach

3124/4

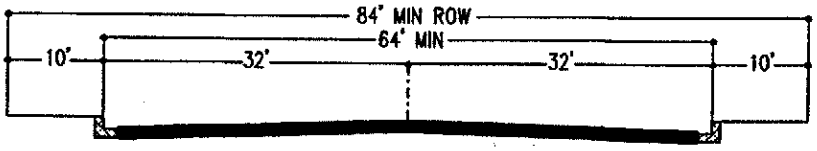
# Figure 5
# City of Newport Beach General Plan Roadway Cross-Sections



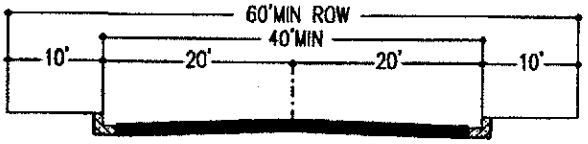

MAJOR HIGHWAY




MAJOR STREET




PRIMARY STREET



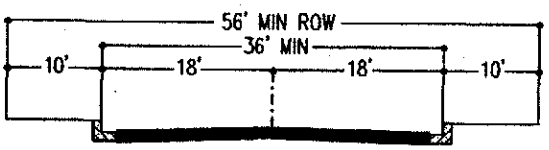

SECONDARY STREET

Notes:

(1) Streets may require special design.

(2) May be reduced t o6 Ft. if no sidewalk is required

(3) Where bicycle trail designated, sidewalk widths shall be adjusted as shown on Std. -120-L



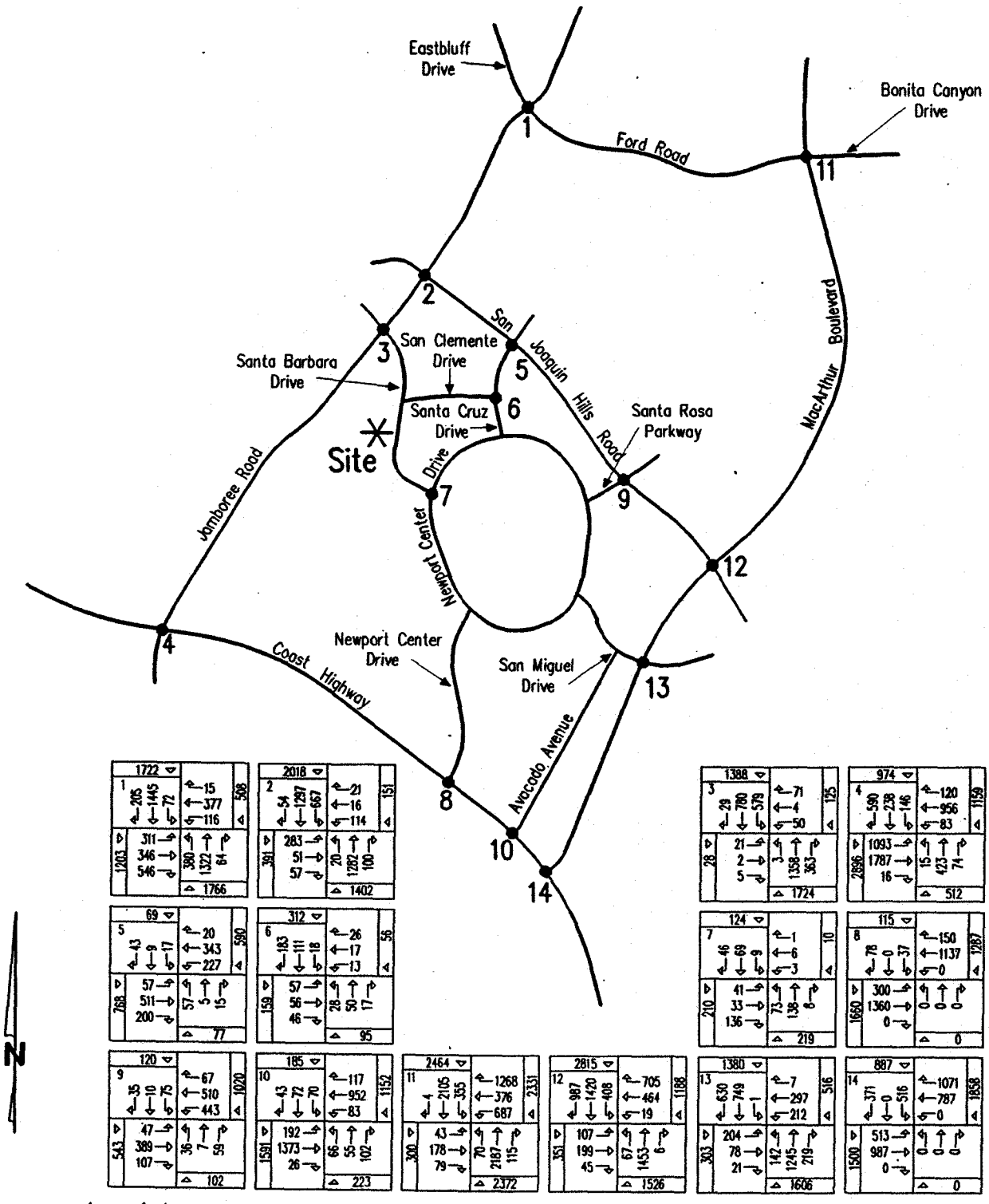

LOCAL STREET

*Kunzman Associates*

Source: City of Newport Beach

3124/5

# Figure 6
## Existing Morning Peak Hour Intersection Turning Movement Volumes

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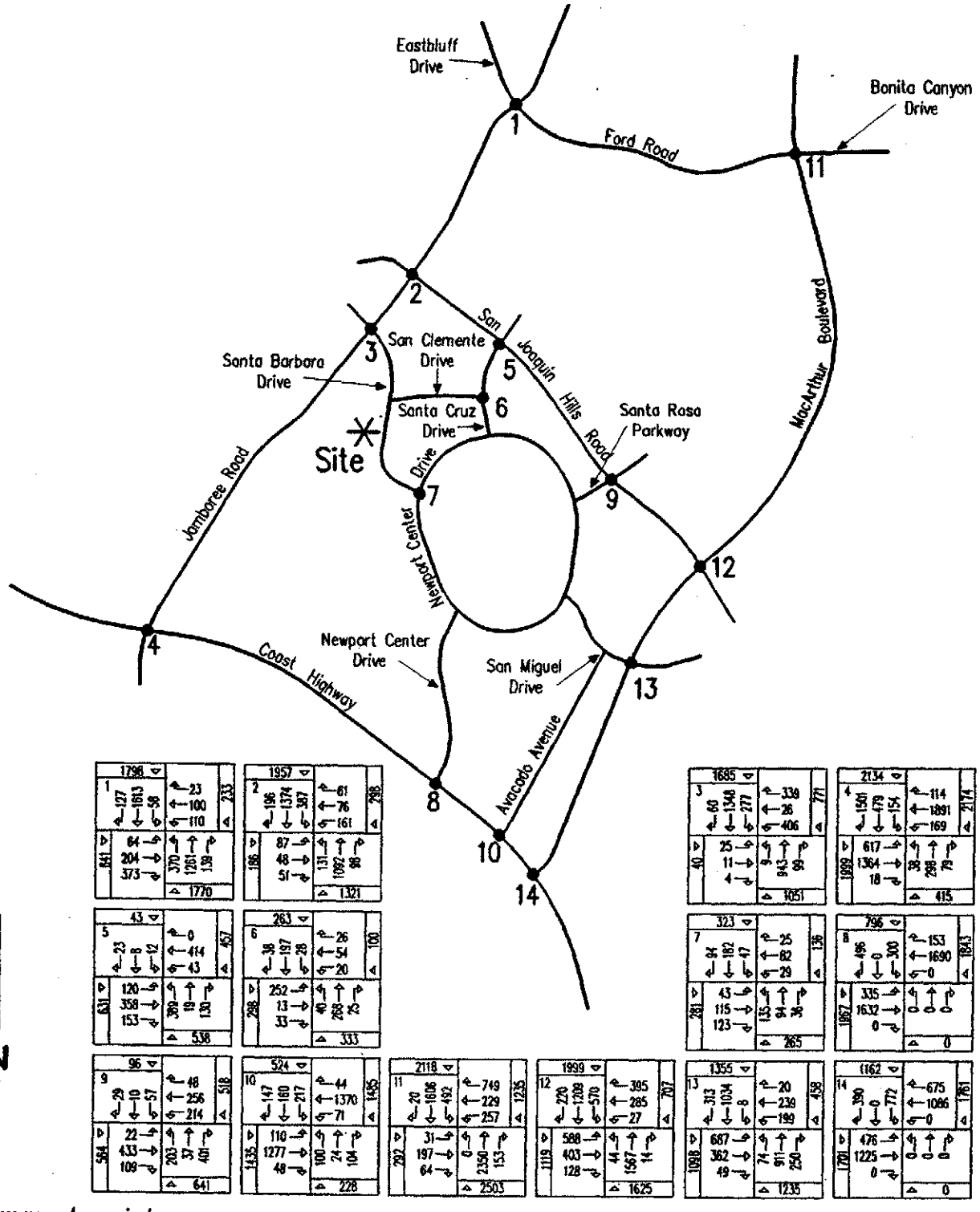
Intersection reference numbers are in upper left corner of turning movement boxes.

3124/bbas

# Figure 7
## Existing Evening Peak Hour Intersection Turning Movement Volumes

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Intersection reference numbers are in upper left corner of turning movement boxes.

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# 4. Project Traffic

The existing use is a tennis club (includes 8 tennis courts) and is an ancillary use to the Marriott Hotel. The proposed development consists of 79 condominium dwelling units. The project site currently has access to Santa Barbara Drive.

## Traffic Generation

The traffic generated by the project is determined by multiplying an appropriate trip generation rate by the quantity of land use. Trip generation rates are predicated on the assumption that energy costs, the availability of vehicles to drive, and our life styles remain similar to what we know today. A major change in these variables may affect trip generation rates.

Trip generation rates were determined for daily traffic, morning peak hour inbound and outbound traffic, and evening peak hour inbound and outbound traffic for the proposed land use. By multiplying the traffic generation rates by the land use quantity, the traffic volumes are determined. Table 1 exhibits the traffic generation rates, project peak hour volumes, and project daily traffic volumes. The trip generation rates are from the Newport Beach Traffic Analysis Model (NBTAM) and Institute of Transportation Engineers (ITE), Trip Generation, 7th Edition, 2003.

The existing development currently generates approximately 310 daily vehicle trips, 10 of which will occur during the morning peak hour and 26 of which will occur during the evening peak hour.

The proposed development is projected to generate approximately 640 daily vehicle trips, 52 of which will occur during the morning peak hour and 65 of which will occur during the evening peak hour.

As shown in Table 1, the proposed development compared to the existing development is projected to generate approximately 330 more daily vehicle trips, 42 more of which will occur during the morning peak hour and 39 more of which will occur during the evening peak hour.

## Traffic Distribution and Assignment

Traffic distribution is the determination of the directional orientation of traffic. It is based on the geographical location of employment centers, commercial centers, recreational areas, or residential area concentrations. The traffic distribution has also been based upon previous traffic studies for the project site.

Traffic assignment is the determination of which specific route development traffic will use, once the generalized traffic distribution is determined. The basic factors affecting route selection are minimum time path and minimum distance path.

Figure 8 contains the directional distribution and assignment of the project traffic for the proposed land use.

**Project-Related Traffic**

Based on the identified traffic generation and distribution, project related morning and evening peak hour intersection turning movement volumes are shown on Figures 9 and 10, respectively.

## Table 1

## Project Traffic Generation

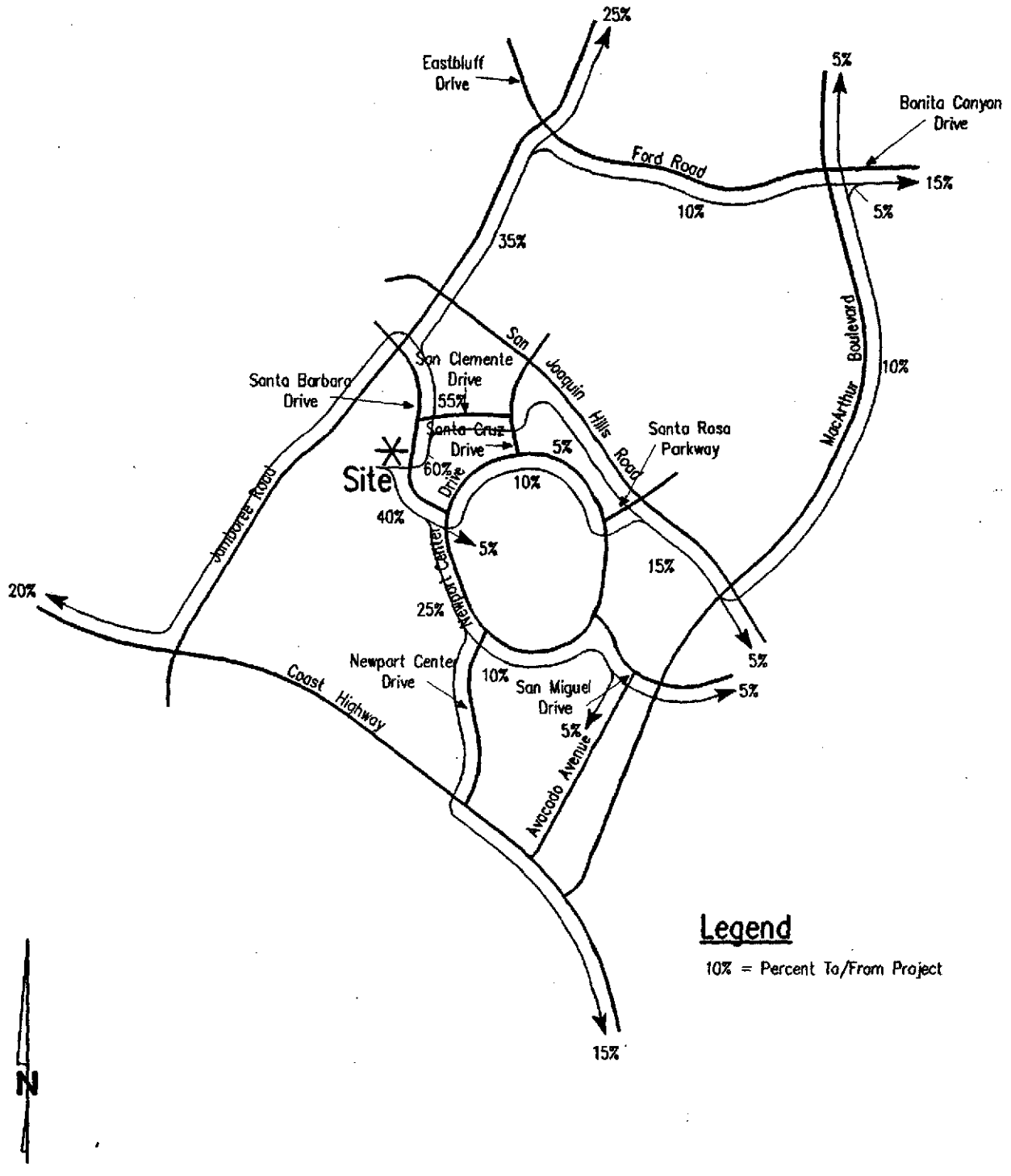
| Land Use | Quantity | Units[1] | Peak Hour | | | | | | Daily |
|---|---|---|---|---|---|---|---|---|---|
| | | | Morning | | | Evening | | | |
| | | | Inbound | Outbound | Total | Inbound | Outbound | Total | |
| Generation Rates | | | | | | | | | |
| Tennis Club[2] | 8 | CT | 0.66 | 0.66 | 1.32 | 1.68 | 1.68 | 3.36 | 38.70 |
| Single-Family Attached[3] | 79 | DU | 0.17 | 0.49 | 0.66 | 0.47 | 0.36 | 0.83 | 8.10 |
| Trips Generated | | | | | | | | | |
| Existing: | | | | | | | | | |
| Tennis Club | 8 | CT | 5 | 5 | 10 | 13 | 13 | 26 | 310 |
| Proposed: | | | | | | | | | |
| Single-Family Attached | 79 | DU | 13 | 39 | 52 | 37 | 28 | 65 | 640 |
| Difference | | | 8 | 34 | 42 | 24 | 15 | 39 | 330 |

[1] CT = Courts; DU = Dwelling Units

[2] Source: Institute of Transportation Engineers (ITE), Trip Generation, 7th Edition, 2003, Land Use Category 490.

[3] Source: NBTAM Trip Generation Rates

# Figure 8
## Project Traffic Distribution

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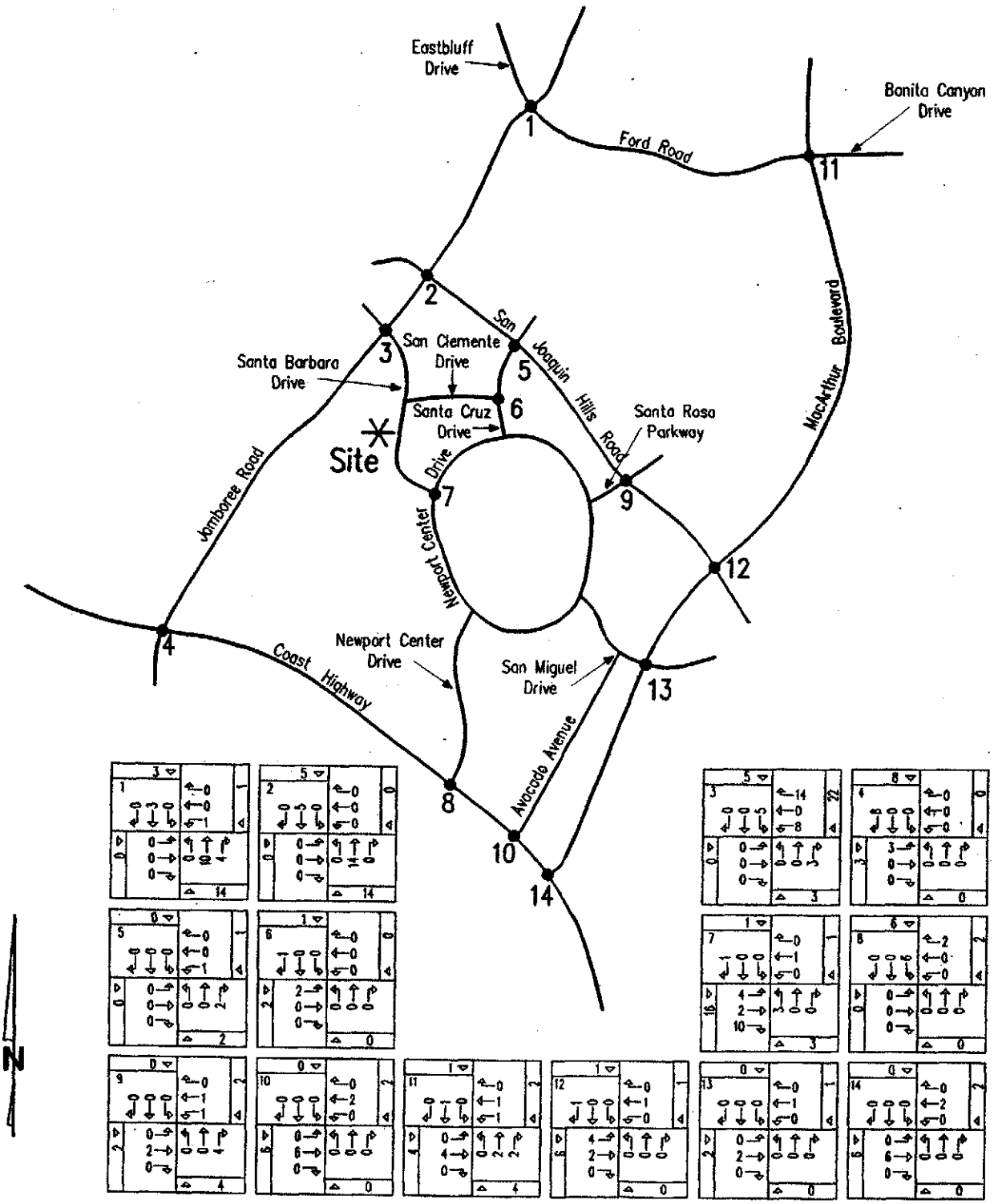
# Figure 9
## Project Morning Peak Hour Intersection Turning Movement Volumes

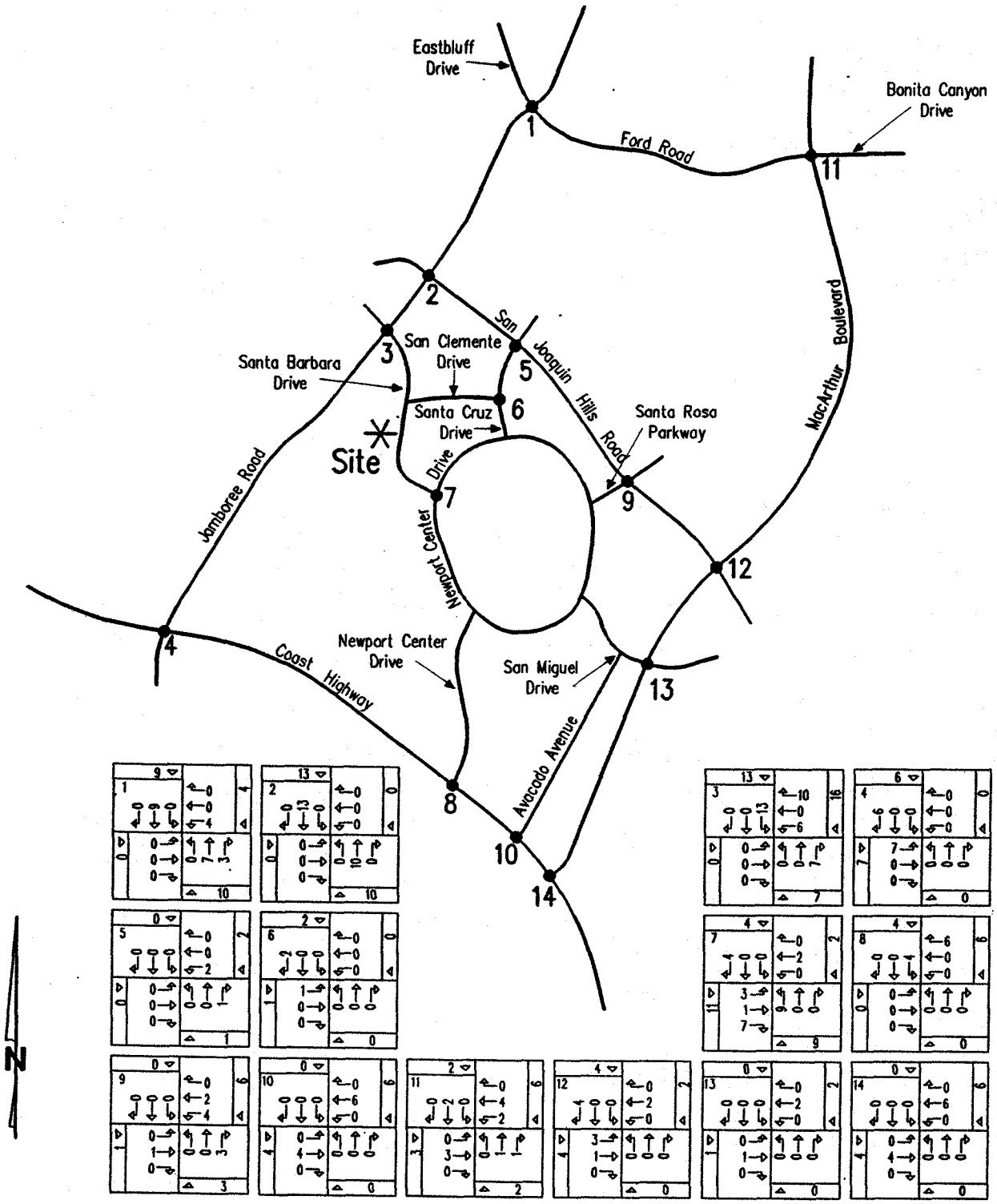



*Kunzman Associates*

Intersection reference numbers are in upper left corner of turning movement boxes.

3124/bbas

# Figure 10
## Project Evening Peak Hour Intersection Turning Movement Volumes




*Kunzman Associates*

Intersection reference numbers are in upper left corner of turning movement boxes.

3124/bbas

# 5. TPO Analysis

## Approved Projects

The City of Newport Beach staff provided the approved projects in the study area for the TPO analysis. The approved projects consist of development that has been approved but are not fully completed (see Table 2 and Appendix C). The approved project morning and evening peak hour intersection turning movement volumes have been calculated and are shown on Figures 11 and 12, respectively.

## Regional Growth

To account for regional growth on roadways, Year 2009 traffic volumes have been calculated based on a 1 percent annual growth rate of existing traffic volumes over a five-year period. The regional growth rate has been obtained from the City of Newport Beach.

Regional growth has been added to peak hour traffic volumes on Jamboree Road, Coast Highway, and MacArthur Boulevard.

## One-Percent Methodology

One-percent of the projected peak hour volumes of each approach of each study area intersection were compared with the peak hour distributed volumes from the proposed project. A summary of this TPO comparison is shown within Appendix D.

If one-percent of the existing + approved projects traffic peak hour volumes of each approach are larger than the peak hour project approach volumes, no further analysis is required. Existing + approved projects morning and evening peak hour intersection turning movement volumes have been calculated and are shown on Figures 13 and 14, respectively. Existing + approved projects + project morning and evening peak hour intersection turning movement volumes have been calculated and are shown on Figures 15 and 16, respectively. If project peak hour approach volumes are higher than one-percent of the projected peak hour volumes on any approach of any intersection, the intersection would require analysis utilizing the Intersection Capacity Utilization (ICU) methodology.

Comparison of the one-percent of the existing + approved projects traffic peak hour approach volumes with the project peak hour approach volumes resulted in the following study area intersections exceeding the one-percent threshold and requiring additional analysis (see Table 3 and Appendix D):

Jamboree Road (NS) at:
- Eastbluff Drive/Ford Road (EW)
- Santa Barbara Drive (EW)

Santa Cruz Road (NS) at:
- San Joaquin Hills Road (EW)
- San Clemente Drive (EW)

Newport Center Drive (NS) at:
- Santa Barbara Drive (EW)
- Coast Highway (EW)

Santa Rosa Drive/Big Canyon Drive (NS) at:
- San Joaquin Hills Road (EW)

MacArthur Boulevard (NS) at:
- Ford Road (EW)
- San Joaquin Hills Road (EW)

**Intersection Capacity Utilization (ICU)**

The technique used to assess the operation of a signalized intersection is known as Intersection Capacity Utilization (ICU). To calculate an ICU value the volume of traffic using the intersection is compared with the capacity of the intersection. An ICU value is usually expressed as a decimal. The decimal represents that portion of the hour required to provide sufficient capacity to accommodate all intersection traffic if all approaches operate at capacity.

The Levels of Service for existing + approved projects traffic conditions have been calculated and are shown in Table 4. Existing + approved projects ICU worksheets are provided in Appendix F. For existing + approved projects traffic conditions, the intersections in the vicinity of the site are projected to operate at Level of Service D or better during the peak hours.

The Levels of Service for existing + approved projects + project traffic conditions have been calculated and are shown in Table 4. Existing + approved projects + project ICU worksheets are provided in Appendix F. For existing + approved projects + project traffic conditions, the intersections in the vicinity of the site are projected to operate at Level of Service D or better during the peak hours.

## Table 2

## Approved Project List

| Project Name |
|---|
| Fashion Island Expansion |
| Temple Bat Yahm Expansion |
| Ford Redevelopment |
| Cannery Lofts Village |
| Hoag Hospital Phase II |
| Ciosa - Irvine Project |
| Newport Dunes |
| 1401 Dove Street |
| Newport Auto Center Expansion |
| Olsen Townhome Project |
| Bayview Landing Senior Housing |
| Birch Bayview Plaza II |
| 494/496 Old Newport Boulevard |
| 401 Old Newport Boulevard |

## Table 3

## TPO Analysis One-Percent Threshold

| Intersection | Peak Hour | Approach Direction[1] | | | |
|---|---|---|---|---|---|
| | | Northbound | Southbound | Eastbound | Westbound |
| Jamboree Road (NS) at: | | | | | |
| Eastbluff Drive/Ford Road (EW) | AM | No | No | No | No |
| | PM | No | No | No | Yes |
| San Joaquin Hills Road (EW) | AM | No | No | No | No |
| | PM | No | No | No | No |
| Santa Barbara Drive (EW) | AM | No | No | No | Yes |
| | PM | No | No | No | Yes |
| Coast Highway (EW) | AM | No | No | No | No |
| | PM | No | No | No | No |
| Santa Cruz Road (NS) at: | | | | | |
| San Joaquin Hills Road (EW) | AM | Yes | No | No | No |
| | PM | No | No | No | No |
| San Clemente Drive (EW) | AM | No | No | Yes | No |
| | PM | No | No | No | No |
| Newport Center Drive (NS) at: | | | | | |
| Santa Barbara Drive (EW) | AM | Yes | Yes | Yes | No |
| | PM | Yes | No | Yes | Yes |
| Coast Highway (EW) | AM | No | Yes | No | No |
| | PM | No | No | No | No |
| Santa Rosa Drive/Big Canyon Drive (NS) at: | | | | | |
| San Joaquin Hills Road (EW) | AM | Yes | No | No | No |
| | PM | No | No | No | No |
| Avocado Avenue (NS) at: | | | | | |
| Coast Highway (EW) | AM | No | No | No | No |
| | PM | No | No | No | No |
| MacArthur Boulevard (NS) at: | | | | | |
| Ford Road (EW) | AM | No | No | Yes | No |
| | PM | No | No | No | No |
| San Joaquin Hills Road (EW) | AM | No | No | Yes | No |
| | PM | No | No | No | No |
| San Miguel Drive (EW) | AM | No | No | No | No |
| | PM | No | No | No | No |
| Hospital Drive (EW) | AM | No | No | No | No |
| | PM | No | No | No | No |

[1] Project Traffic is estimated to be equal to or greater than 1% of projected peak hour traffic. Intersection Capacity Utilization (ICU) analysis is required.

## Table 4

## TPO Analysis Intersection Capacity Utilization (ICU) and Levels of Service (LOS)

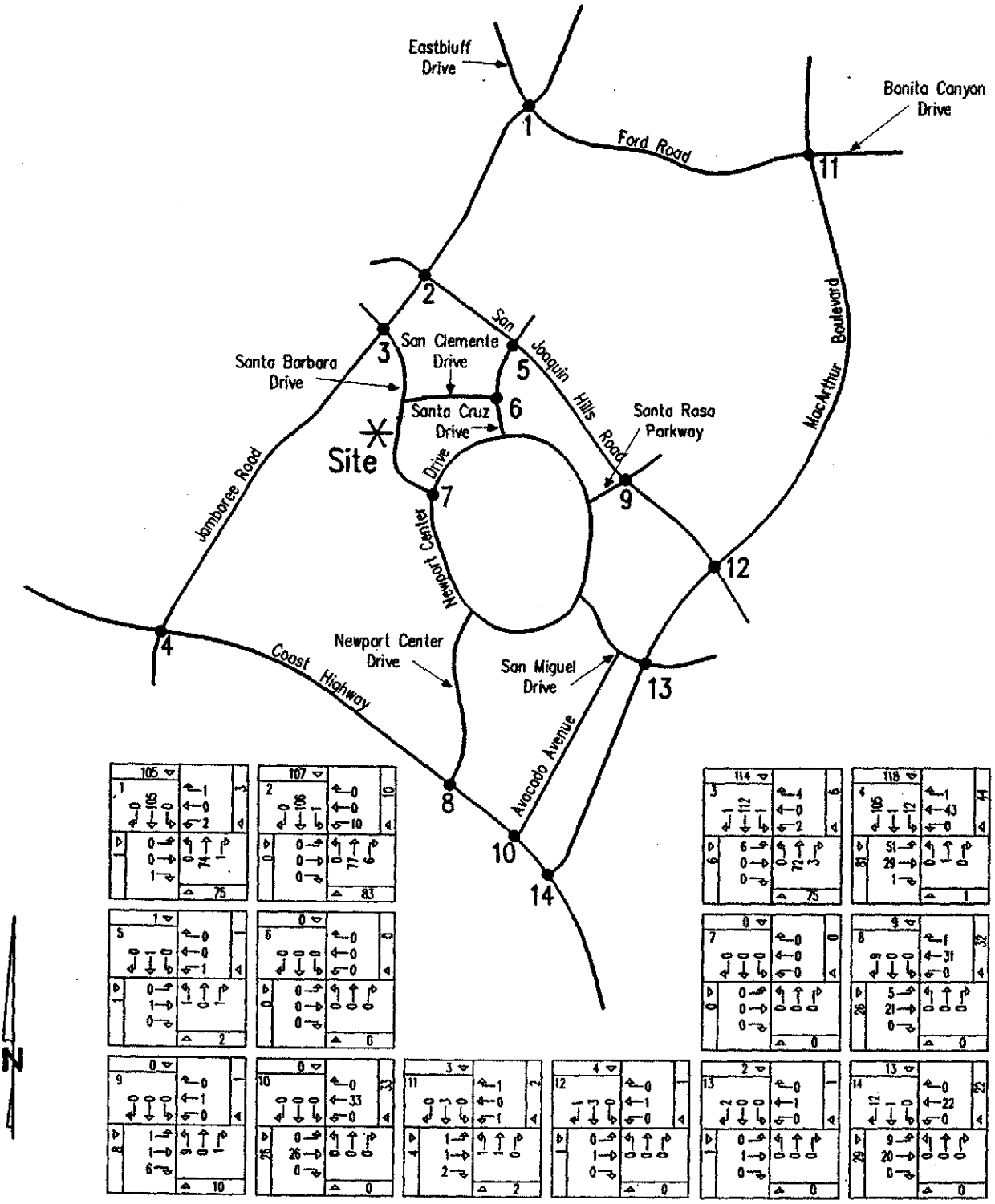
| Intersection | Traffic Control[3] | Intersection Approach Lanes[2] | | | | | | | | | | | | Peak Hour ICU-LOS[1] | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Northbound | | | Southbound | | | Eastbound | | | Westbound | | | Existing + Approved Projects | | Existing + Approved Projects + Project | | ICU Increase | |
| | | L | T | R | L | T | R | L | T | R | L | T | R | Morning | Evening | Morning | Evening | Morning | Evening |
| Jamboree Road (NS) at: | | | | | | | | | | | | | | | | | | | |
| Eastbluff Drive/Ford Road (EW) | TS | 2 | 3 | 0 | 1 | 3 | 1 | 1 | 1 | 1>> | 0 | 3 | 1 | 0.78-C | 0.67-B | 0.78-C | 0.67-B | +0.00 | +0.00 |
| Santa Barbara Drive (EW) | TS | 1 | 3 | 1 | 2 | 3 | 1 | 1 | 1 | 0 | 0 | 2 | 1 | 0.57-A | 0.55-A | 0.57-A | 0.55-A | +0.00 | +0.00 |
| Santa Cruz Road (NS) at: | | | | | | | | | | | | | | | | | | | |
| San Joaquin Hills Road (EW) | TS | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 3 | 0 | 1 | 3 | 0 | 0.34-A | 0.41-A | 0.34-A | 0.41-A | +0.00 | +0.00 |
| San Clemente Drive (EW) | TS | 1 | 3 | 0 | 1 | 2 | 0 | 0 | 2 | 0 | 0 | 3 | 0 | 0.16-A | 0.19-A | 0.16-A | 0.19-A | +0.00 | +0.00 |
| Newport Center Drive (NS) at: | | | | | | | | | | | | | | | | | | | |
| Santa Barbara Drive (EW) | TS | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 0 | 0 | 2 | 0 | 0.12-A | 0.21-A | 0.13-A | 0.22-A | +0.01 | +0.01 |
| Coast Highway (EW) | TS | 0 | 0 | 0 | 2 | 0 | 1>> | 2 | 3 | 0 | 0 | 3 | 1>> | 0.37-A | 0.58-A | 0.37-A | 0.58-A | +0.00 | +0.00 |
| Santa Rosa Drive/Big Canyon Drive (NS) at: | | | | | | | | | | | | | | | | | | | |
| San Joaquin Hills Road (EW) | TS | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 3 | 0 | 2 | 3 | 0 | 0.33-A | 0.48-A | 0.33-A | 0.49-A | +0.00 | +0.01 |
| MacArthur Boulevard (NS) at: | | | | | | | | | | | | | | | | | | | |
| Ford Road (EW) | TS | 2 | 4 | 1>> | 2 | 4 | 1>> | 2 | 2 | 1 | 2 | 2 | 1>> | 0.75-C | 0.69-B | 0.75-C | 0.69-B | +0.00 | +0.00 |
| San Joaquin Hills Road (EW) | TS | 2 | 3 | 1 | 2 | 3 | 1>> | 2 | 2 | 0 | 1 | 2 | 1>> | 0.63-B | 0.81-D | 0.63-B | 0.81-D | +0.00 | +0.00 |

[1] ICU-LOS = Intersection Capacity Utilization - Level of Service

[2] When a right turn lane is designated, the lane can either be striped or unstriped. To function as a right turn lane, there must be sufficient width for right turning vehicles to travel outside the through lanes. L = Left; T = Through; R = Right; >> = Free Right Turn

[3] TS = Traffic Signal

# Figure 11
## Approved Projects
## Morning Peak Hour Intersection Turning Movement Volumes

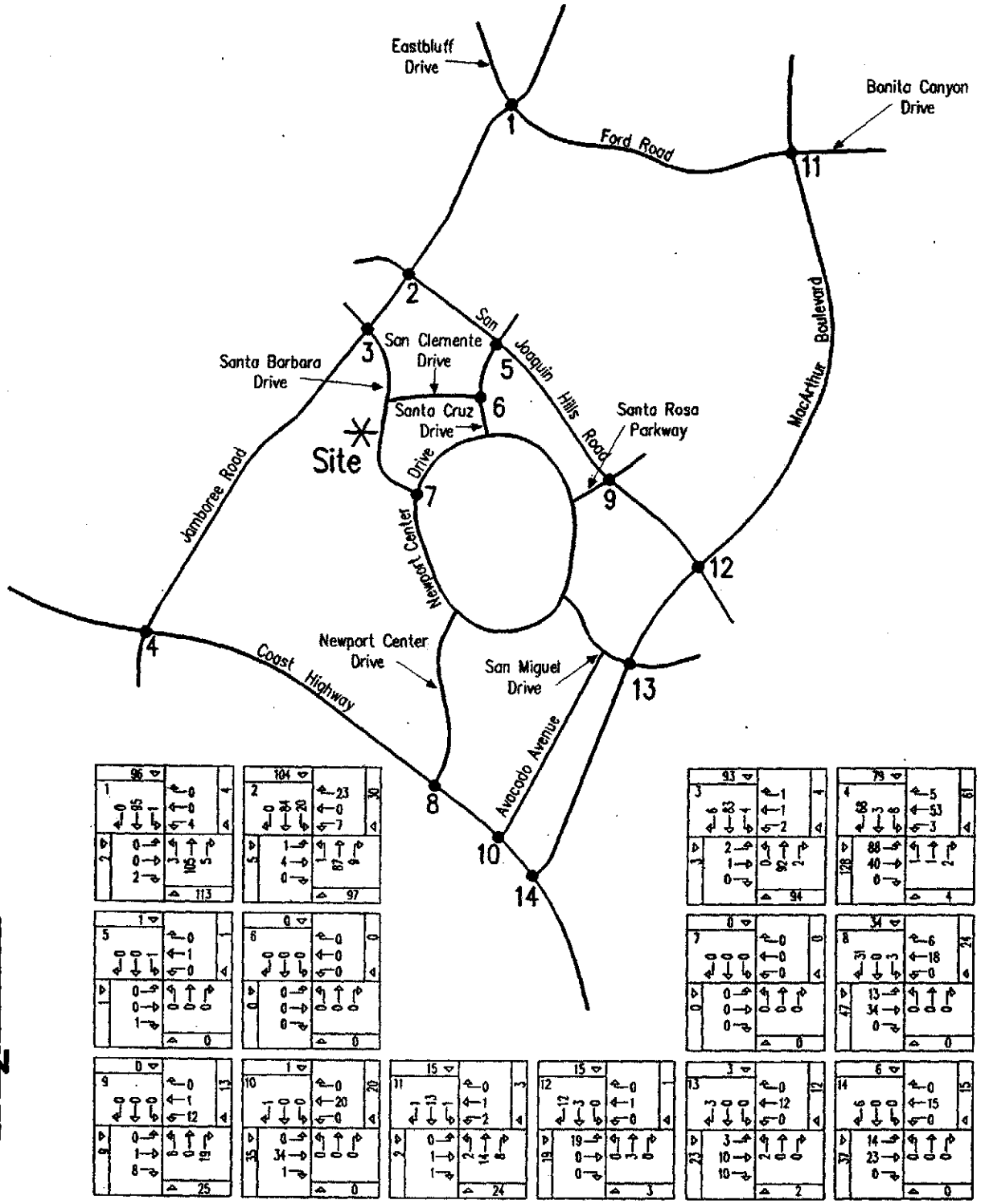



Kunzman Associates

Intersection reference numbers are in upper left corner of turning movement boxes.

3124/bbas

# Figure 12
## Approved Projects
## Evening Peak Hour Intersection Turning Movement Volumes

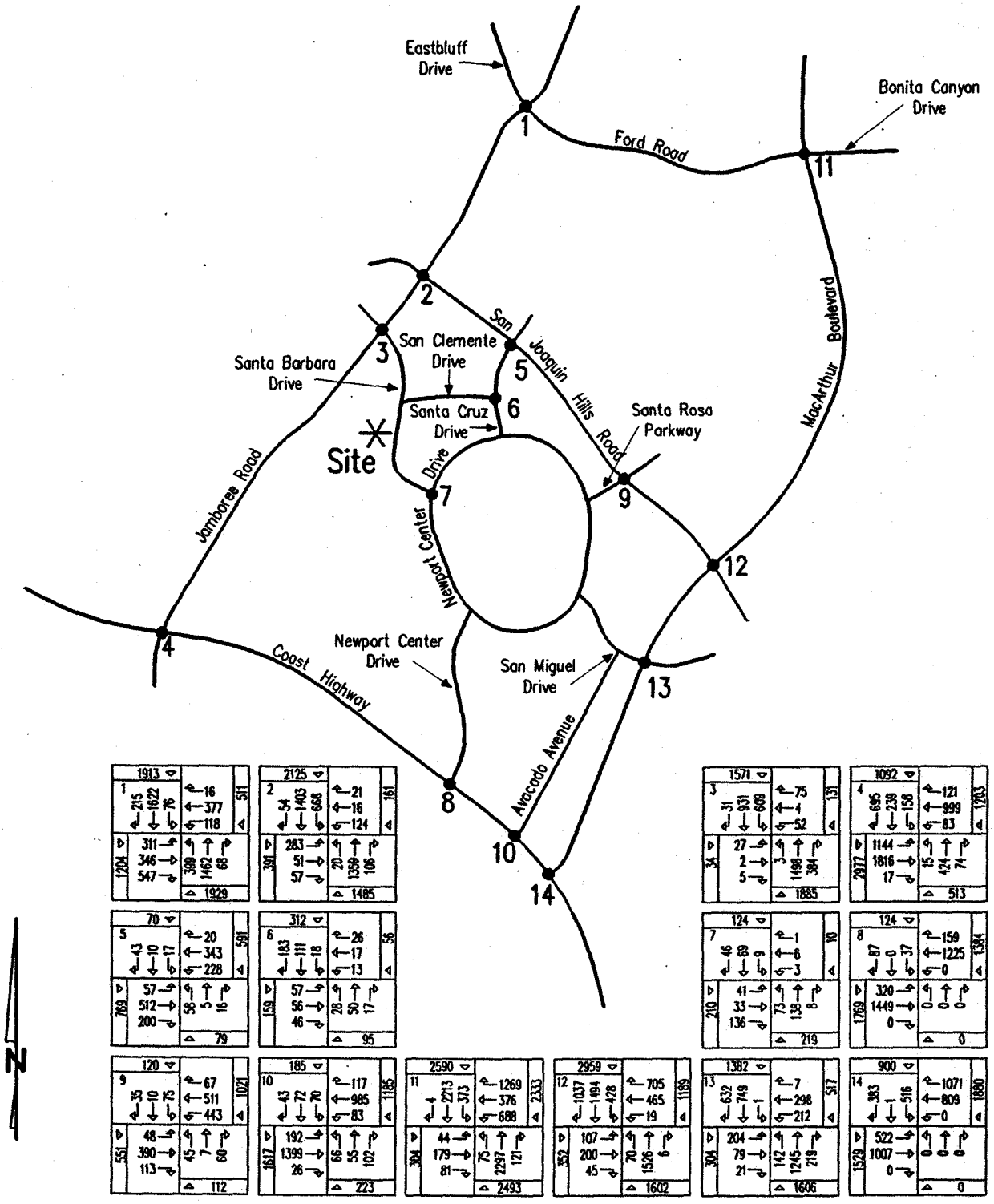



*Kunzman Associates*

Intersection reference numbers are in upper left corner of turning movement boxes.

3124/bbas

# Figure 13
## Existing + Approved Projects
## Morning Peak Hour Intersection Turning Movement Volumes

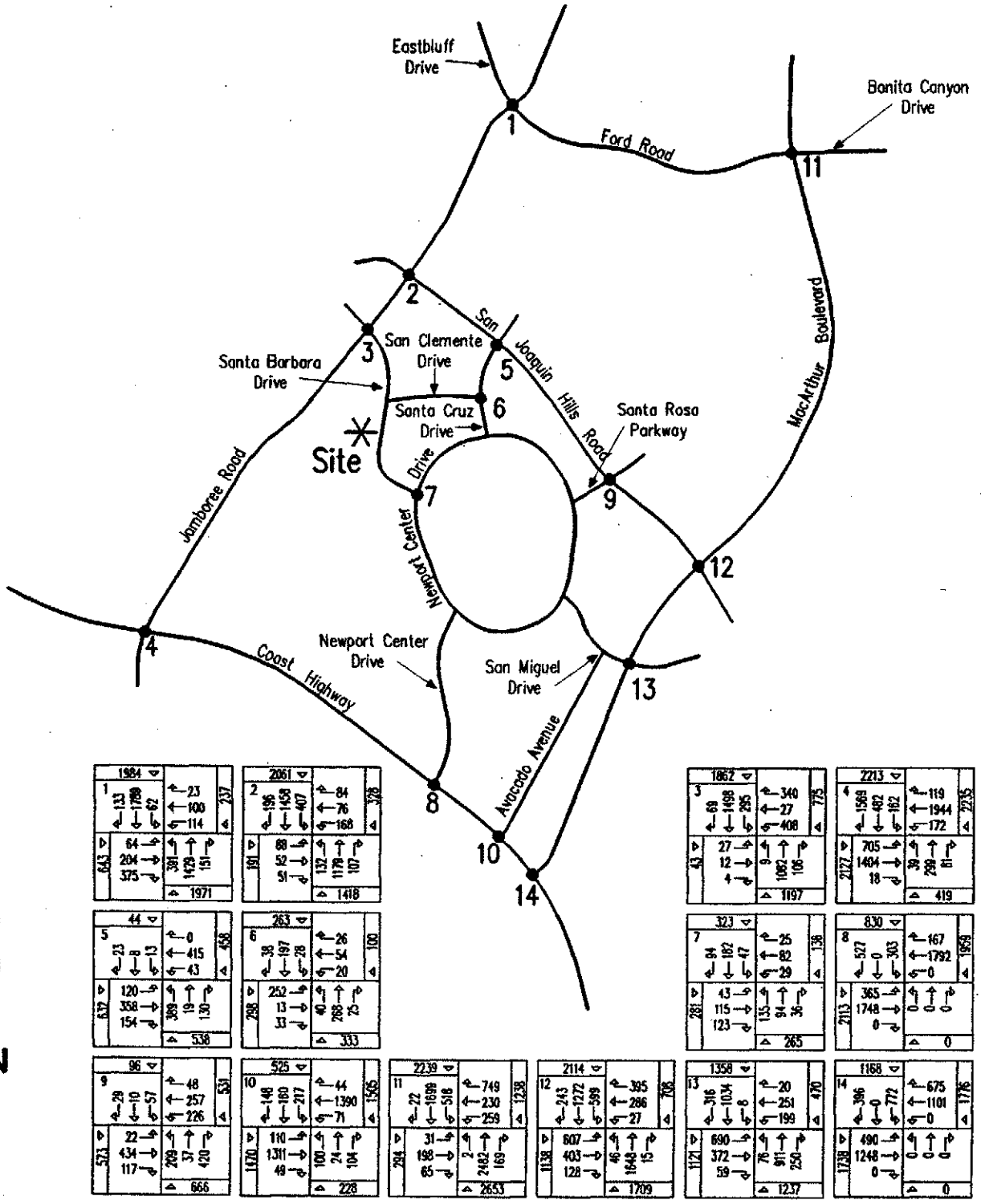



*Kunzman Associates*

Intersection reference numbers are in upper left corner of turning movement boxes.

3124/bbas

# Figure 14
## Existing + Approved Projects
## Evening Peak Hour Intersection Turning Movement Volumes

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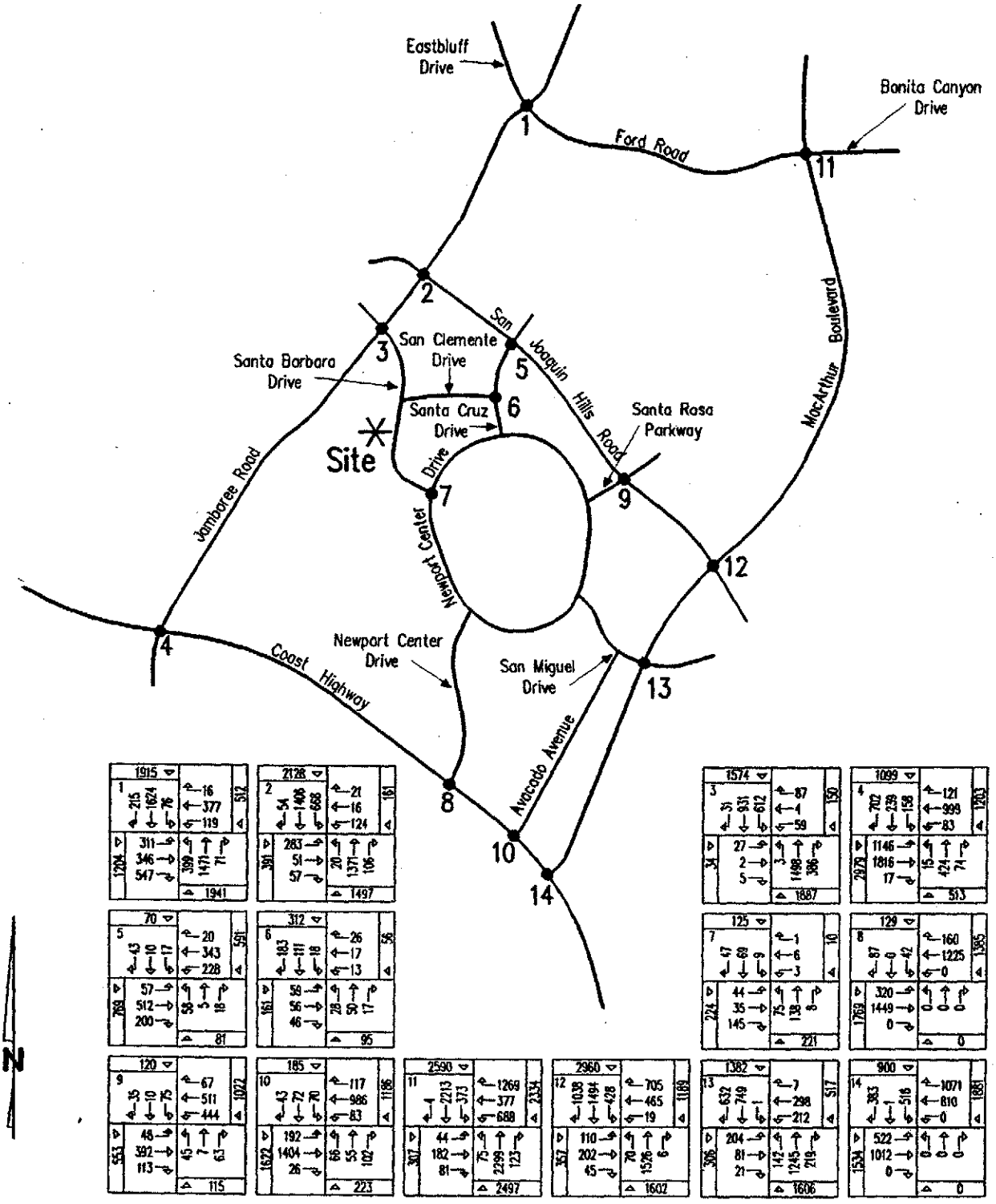
Intersection reference numbers are in upper left corner of turning movement boxes.

3124/bbas

# Figure 15
## Existing + Approved Projects + Project
## Morning Peak Hour Intersection Turning Movement Volumes

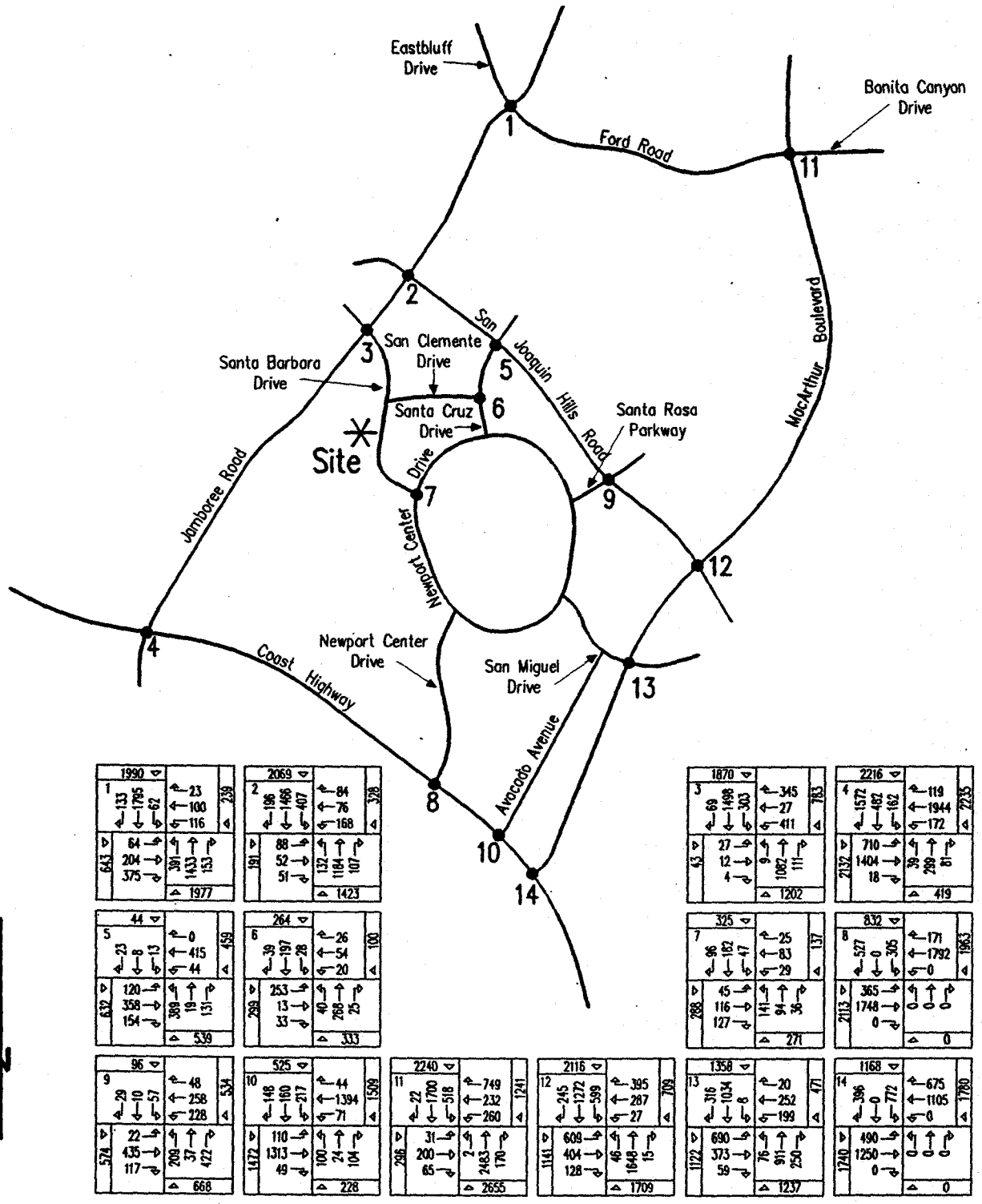



Kunzman Associates

Intersection reference numbers are in upper left corner of turning movement boxes.

3124/bbas

# Figure 16
## Existing + Approved Projects + Project
## Evening Peak Hour Intersection Turning Movement Volumes




Kunzman Associates

Intersection reference numbers are in upper left corner of turning movement boxes.

3124/bbas

# 6. CEQA Analysis

The California Environmental Quality Act (CEQA) analysis (this part of the analysis is consistent with CEQA) included analysis of the same study area intersections as the TPO analysis.

## Cumulative Projects

The City of Newport Beach staff provided the cumulative projects in the study area for the CEQA analysis. Cumulative projects are known, but not approved project developments that are reasonably expected to be completed or nearly completed at the same time as the proposed project. The cumulative project list is shown in Table 5 and the cumulative project traffic generation is included in Appendix E. Appendix E contains the directional distribution of the cumulative project traffic. The cumulative project morning and evening peak hour intersection turning movement volumes have been calculated and are shown on Figures 17 and 18, respectively.

The CEQA traffic volumes were obtained by adding the cumulative projects traffic volumes to the TPO traffic volumes.

## Intersection Capacity Utilization (ICU)

The technique used to assess the operation of a signalized intersection is known as Intersection Capacity Utilization (ICU). To calculate an ICU value the volume of traffic using the intersection is compared with the capacity of the intersection. An ICU value is usually expressed as a decimal. The decimal represents that portion of the hour required to provide sufficient capacity to accommodate all intersection traffic if all approaches operate at capacity.

The Levels of Service for existing + approved projects + cumulative projects traffic conditions have been calculated and are shown in Table 6. Existing + approved projects + cumulative projects morning and evening peak hour intersection turning movement volumes have been calculated and are shown on Figures 19 and 20, respectively. Existing + approved projects + cumulative projects ICU worksheets are provided in Appendix F. For existing + approved projects + cumulative projects traffic conditions, the intersections in the vicinity of the site are projected to operate at Level of Service D or better during the peak hours.

The Levels of Service for existing + approved projects + cumulative projects + project traffic conditions have been calculated and are shown in Table 6. Existing + approved projects + cumulative projects + project morning and evening peak hour intersection turning movement volumes have been calculated and are shown

on Figures 21 and 22, respectively. Existing + approved projects + cumulative projects + project ICU worksheets are provided in Appendix F. For existing + approved projects + cumulative projects + project traffic conditions, the intersections in the vicinity of the site are projected to operate at Level of Service D or better during the peak hours.

## Table 5

## Cumulative Project List

| Project Name |
|---|
| South Coast Shipyard |
| Morman Temple |
| Saint Mark Presbyterian |
| Our Lady Queen of Angels |
| St. Andrews Church |
| Mariners Church |
| Exodus Community Center |
| Newport Coast - TAZ 1 |
| Newport Coast - TAZ 2 |
| Newport Coast - TAZ 3 |
| Newport Coast - TAZ 4 |
| Newport Ridge - TAZ 1 |
| Newport Ridge - TAZ 2 |
| Newport Ridge - TAZ 3 |
| Bonita Canyon - Residential |

## Table 6

## CEQA Analysis Intersection Capacity Utilization (ICU) and Levels of Service (LOS)

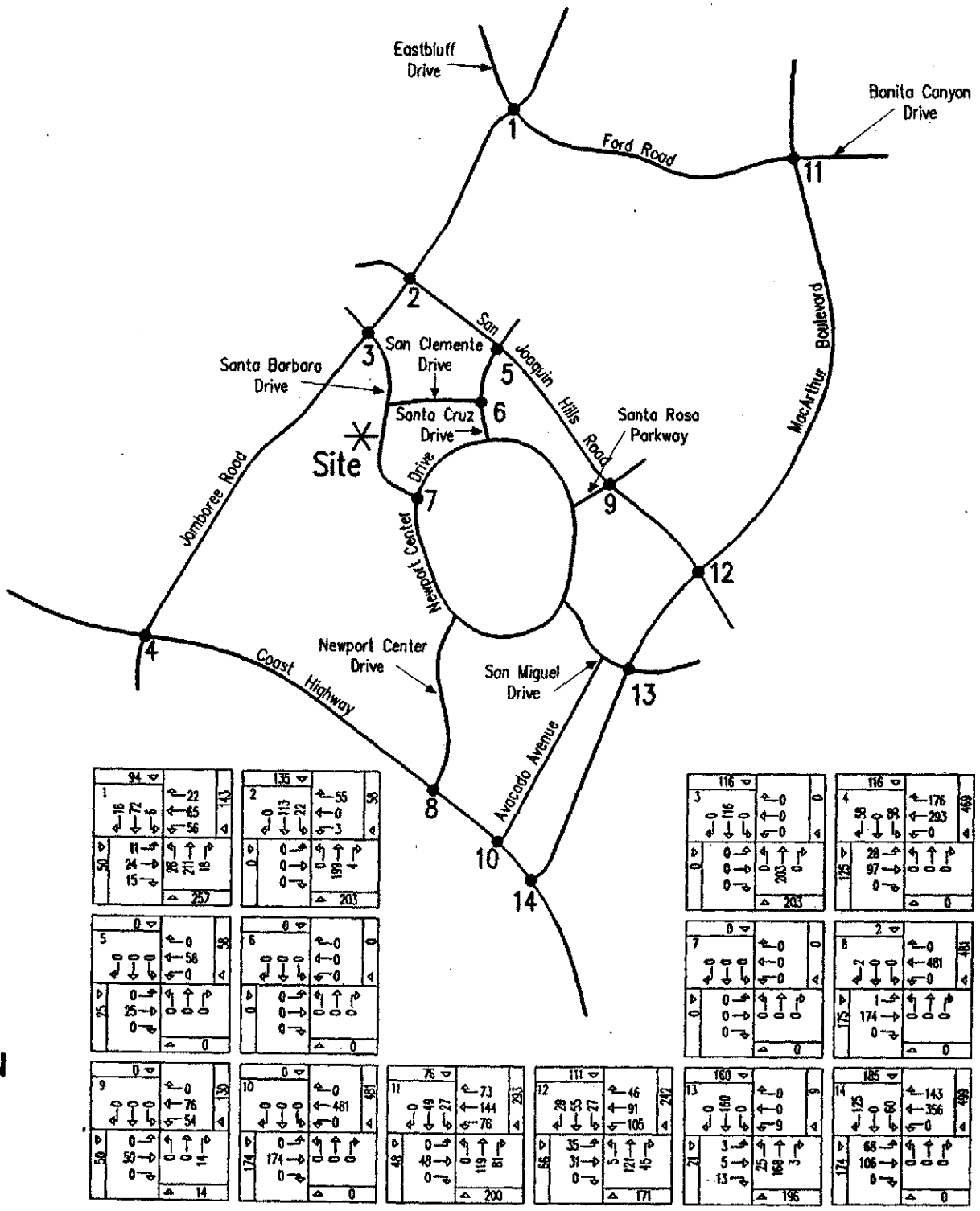
| Intersection | Traffic Control[3] | Intersection Approach Lanes[2] | | | | | | | | | | | | Peak Hour ICU-LOS[1] | | | | ICU Increase | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Northbound | | | Southbound | | | Eastbound | | | Westbound | | | Existing + Approved Projects + Cumulative Projects | | Existing + Approved Projects + Cumulative Projects + Project | | | |
| | | L | T | R | L | T | R | L | T | R | L | T | R | Morning | Evening | Morning | Evening | Morning | Evening |
| Jamboree Road (NS) at: | | | | | | | | | | | | | | | | | | | |
| Eastbluff Drive/Ford Road (EW) | TS | 2 | 3 | 0 | 1 | 3 | 1 | 1 | 1 | 1>> | 0 | 3 | 1 | 0.85-D | 0.78-C | 0.85-D | 0.78-C | +0.00 | +0.00 |
| Santa Barbara Drive (EW) | TS | 1 | 3 | 1 | 2 | 3 | 1 | 1 | 1 | 0 | 0 | 2 | 1 | 0.61-B | 0.60-A | 0.62-B | 0.60-A | +0.01 | +0.00 |
| Santa Cruz Road (NS) at: | | | | | | | | | | | | | | | | | | | |
| San Joaquin Hills Road (EW) | TS | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 3 | 0 | 1 | 3 | 0 | 0.35-A | 0.42-A | 0.35-A | 0.42-A | +0.00 | +0.00 |
| San Clemente Drive (EW) | TS | 1 | 3 | 0 | 1 | 2 | 0 | 0 | 2 | 0 | 0 | 3 | 0 | 0.16-A | 0.19-A | 0.16-A | 0.19-A | +0.00 | +0.00 |
| Newport Center Drive (NS) at: | | | | | | | | | | | | | | | | | | | |
| Santa Barbara Drive (EW) | TS | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 0 | 0 | 2 | 0 | 0.12-A | 0.21-A | 0.13-A | 0.22-A | +0.01 | +0.01 |
| Coast Highway (EW) | TS | 0 | 0 | 0 | 2 | 0 | 1>> | 2 | 3 | 0 | 0 | 3 | 1>> | 0.47-A | 0.66-B | 0.47-A | 0.66-B | +0.00 | +0.00 |
| Santa Rosa Drive/Big Canyon Drive (NS) at: | | | | | | | | | | | | | | | | | | | |
| San Joaquin Hills Road (EW) | TS | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 3 | 0 | 2 | 3 | 0 | 0.36-A | 0.55-A | 0.37-A | 0.55-A | +0.01 | +0.00 |
| MacArthur Boulevard (NS) at: | | | | | | | | | | | | | | | | | | | |
| Ford Road (EW) | TS | 2 | 4 | 1>> | 2 | 4 | 1>> | 2 | 2 | 1 | 2 | 2 | 1>> | 0.81-D | 0.80-C | 0.81-D | 0.81-D | +0.00 | +0.01 |
| San Joaquin Hills Road (EW) | TS | 2 | 3 | 1 | 2 | 3 | 1>> | 2 | 2 | 0 | 1 | 2 | 1>> | 0.70-B | 0.88-D | 0.70-B | 0.88-D | +0.00 | +0.00 |

[1] ICU-LOS = Intersection Capacity Utilization - Level of Service

[2] When a right turn lane is designated, the lane can either be striped or unstriped. To function as a right turn lane, there must be sufficient width for right turning vehicles to travel outside the through lanes.
L = Left; T = Through; R = Right; >> = Free Right Turn

[3] TS = Traffic Signal

# Figure 17
## Cumulative Projects
## Morning Peak Hour Intersection Turning Movement Volumes

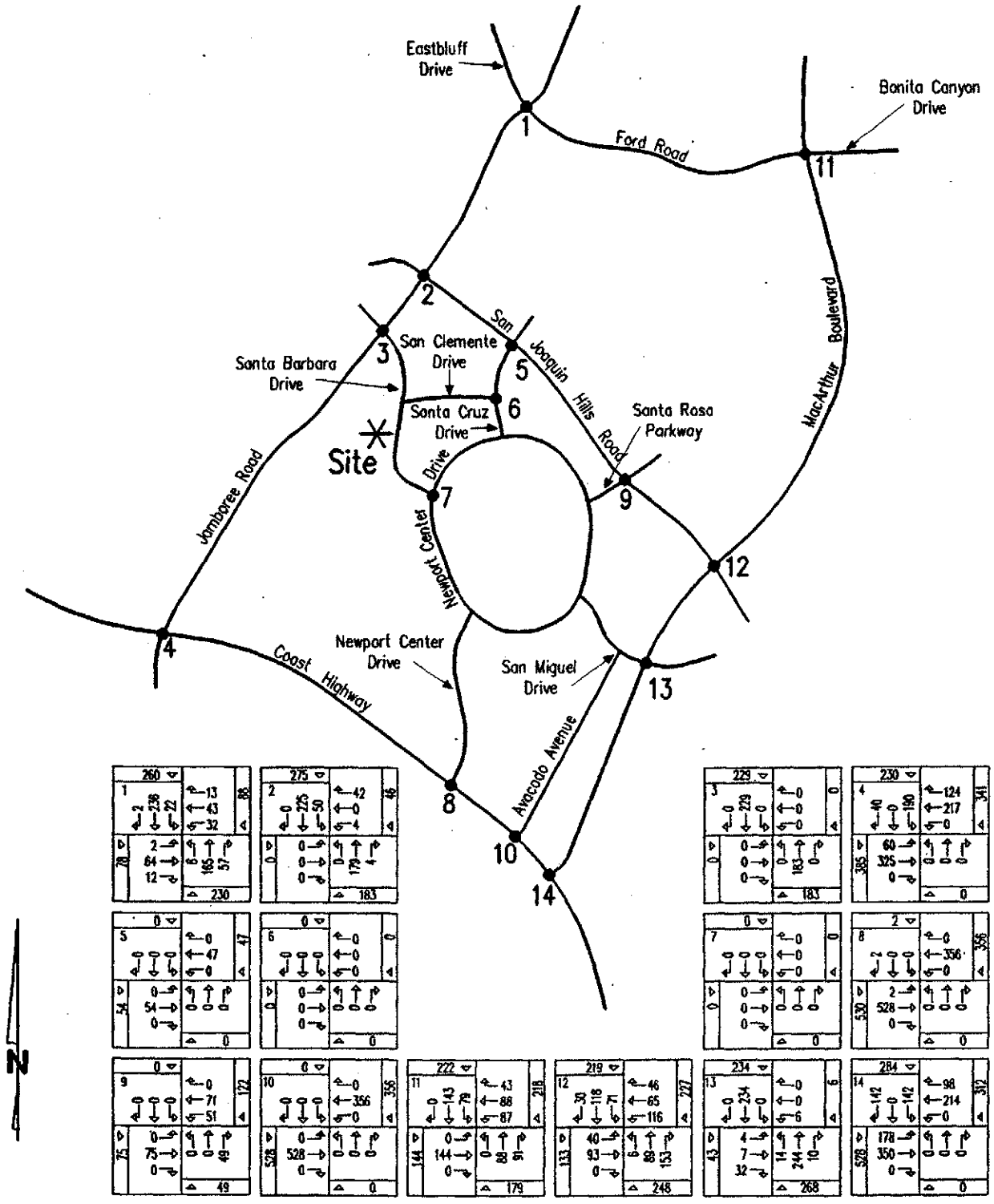



*Kunzman Associates*

Intersection reference numbers are in upper left corner of turning movement boxes.

3124/bbas

# Figure 18
## Cumulative Projects
## Evening Peak Hour Intersection Turning Movement Volumes

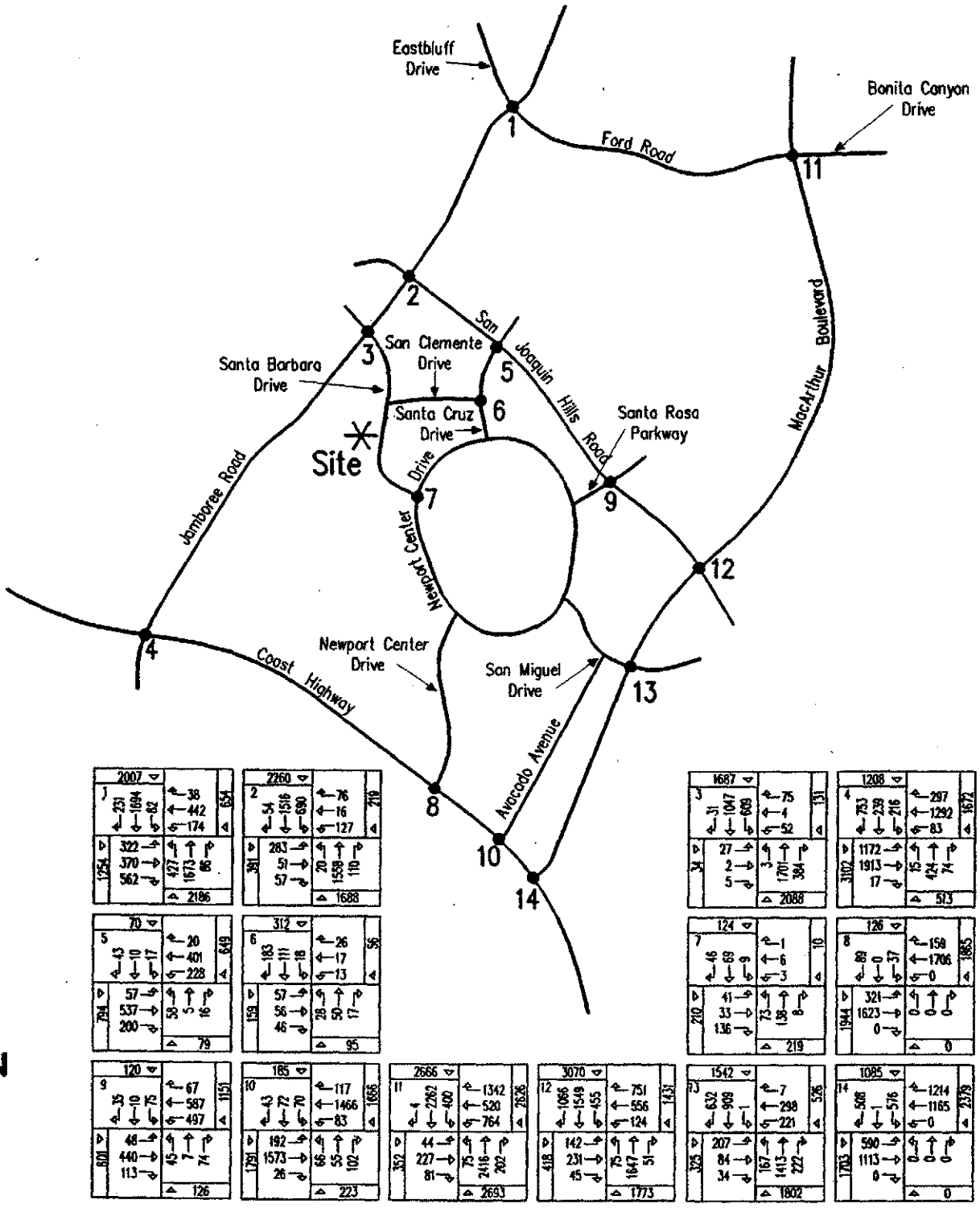



Kunzman Associates

Intersection reference numbers are in upper left corner of turning movement boxes.

3124/bbas

# Figure 19
## Existing + Approved Projects + Cumulative Projects
## Morning Peak Hour Intersection Turning Movement Volumes

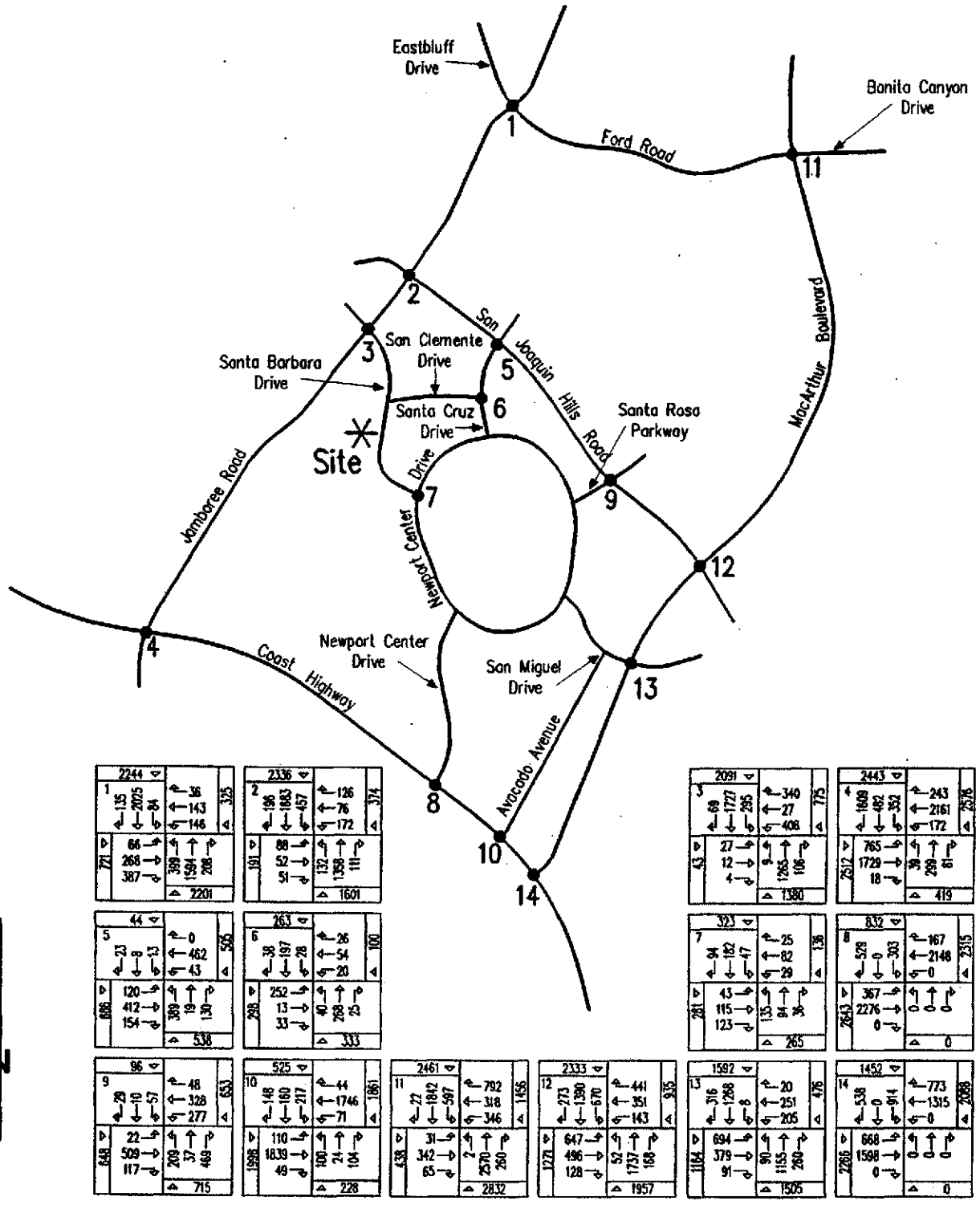



*Kunzman Associates*

Intersection reference numbers are in upper left corner of turning movement boxes.

3124/bbas

# Figure 20
## Existing + Approved Projects + Cumulative Projects
## Evening Peak Hour Intersection Turning Movement Volumes

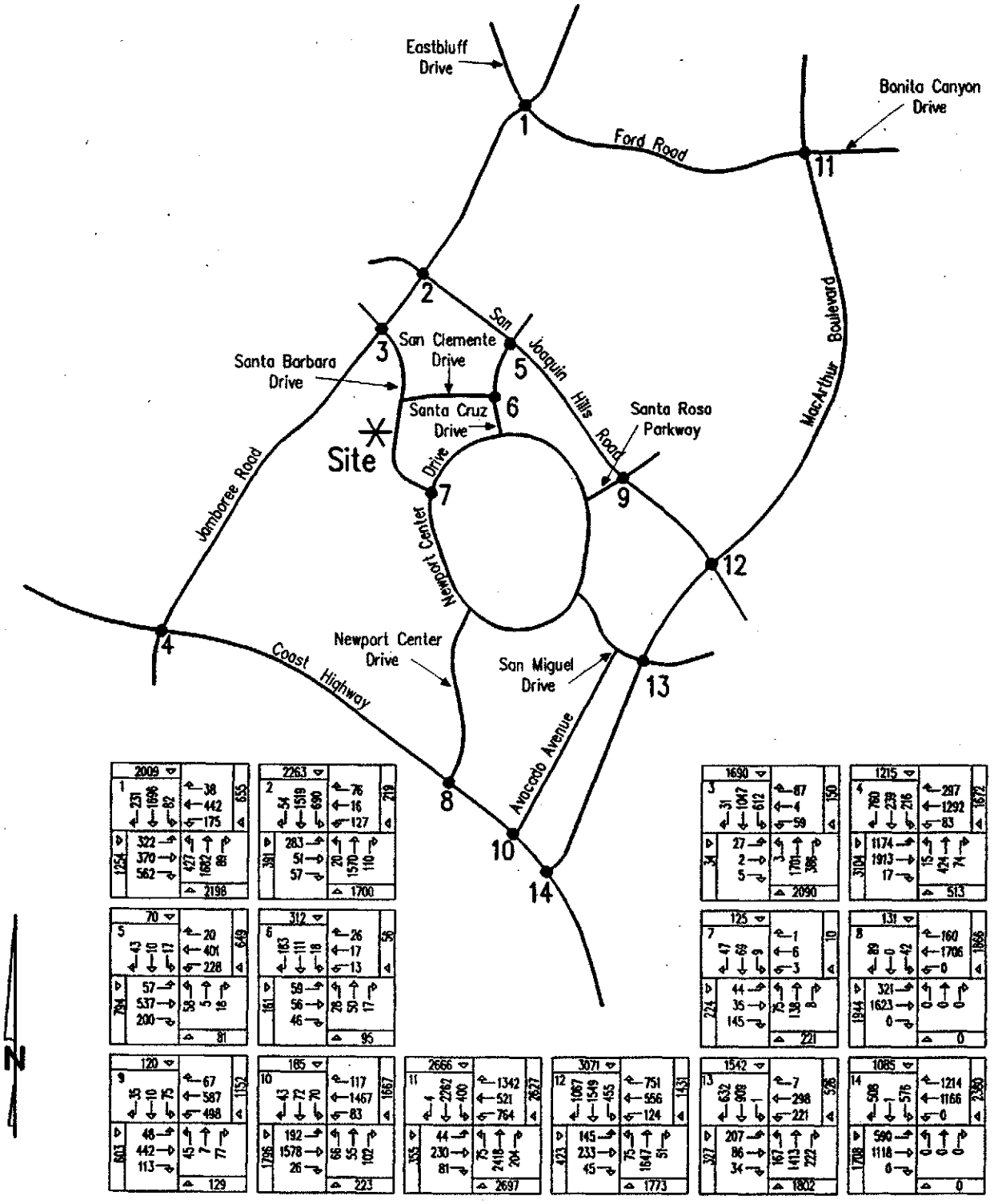



*Kunzman Associates*

Intersection reference numbers are in upper left corner of turning movement boxes.

3124/bbas

# Figure 21
## Existing + Approved Projects + Cumulative Projects + Project Morning Peak Hour Intersection Turning Movement Volumes

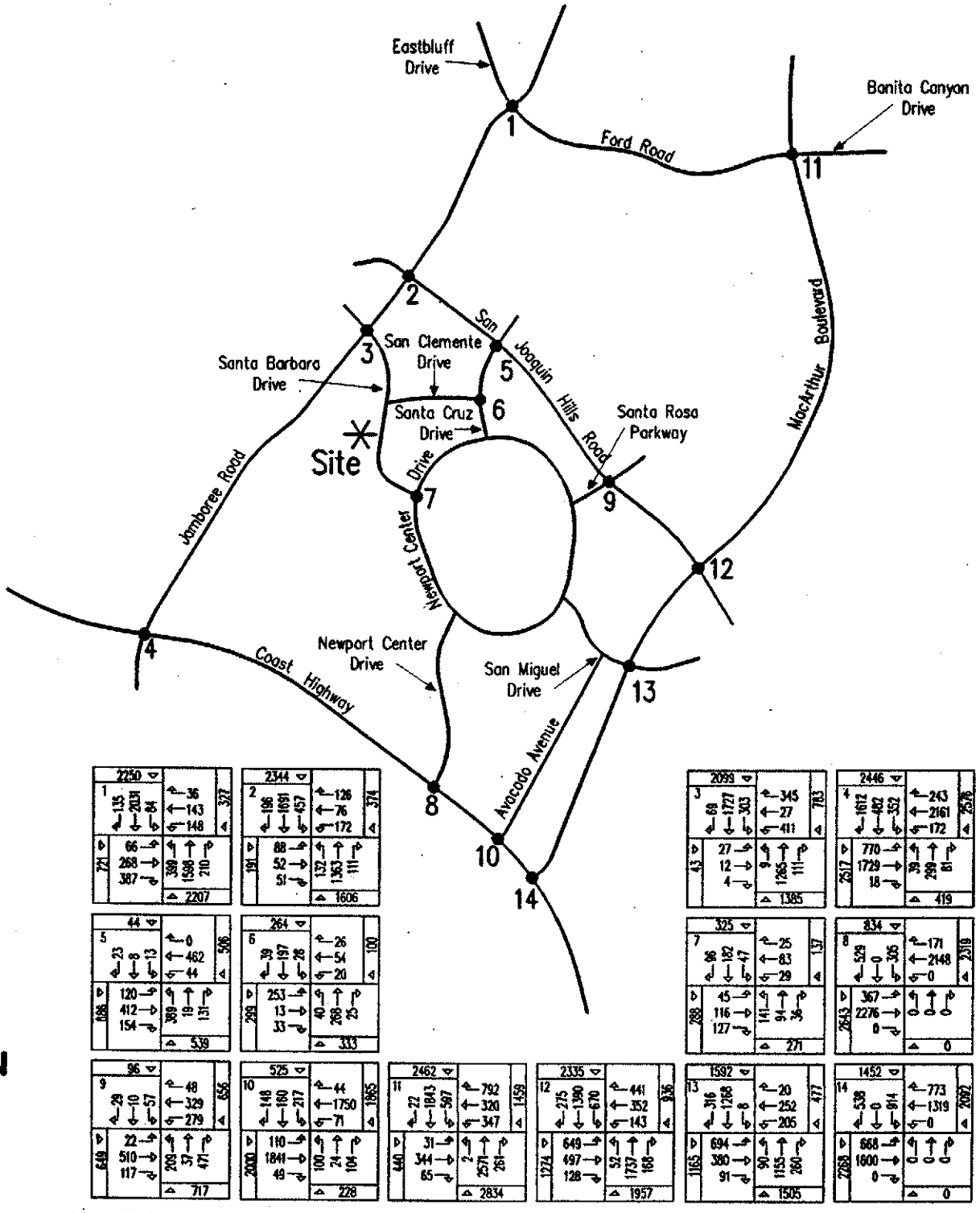



Kunzman Associates

Intersection reference numbers are in upper left corner of turning movement boxes.

3124/bbas

# Figure 22
## Existing + Approved Projects + Cumulative Projects + Project Evening Peak Hour Intersection Turning Movement Volumes




*Kunzman Associates*

Intersection reference numbers are in upper left corner of turning movement boxes.

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# 7. GPA Analysis

The GPA analysis traffic volumes have been obtained from the City of Newport Beach. The GPA analysis does not take into account any trip credits for the site. Since, under General Plan Buildout traffic conditions, all entitlement for the site is shifted to the adjacent hotel.

**Intersection Capacity Utilization (ICU)**

The technique used to assess the operation of a signalized intersection is known as Intersection Capacity Utilization (ICU). To calculate an ICU value the volume of traffic using the intersection is compared with the capacity of the intersection. An ICU value is usually expressed as a decimal. The decimal represents that portion of the hour required to provide sufficient capacity to accommodate all intersection traffic if all approaches operate at capacity.

The Levels of Service for General Plan Buildout without project traffic conditions have been calculated and are shown in Table 7. General Plan Buildout without project morning and evening peak hour intersection turning movement volumes have been calculated and are shown on Figures 23 and 24, respectively General Plan Buildout without project ICU worksheets are provided in Appendix F. For General Plan Buildout without project traffic conditions, the intersections in the vicinity of the site are projected to operate at Level of Service D or better during the peak hours, except for the following study area intersections that are projected to operate at Level of Service E/F during the evening peak hour:

MacArthur Boulevard (NS) at:
- Ford Road (EW)
- San Joaquin Hills Road (EW)

The Levels of Service for General Plan Buildout with project traffic conditions have been calculated and are shown in Table 7. General Plan Buildout with project morning and evening peak hour intersection turning movement volumes have been calculated and are shown on Figures 25 and 26, respectively General Plan Buildout with project ICU worksheets are provided in Appendix F. For General Plan Buildout with project traffic conditions, the intersections in the vicinity of the site are projected to operate at Level of Service D or better during the peak hours, except for the following study area intersections that are projected to operate at Level of Service E/F during the evening peak hour:

MacArthur Boulevard (NS) at:
- Ford Road (EW)
- San Joaquin Hills Road (EW)

Comparison of the one-percent increase in the General Plan Buildout ICU between the without project and with project traffic conditions (see Table 7) resulted in no study area intersections exceeding the one-percent threshold.

## Table 7

## GPA Analysis Intersection Capacity Utilization (ICU) and Levels of Service (LOS)

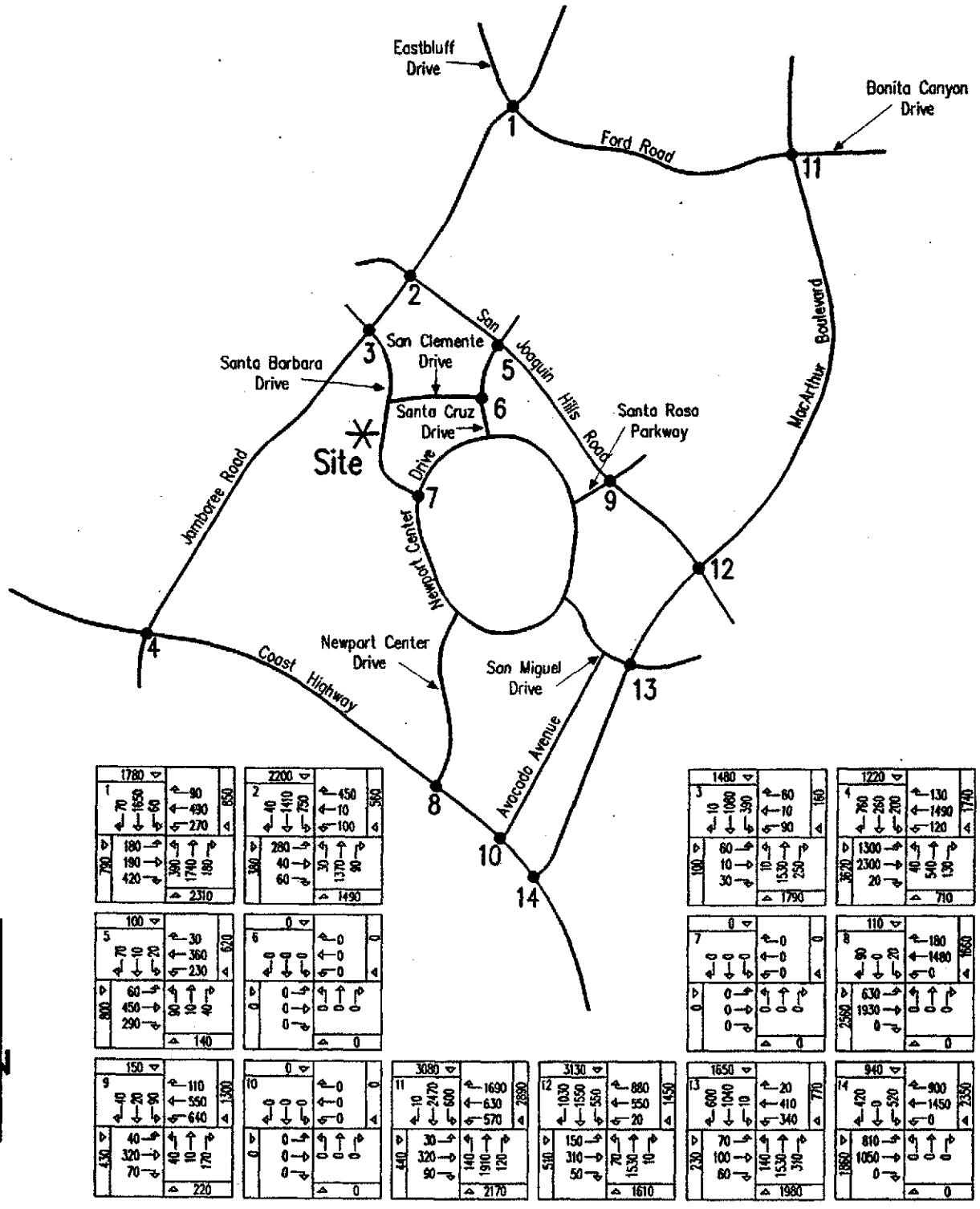
| Intersection | Traffic Control[3] | Intersection Approach Lanes[2] | | | | | | | | | | | | Peak Hour ICU-LOS[1] | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Northbound | | | Southbound | | | Eastbound | | | Westbound | | | General Plan Buildout Without Project | | General Plan Buildout With Project | | ICU Increase | |
| | | L | T | R | L | T | R | L | T | R | L | T | R | Morning | Evening | Morning | Evening | Morning | Evening |
| Jamboree Road (NS) at: | | | | | | | | | | | | | | | | | | | |
| Eastbluff Drive/Ford Road (EW) | TS | 2 | 3 | 0 | 1 | 3 | 1 | 1 | 1 | 1>> | 0 | 3 | 1 | 0.74-C | 0.70-B | 0.74-C | 0.70-B | +0.001 | +0.003 |
| San Joaquin Hills Road (EW) | TS | 1 | 3 | 1>> | 2 | 3 | 1>> | 0 | 3 | 1>> | 0 | 3 | 1 | 0.61-B | 0.63-B | 0.61-B | 0.63-B | +0.003 | +0.002 |
| Santa Barbara Drive (EW) | TS | 1 | 3 | 1 | 2 | 3 | 1 | 1 | 1 | 0 | 0 | 2 | 1 | 0.52-A | 0.69-B | 0.53-A | 0.71-C | +0.009 | +0.011 |
| Coast Highway (EW) | TS | 1 | 2 | 0 | 1 | 2 | 1>> | 3 | 4 | 0 | 2 | 4 | 1>> | 0.84-D | 0.87-D | 0.84-D | 0.87-D | +0.000 | +0.002 |
| Santa Cruz Road (NS) at: | | | | | | | | | | | | | | | | | | | |
| San Joaquin Hills Road (EW) | TS | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 3 | 0 | 1 | 3 | 0 | 0.38-A | 0.51-A | 0.38-A | 0.51-A | +0.000 | +0.000 |
| Newport Center Drive (NS) at: | | | | | | | | | | | | | | | | | | | |
| Coast Highway (EW) | TS | 0 | 0 | 0 | 2 | 0 | 1>> | 2 | 3 | 0 | 0 | 3 | 1>> | 0.51-A | 0.62-B | 0.51-A | 0.62-B | +0.002 | +0.002 |
| Santa Rosa Drive/Big Canyon Drive (NS) at: | | | | | | | | | | | | | | | | | | | |
| San Joaquin Hills Road (EW) | TS | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 3 | 0 | 2 | 3 | 0 | 0.34-A | 0.66-B | 0.34-A | 0.66-B | +0.001 | +0.002 |
| MacArthur Boulevard (NS) at: | | | | | | | | | | | | | | | | | | | |
| Ford Road (EW) | TS | 2 | 4 | 1>> | 2 | 4 | 1>> | 2 | 2 | 1 | 2 | 2 | 1>> | 0.76-C | 1.07-F | 0.77-C | 1.08-F | +0.002 | +0.003 |
| San Joaquin Hills Road (EW) | TS | 2 | 3 | 1 | 2 | 3 | 1>> | 2 | 2 | 0 | 1 | 2 | 1>> | 0.71-C | 0.96-E | 0.71-C | 0.97-E | +0.001 | +0.002 |
| San Miguel Drive (EW) | TS | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 2 | 1 | 2 | 2 | 0 | 0.58-A | 0.72-C | 0.58-A | 0.72-C | +0.001 | +0.000 |
| Coast Highway (EW) | TS | 0 | 0 | 0 | 2 | 0 | 1>> | 2 | 3 | 0 | 0 | 3 | 1>> | 0.72-C | 0.81-D | 0.72-C | 0.81-D | +0.001 | +0.001 |

[1] ICU-LOS = Intersection Capacity Utilization - Level of Service

[2] When a right turn lane is designated, the lane can either be striped or unstriped. To function as a right turn lane, there must be sufficient width for right turning vehicles to travel outside the through lanes.
L = Left; T = Through; R = Right; >> = Free Right Turn

[3] TS = Traffic Signal

# Figure 23
## General Plan Buildout Without Project
## Morning Peak Hour Intersection Turning Movement Volumes

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Intersection reference numbers are in upper left corner of turning movement boxes.

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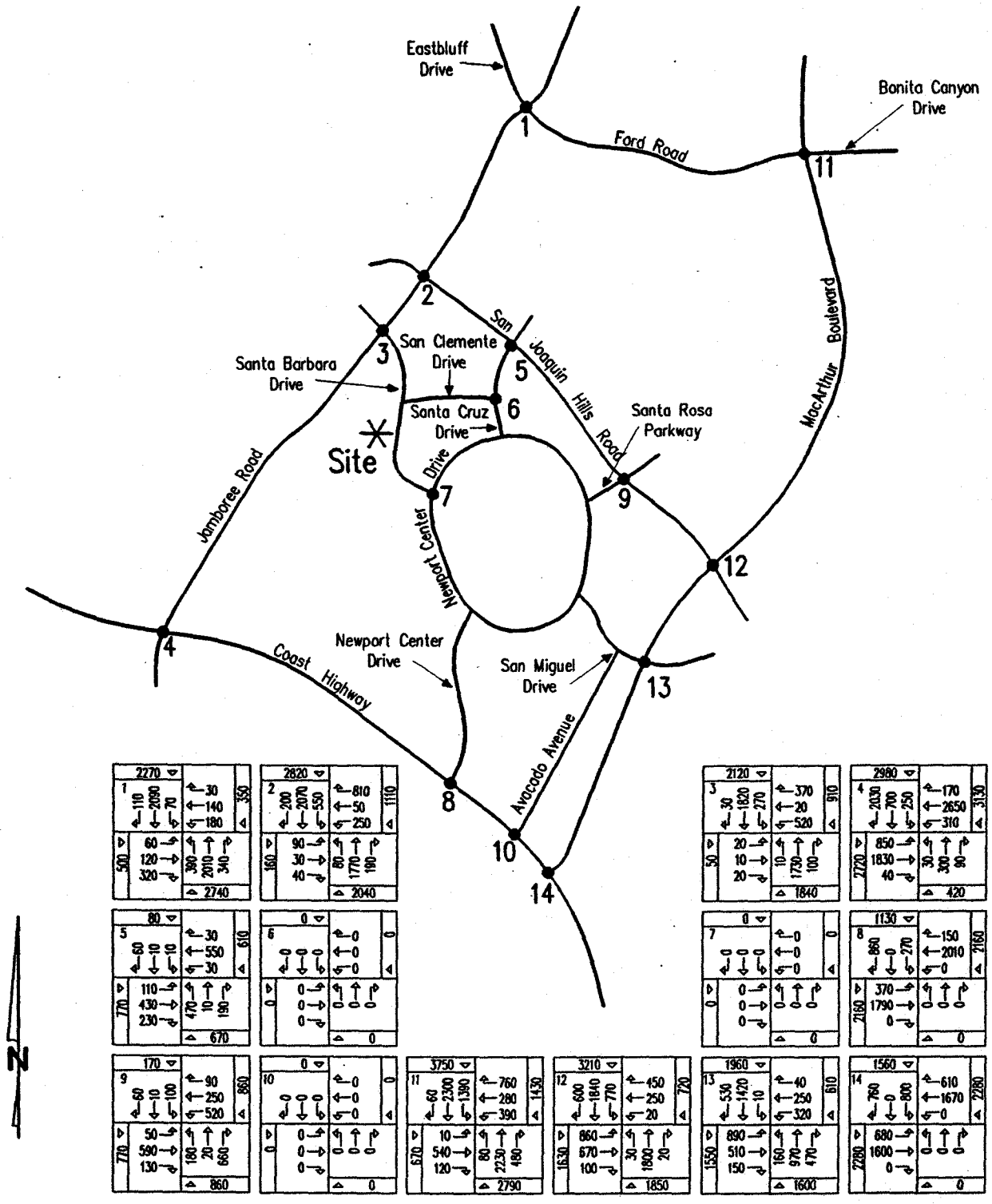
# Figure 24
## General Plan Buildout Without Project
## Evening Peak Hour Intersection Turning Movement Volumes

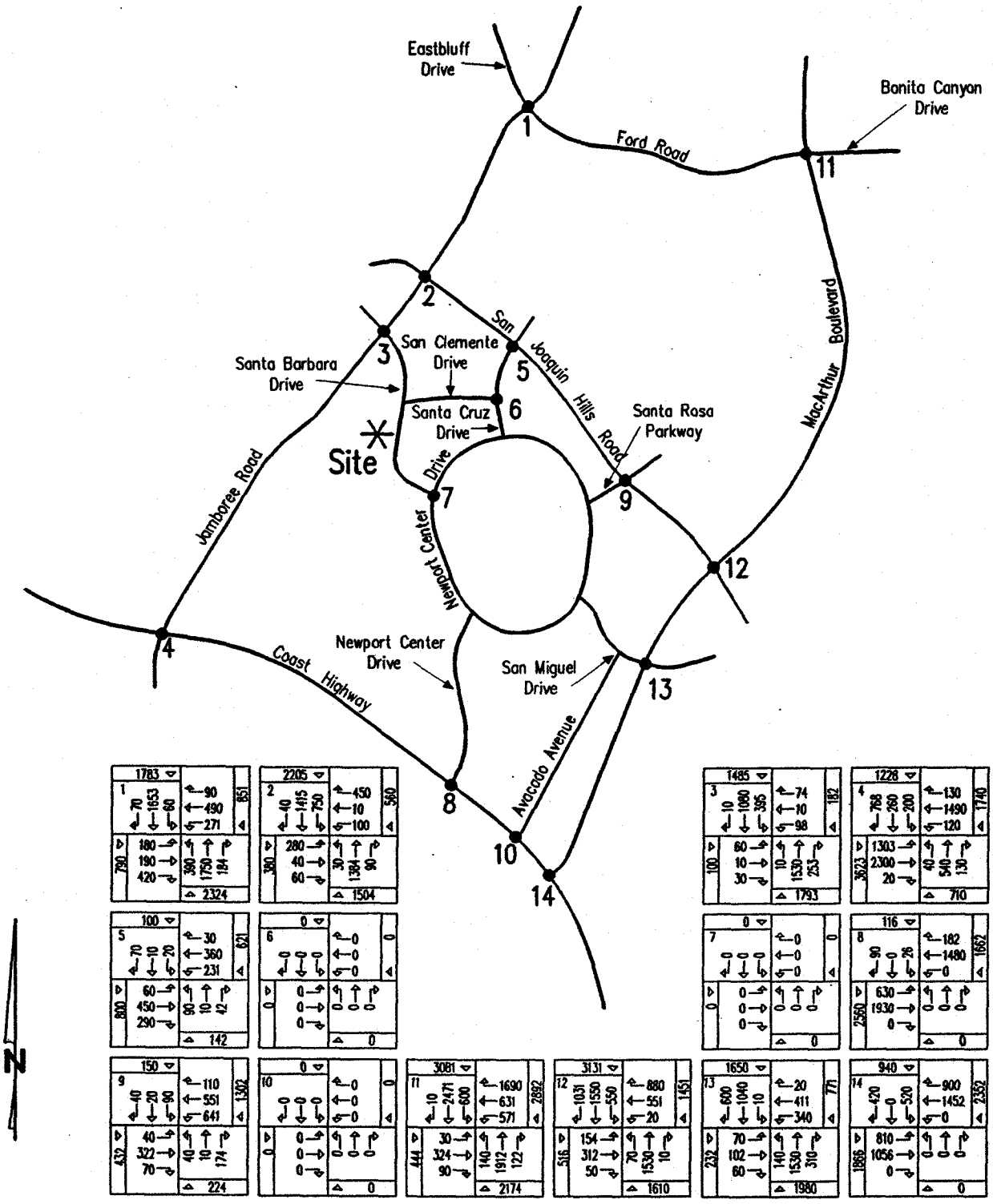



*Kunzman Associates*

Intersection reference numbers are in upper left corner of turning movement boxes.

3124/bbas

# Figure 25
## General Plan Buildout With Project
## Morning Peak Hour Intersection Turning Movement Volumes

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Intersection reference numbers are in upper left corner of turning movement boxes.

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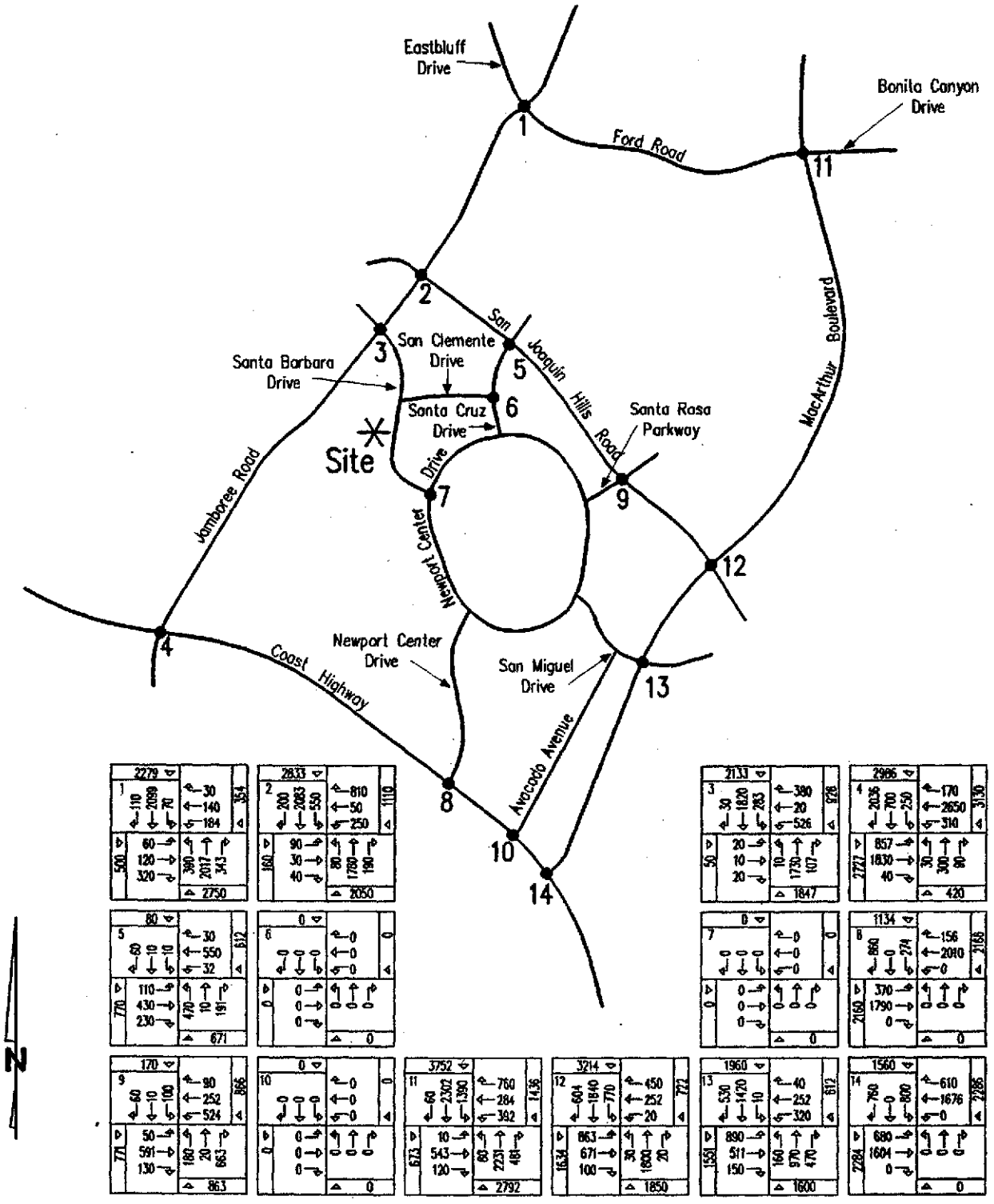
# Figure 26
## General Plan Buildout With Project
## Evening Peak Hour Intersection Turning Movement Volumes

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Intersection reference numbers are in upper left corner of turning movement boxes.

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# 8. Conclusions

This section summarizes the existing traffic conditions, project traffic impacts, and the proposed mitigation measures.

**Existing Traffic Conditions**

a. The existing use is a tennis club (includes 8 tennis courts) and is an ancillary use to the Marriott Hotel.

b. The project site currently has access to Santa Barbara Drive.

c. Pursuant to discussions with City of Newport Beach staff, the study area includes the following intersections:

Jamboree Road (NS) at:
- Eastbluff Drive/Ford Road (EW)
- San Joaquin Hills Road (EW)
- Santa Barbara Drive (EW)
- Coast Highway (EW)

Santa Cruz Road (NS) at:
- San Joaquin Hills Road (EW)
- San Clemente Drive (EW)

Newport Center Drive (NS) at:
- Santa Barbara Drive (EW)
- Coast Highway (EW)

Santa Rosa Drive/Big Canyon Drive (NS) at:
- San Joaquin Hills Road (EW)

Avocado Avenue (NS) at:
- Coast Highway (EW)

MacArthur Boulevard (NS) at:
- Ford Road (EW)
- San Joaquin Hills Road (EW)
- San Miguel Drive (EW)

**Traffic Impacts**

a. The proposed project consists of 79 condominium dwelling units.

b. The proposed development is projected to generate approximately 640 daily vehicle trips, 52 of which will occur during the morning peak hour and 65 of which will occur during the evening peak hour. As shown in Table 1, the proposed development compared to the existing development is projected to generate approximately 330 more daily vehicle trips, 42 more of which will occur during the morning peak hour and 39 more of which will occur during the evening peak hour.

c. The City of Newport Beach staff provided the approved and cumulative projects in the study area. The approved projects consist of development that has been approved but are not fully completed. Cumulative projects are known, but not approved project developments that are reasonably expected to be completed or nearly completed at the same time as the proposed project.

d. The TPO analysis resulted in the following study area intersections exceeding the one-percent threshold and requiring additional analysis:

Jamboree Road (NS) at:
- Eastbluff Drive/Ford Road (EW)
- Santa Barbara Drive (EW)

Santa Cruz Road (NS) at:
- San Joaquin Hills Road (EW)
- San Clemente Drive (EW)

Newport Center Drive (NS) at:
- Santa Barbara Drive (EW)
- Coast Highway (EW)

Santa Rosa Drive/Big Canyon Drive (NS) at:
- San Joaquin Hills Road (EW)

MacArthur Boulevard (NS) at:
- Ford Road (EW)
- San Joaquin Hills Road (EW)

e. The California Environmental Quality Act (CEQA) analysis (this part of the analysis is consistent with CEQA) included analysis of the same study area intersections as the TPO analysis.

f. The GPA analysis included ICU calculations at the following study area intersections:

Jamboree Road (NS) at:
- Eastbluff Drive/Ford Road (EW)
- San Joaquin Hills Road (EW)
- Santa Barbara Drive (EW)
- Coast Highway (EW)

Santa Cruz Road (NS) at:
- San Joaquin Hills Road (EW)

Newport Center Drive (NS) at:
- Coast Highway (EW)

Santa Rosa Drive/Big Canyon Drive (NS) at:
- San Joaquin Hills Road (EW)

MacArthur Boulevard (NS) at:
- Ford Road (EW)
- San Joaquin Hills Road (EW)
- San Miguel Drive (EW)
- Coast Highway (EW)

Comparison of the one-percent increase in the General Plan Buildout ICU between the without project and with project traffic conditions (see Table 7) resulted in no study area intersections exceeding the one-percent threshold.

**Recommended Improvements**

The following measures are recommended to mitigate the impact of the project on traffic circulation:

a. Site-specific circulation and access recommendations are depicted on Figure 27.

b. An existing two-way left turn lane on Santa Barbara Drive provides adequate left turn storage for vehicles desiring to turn left into the project site.

c. On-site parking should be provided to meet City of Newport Beach parking code requirements.

d. Sight distance at the project accesses should be reviewed with respect to Caltrans/City of Newport Beach standards in conjunction with the preparation of final grading, landscape, and street improvement plans.

e. On-site traffic signing and striping should be implemented in conjunction with detailed construction plans for the project.

f. The parking garage design shall meet all City requirements regarding parking stall width, parking stall depth, parking aisle width, parking aisle grade, and parking aisle-turning radii.

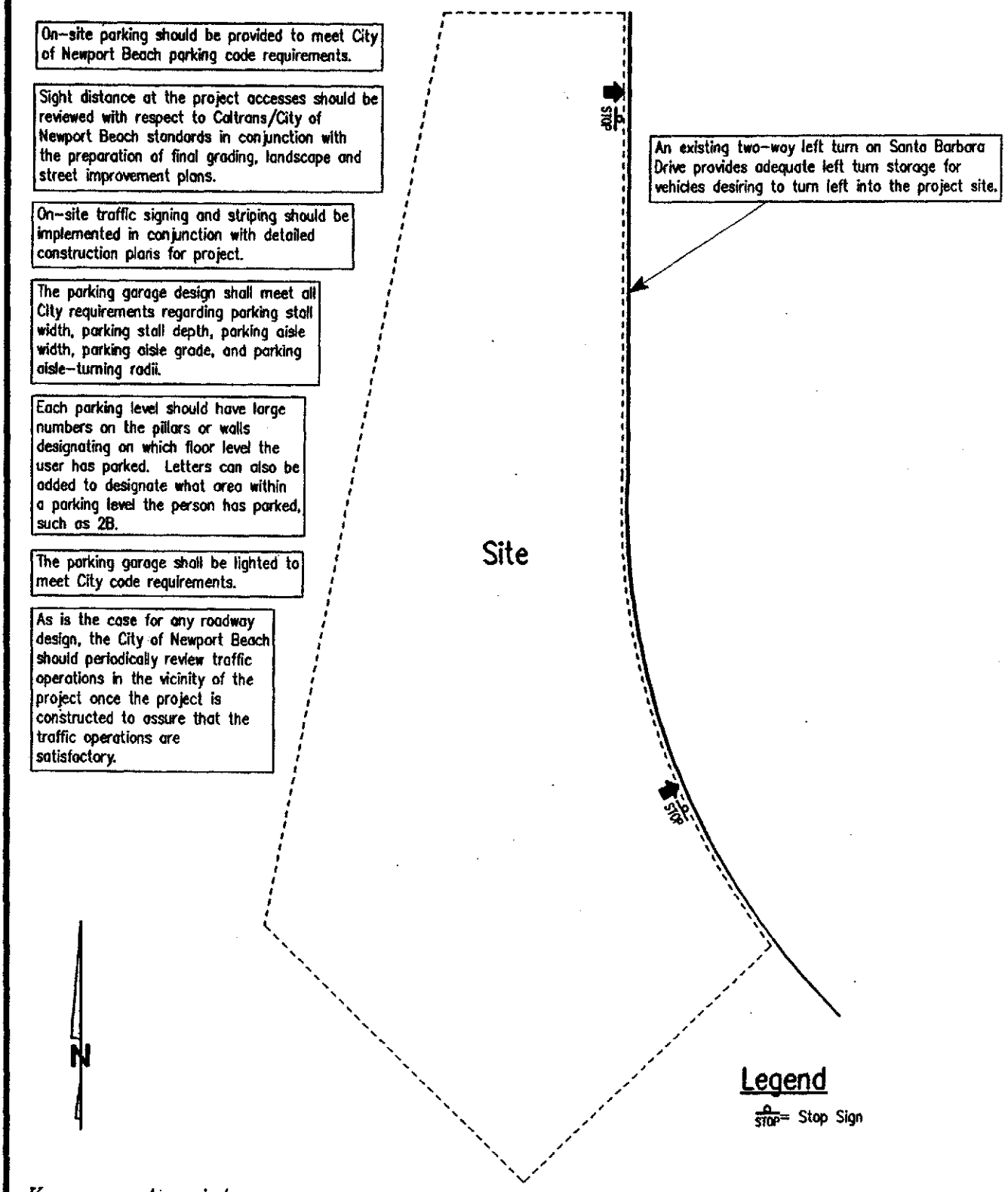
g. Each parking level should have large numbers on the pillars or walls designating on which floor level the user has parked. Letters can also be added to designate what area within a parking level the person has parked, such as 2B.

h. The parking garage shall be lighted to meet City code requirements.

i. The project site did not cause a significant impact at the study area intersections (increase of one-percent or more at a study area intersection operating at worse than Level of Service D during the peak hours); therefore, no improvements are recommended at the study area intersections.

j. As is the case for any roadway design, the City of Newport Beach should periodically review traffic operations in the vicinity of the project once the project is constructed to assure that the traffic operations are satisfactory.

# Figure 27
# Circulation Recommendations

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# Appendices

| | |
|---|---|
| **Appendix A** | **Glossary of Transportation Terms** |
| **Appendix B** | **Year 2003/2004 Worksheets** |
| **Appendix C** | **Approved Project Data** |
| **Appendix D** | **TPO One-Percent Analysis Calculation Worksheets** |
| **Appendix E** | **Cumulative Project Data** |
| **Appendix F** | **Explanation and Calculation of Intersection Capacity Utilization (ICU)** |

# APPENDIX A

## Glossary of Transportation Terms

## GLOSSARY OF TRANSPORTATION TERMS

### COMMON ABBREVIATIONS

| | |
|---|---|
| AC: | Acres |
| ADT: | Average Daily Traffic |
| Caltrans: | California Department of Transportation |
| DU: | Dwelling Unit |
| ICU: | Intersection Capacity Utilization |
| LOS: | Level of Service |
| TSF: | Thousand Square Feet |
| V/C | Volume/Capacity |
| VMT: | Vehicle Miles Traveled |

### TERMS

**AVERAGE DAILY TRAFFIC**: The total volume during a year divided by the number of days in a year. Usually only weekdays are included.

**BANDWIDTH:** The number of seconds of green time available for through traffic in a signal progression.

**BOTTLENECK**: A constriction along a travelway that limits the amount of traffic that can proceed downstream from its location.

**CAPACITY**: The maximum number of vehicles which can be reasonably expected to pass over a given section of a lane or a roadway in a given time period.

**CHANNELIZATION:** The separation or regulation of conflicting traffic movements into definite paths of travel by the use of pavement markings, raised islands, or other suitable means to facilitate the safe and orderly movements of both vehicles and pedestrians.

**CLEARANCE INTERVAL**: Nearly same as yellow time. If there is an all red interval after the end of a yellow, then that is also added into the clearance interval.

**CORDON**: An imaginary line around an area across which vehicles, persons, or other items are counted (in and out).

**CYCLE LENGTH**: The time period in seconds required for one complete signal cycle.

**CUL-DE-SAC STREET**: A local street open at one end only, and with special provisions for turning around.

**DAILY CAPACITY**: The daily volume of traffic that will result in a volume during the peak hour equal to the capacity of the roadway.

**DAILY TRAFFIC**: Same as average daily traffic.

**DELAY**: The time consumed while traffic is impeded in its movement by some element over which it has no control, usually expressed in seconds per vehicle.

**DEMAND RESPONSIVE SIGNAL**: Same as traffic-actuated signal.

**DENSITY**: The number of vehicles occupying in a unit length of the through traffic lanes of a roadway at any given instant. Usually expressed in vehicles per mile.

**DETECTOR**: A device that responds to a physical stimulus and transmits a resulting impulse to the signal controller.

**DESIGN SPEED**: A speed selected for purposes of design. Features of a highway, such as curvature, superelevation, and sight distance (upon which the safe operation of vehicles is dependent) are correlated to design speed.

**DIRECTIONAL SPLIT**: The percent of traffic in the peak direction at any point in time.

**DIVERSION**: The rerouting of peak hour traffic to avoid congestion.

**FIXED TIME SIGNAL**: Same as pretimed signal.

**FORCED FLOW**: Opposite of free flow.

**FREE FLOW**: Volumes are well below capacity. Vehicles can maneuver freely and travel is unimpeded by other traffic.

**GAP**: Time or distance between successive vehicles in a traffic stream, rear bumper to front bumper.

**HEADWAY**: Time or distance spacing between successive vehicles in a traffic stream, front bumper to front bumper.

**INTERCONNECTED SIGNAL SYSTEM**: A number of intersections that are connected to achieve signal progression.

**LEVEL OF SERVICE**: A qualitative measure of a number of factors, which include speed and travel time, traffic interruptions, freedom to maneuver, safety, driving comfort and convenience, and operating costs.

**LOOP DETECTOR**: A vehicle detector consisting of a loop of wire embedded in the roadway, energized by alternating current and producing an output circuit closure when passed over by a vehicle.

**MINIMUM ACCEPTABLE GAP**: Smallest time headway between successive vehicles in a traffic stream into which another vehicle is willing and able to cross or merge.

**MULTI-MODAL**: More than one mode; such as automobile, bus transit, rail rapid transit, and bicycle transportation modes.

**OFFSET**: The time interval in seconds between the beginning of green at one intersection and the beginning of green at an adjacent intersection.

**PLATOON:** A closely grouped component of traffic that is composed of several vehicles moving, or standing ready to move, with clear spaces ahead and behind.

**ORIGIN-DESTINATION SURVEY**: A survey to determine the point of origin and the point of destination for a given vehicle trip.

**PASSENGER CAR EQUIVALENTS (PCE)**: One car is one Passenger Car Equivalent. A truck is equal to 2 or 3 Passenger Car Equivalents in that a truck requires longer to start, goes slower, and accelerates slower. Loaded trucks have a higher Passenger Car Equivalent than empty trucks.

**PRETIMED SIGNAL**: A type of traffic signal that directs traffic to stop and go on a predetermined time schedule without regard to traffic conditions.

**PROGRESSION**: A term used to describe the progressive movement of traffic through several signalized intersections.

**SCREEN-LINE**: An imaginary line or physical feature across which all trips are counted, normally to verify the validity of mathematical traffic models.

**SIGNAL CYCLE**: The time period in seconds required for one complete sequence of signal indications.

**SIGNAL PHASE**: The part of the signal cycle allocated to one or more traffic movements.

**STARTING DELAY**: The delay experienced in initiating the movement of queued traffic from a stop to an average running speed through a signalized intersection.

**TRAFFIC-ACTUATED SIGNAL**: A type of traffic signal that directs traffic to stop and go in accordance with the demands of traffic, as registered by the actuation of detectors.

**TRIP:** The movement of a person or vehicle from one location (origin) to another (destination). For example, from home to store to home is two trips, not one.

**TRIP-END**: One end of a trip at either the origin or destination; i.e. each trip has two trip-ends. A trip-end occurs when a person, object, or message is transferred to or from a vehicle.

**TRIP GENERATION RATE:** The quality of trips produced and/or attracted by a specific land use stated in terms of units such as per dwelling, per acre, and per 1,000 square feet of floor space.

**TRUCK:** A vehicle having dual tires on one or more axles, or having more than two axles.

**UNBALANCED FLOW:** Heavier traffic flow in one direction than the other. On a daily basis, most facilities have balanced flow. During the peak hours, flow is seldom balanced in an urban area.

**VEHICLE MILES OF TRAVEL**: A measure of the amount of usage of a section of highway, obtained by multiplying the average daily traffic by length of facility in miles.

# APPENDIX B

## Year 2003/2004 Worksheets

## *1% TRAFFIC VOLUME ANALYSIS*

***INTERSECTION:*** JAMBOREE ROAD & EASTBLUFF DRIVE/FORD ROAD 4980

***(Existing Traffic Volumes Based on Average Daily Traffic 2003 AM)***

| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
|---|---|---|---|---|---|---|
| Northbound | 1766 | | | | | |
| Southbound | 1722 | | | | | |
| Eastbound | 1203 | | | | | |
| Westbound | 508 | | | | | |

☐ Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

☐ Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

## *1% TRAFFIC VOLUME ANALYSIS*

***INTERSECTION:*** JAMBOREE ROAD & EASTBLUFF DRIVE/FORD ROAD 4980

***(Existing Traffic Volumes Based on Average Daily Traffic 2003 PM)***

| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
|---|---|---|---|---|---|---|
| Northbound | 1770 | | | | | |
| Southbound | 1798 | | | | | |
| Eastbound | 641 | | | | | |
| Westbound | 233 | | | | | |

☐ Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

☐ Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

JA4980AM

INTERSECTION CAPACITY UTILIZATION ANALYSIS

INTERSECTION: JAMBOREE ROAD & EASTBLUFF DRIVE/FORD ROAD 4980
EXISTING TRAFFIC VOLUMES BASED ON AVERAGE DAILY TRAFFIC 2003 AM

| Movement | EXISTING Lanes Capacity | PROPOSED Lanes Capacity | EXISTING PK HR Volume | EXISTING V/C Ratio | REGIONAL GROWTH Volume | COMMITTED PROJECT Volume | PROJECTED V/C Ratio w/o Project Volume | PROJECT Volume | PROJECT V/C Ratio |
|---|---|---|---|---|---|---|---|---|---|
| NL | 3200 | | 380 | 0.119 * | | | | | |
| NT | 4800 | | 1322 | 0.289 | | | | | |
| NR | | | 64 | | | | | | |
| SL | 1600 | | 72 | 0.045 | | | | | |
| ST | 4800 | | 1445 | 0.301 * | | | | | |
| SR | 1600 | | 205 | 0.128 | | | | | |
| EL | 1600 | | 311 | 0.194 | | | | | |
| ET | 1600 | | 346 | 0.216 * | | | | | |
| ER | N.S. | | 546 | | | | | | |
| WL | 4800 | | 116 | 0.103 * | | | | | |
| WT | | | 377 | | | | | | |
| WR | 1600 | | 15 | 0.009 | | | | | |
| EXISTING I.C.U. | | | | 0.739 | | | | | |
| EXISTING + REG GROWTH + COMMITTED W/PROPOSED IMPROVEMENTS I.C.U. | | | | | | | | | |
| EXISTING + COMMITTED + REGIONAL GROWTH + PROJECT I.C.U. | | | | | | | | | |

**Split Phase E/W direction**

☐ Projected + project traffic I.C.U. will be less than or equal to 0.90

☐ Projected + project traffic I.C.U. will be greater than 0.90

☐ Projected + project traffic I.C.U. w/systems improvement will be less than or equal to 0.90

☐ Projected + project traffic I.C.U. with project improvements will be less than I.C.U. without project

Description of system improvement:

JA4980PM

INTERSECTION CAPACITY UTILIZATION ANALYSIS

INTERSECTION: JAMBOREE ROAD & EASTBLUFF DRIVE/FORD ROAD 4980
EXISTING TRAFFIC VOLUMES BASED ON AVERAGE DAILY TRAFFIC 2003 PM

| Movement | EXISTING Lanes Capacity | PROPOSED Lanes Capacity | EXISTING PK HR Volume | EXISTING V/C Ratio | REGIONAL GROWTH Volume | COMMITTED PROJECT Volume | PROJECTED V/C Ratio w/o Project Volume | PROJECT Volume | PROJECT V/C Ratio |
|---|---|---|---|---|---|---|---|---|---|
| NL | 3200 | | 370 | 0.116 * | | | | | |
| NT | 4800 | | 1261 | 0.292 | | | | | |
| NR | | | 139 | | | | | | |
| SL | 1600 | | 58 | 0.036 | | | | | |
| ST | 4800 | | 1613 | 0.336 * | | | | | |
| SR | 1600 | | 127 | 0.079 | | | | | |
| EL | 1600 | | 64 | 0.040 | | | | | |
| ET | 1600 | | 204 | 0.128 * | | | | | |
| ER | N.S. | | 373 | | | | | | |
| WL | 4800 | | 110 | 0.044 * | | | | | |
| WT | | | 100 | | | | | | |
| WR | 1600 | | 23 | 0.014 | | | | | |
| EXISTING I.C.U. | | | | 0.624 | | | | | |
| EXISTING + REG GROWTH + COMMITTED W/PROPOSED IMPROVEMENTS I.C.U. | | | | | | | | | |
| EXISTING + COMMITTED + REGIONAL GROWTH + PROJECT I.C.U. | | | | | | | | | |

**Split Phase E/W direction**

☐ Projected + project traffic I.C.U. will be less than or equal to 0.90

☐ Projected + project traffic I.C.U. will be greater than 0.90

☐ Projected + project traffic I.C.U. w/systems improvement will be less than or equal to 0.90

☐ Projected + project traffic I.C.U. with project improvements will be less than I.C.U. without project

Description of system improvement:

## *1% TRAFFIC VOLUME ANALYSIS*

***INTERSECTION:*** JAMBOREE ROAD & SAN JOAQUIN HILLS ROAD 5045
***(Existing Traffic Volumes Based on Average Daily Traffic 2003 AM)***

| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
|---|---|---|---|---|---|---|
| Northbound | 1402 | | | | | |
| Southbound | 2018 | | | | | |
| Eastbound | 391 | | | | | |
| Westbound | 151 | | | | | |

☐ Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

☐ Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

## *1% TRAFFIC VOLUME ANALYSIS*

***INTERSECTION:*** JAMBOREE ROAD & SAN JOAQUIN HILLS ROAD 5045
***(Existing Traffic Volumes Based on Average Daily Traffic 2003 PM)***

| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
|---|---|---|---|---|---|---|
| Northbound | 1321 | | | | | |
| Southbound | 1957 | | | | | |
| Eastbound | 186 | | | | | |
| Westbound | 298 | | | | | |

☐ Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

☐ Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

JA5045AM

INTERSECTION CAPACITY UTILIZATION ANALYSIS

INTERSECTION: JAMBOREE ROAD & SAN JOAQUIN HILLS ROAD 5045
EXISTING TRAFFIC VOLUMES BASED ON AVERAGE DAILY TRAFFIC 2003 AM

| Movement | EXISTING Lanes Capacity | PROPOSED Lanes Capacity | EXISTING PK HR Volume | EXISTING V/C Ratio | REGIONAL GROWTH Volume | COMMITTED PROJECT Volume | PROJECTED V/C Ratio w/o Project Volume | PROJECT Volume | PROJECT V/C Ratio |
|---|---|---|---|---|---|---|---|---|---|
| NL | 1600 | | 20 | 0.013 | | | | | |
| NT | 4800 | | 1282 | 0.267 * | | | | | |
| NR | N.S. | | 100 | | | | | | |
| SL | 3200 | | 667 | 0.208 * | | | | | |
| ST | 4800 | | 1297 | 0.270 | | | | | |
| SR | N.S. | | 54 | | | | | | |
| EL | 4800 | | 283 | 0.070 * | | | | | |
| ET | | | 51 | | | | | | |
| ER | N.S. | | 57 | | | | | | |
| WL | 4800 | | 114 | 0.027 * | | | | | |
| WT | | | 16 | | | | | | |
| WR | 1600 | | 21 | 0.013 | | | | | |
| EXISTING I.C.U. | | | | 0.572 | | | | | |
| EXISTING + REGIONAL GROWTH + COMMITTED W/PROPOSED IMPROVEMENTS I.C.U. | | | | | | | | | |
| EXISTING + COMMITTED + REGIONAL GROWTH + PROJECT I.C.U. | | | | | | | | | |

**Split Phase E/W direction**

[ ] Projected + project traffic I.C.U. will be less than or equal to 0.90

[ ] Projected + project traffic I.C.U. will be greater than 0.90

[ ] Projected + project traffic I.C.U. w/systems improvement will be less than or equal to 0.90

[ ] Projected + project traffic I.C.U. with project improvements will be less than I.C.U. Without project

Description of system improvement:

JA5045PM

INTERSECTION CAPACITY UTILIZATION ANALYSIS

INTERSECTION: JAMBOREE ROAD & SAN JOAQUIN HILLS ROAD 5045
EXISTING TRAFFIC VOLUMES BASED ON AVERAGE DAILY TRAFFIC 2003 PM

| Movement | EXISTING Lanes Capacity | PROPOSED Lanes Capacity | EXISTING PK HR Volume | EXISTING V/C Ratio | REGIONAL GROWTH Volume | COMMITTED PROJECT Volume | PROJECTED V/C Ratio w/o Project Volume | PROJECT Volume | PROJECT V/C Ratio |
|---|---|---|---|---|---|---|---|---|---|
| NL | 1600 | | 131 | 0.082 * | | | | | |
| NT | 4800 | | 1092 | 0.228 | | | | | |
| NR | N.S. | | 98 | | | | | | |
| SL | 3200 | | 387 | 0.121 | | | | | |
| ST | 4800 | | 1374 | 0.286 * | | | | | |
| SR | N.S. | | 196 | | | | | | |
| EL | 4800 | | 87 | 0.028 * | | | | | |
| ET | | | 48 | | | | | | |
| ER | N.S. | | 51 | | | | | | |
| WL | 4800 | | 161 | 0.049 * | | | | | |
| WT | | | 76 | | | | | | |
| WR | 1600 | | 61 | 0.038 | | | | | |
| EXISTING I.C.U. | | | | 0.445 | | | | | |
| EXISTING + REGIONAL GROWTH + COMMITTED W/PROPOSED IMPROVEMENTS I.C.U. | | | | | | | | | |
| EXISTING + COMMITTED + REGIONAL GROWTH + PROJECT I.C.U. | | | | | | | | | |

**Split Phase E/W direction**

- [ ] Projected + project traffic I.C.U. will be less than or equal to 0.90
- [ ] Projected + project traffic I.C.U. will be greater than 0.90
- [ ] Projected + project traffic I.C.U. w/systems improvement will be less than or equal to 0.90
- [ ] Projected + project traffic I.C.U. with project improvements will be less than I.C.U. Without project

Description of system improvement:

PROJECT
JA5045AM

FORM II

## *1% TRAFFIC VOLUME ANALYSIS*

***INTERSECTION:*** JAMBOREE ROAD & SANTA BARBARA DRIVE 5310
***(Existing Traffic Volumes Based on Average Daily Traffic 2003 AM)***

| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
|---|---|---|---|---|---|---|
| Northbound | 1724 | | | | | |
| Southbound | 1388 | | | | | |
| Eastbound | 28 | | | | | |
| Westbound | 125 | | | | | |

☐ Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

☐ Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

## *1% TRAFFIC VOLUME ANALYSIS*

***INTERSECTION:*** JAMBOREE ROAD & SANTA BARBARA DRIVE 5310
***(Existing Traffic Volumes Based on Average Daily Traffic 2003 PM)***

| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
|---|---|---|---|---|---|---|
| Northbound | 1051 | | | | | |
| Southbound | 1685 | | | | | |
| Eastbound | 40 | | | | | |
| Westbound | 771 | | | | | |

☐ Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

☐ Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

***PROJECT:*** ***DATE:***

JA5310AM

INTERSECTION CAPACITY UTILIZATION ANALYSIS

INTERSECTION: JAMBOREE ROAD & SANTA BARBARA DRIVE 5310
EXISTING TRAFFIC VOLUMES BASED ON AVERAGE DAILY TRAFFIC 2003 AM

| Movement | EXISTING Lanes Capacity | PROPOSED Lanes Capacity | EXISTING PK HR Volume | EXISTING V/C Ratio | REGIONAL GROWTH Volume | COMMITTED PROJECT Volume | PROJECTED V/C Ratio w/o Project Volume | PROJECT Volume | PROJECT V/C Ratio |
|---|---|---|---|---|---|---|---|---|---|
| NL | 1600 | | 3 | 0.002 | | | | | |
| NT | 4800 | | 1358 | 0.283 * | | | | | |
| NR | 1600 | | 363 | 0.227 | | | | | |
| SL | 3200 | | 579 | 0.181 * | | | | | |
| ST | 4800 | | 780 | 0.163 | | | | | |
| SR | 1600 | | 29 | 0.018 | | | | | |
| EL | 1600 | | 21 | 0.013 * | | | | | |
| ET / ER | 1600 | | 2 / 5 | 0.004 | | | | | |
| WL / WT | 3200 | | 50 / 4 | 0.017 | | | | | |
| WR | 1600 | | 71 | 0.044 * | | | | | |
| EXISTING I.C.U. | | | | 0.521 | | | | | |
| EXISTING + REGIONAL GROWTH + COMMITTED W/PROPOSED IMPROVEMENTS I.C.U. | | | | | | | | | |
| EXISTING + COMMITTED + REGIONAL GROWTH + PROJECT I.C.U. | | | | | | | | | |

**Split Phase E/W direction**

☐ Projected + project traffic I.C.U. will be less than or equal to 0.90

☐ Projected + project traffic I.C.U. will be greater than 0.90

☐ Projected + project traffic I.C.U. w/systems improvement will be less than or equal to 0.90

☐ Projected + project traffic I.C.U. with project improvements will be less than I.C.U. without project

Description of system improvement:

JA5310PM

INTERSECTION CAPACITY UTILIZATION ANALYSIS

INTERSECTION: JAMBOREE ROAD & SANTA BARBARA DRIVE 5310
EXISTING TRAFFIC VOLUMES BASED ON AVERAGE DAILY TRAFFIC 2003 PM

| Movement | EXISTING Lanes Capacity | PROPOSED Lanes Capacity | EXISTING PK HR Volume | EXISTING V/C Ratio | REGIONAL GROWTH Volume | COMMITTED PROJECT Volume | PROJECTED V/C Ratio w/o Project Volume | PROJECT Volume | PROJECT V/C Ratio |
|---|---|---|---|---|---|---|---|---|---|
| NL | 1600 | | 9 | 0.006 * | | | | | |
| NT | 4800 | | 943 | 0.196 | | | | | |
| NR | 1600 | | 99 | 0.062 | | | | | |
| SL | 3200 | | 277 | 0.087 | | | | | |
| ST | 4800 | | 1348 | 0.281 * | | | | | |
| SR | 1600 | | 60 | 0.038 | | | | | |
| EL | 1600 | | 25 | 0.016 * | | | | | |
| ET | 1600 | | 11 | 0.009 | | | | | |
| ER | | | 4 | | | | | | |
| WL | 3200 | | 406 | 0.135 | | | | | |
| WT | | | 26 | | | | | | |
| WR | 1600 | | 339 | 0.212 * | | | | | |
| EXISTING I.C.U. | | | | 0.515 | | | | | |
| EXISTING + REGIONAL GROWTH + COMMITTED W/PROPOSED IMPROVEMENTS I.C.U. | | | | | | | | | |
| EXISTING + COMMITTED + REGIONAL GROWTH + PROJECT I.C.U. | | | | | | | | | |

**Split Phase E/W direction**

☐ Projected + project traffic I.C.U. will be less than or equal to 0.90

☐ Projected + project traffic I.C.U. will be greater than 0.90

☐ Projected + project traffic I.C.U. w/systems improvement will be less than or equal to 0.90

☐ Projected + project traffic I.C.U. with project improvements will be less than I.C.U. without project

Description of system improvement:

## *1% TRAFFIC VOLUME ANALYSIS*

***INTERSECTION:*** COAST HIGHWAY & JAMBOREE ROAD 5055
***(Existing Traffic Volumes Based on Average Daily Traffic 2004 AM***

| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
|---|---|---|---|---|---|---|
| Northbound | 512 | | | | | |
| Southbound | 974 | | | | | |
| Eastbound | 2896 | | | | | |
| Westbound | 1159 | | | | | |

☐ Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

☐ Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

## *1% TRAFFIC VOLUME ANALYSIS*

***INTERSECTION:*** COAST HIGHWAY & JAMBOREE ROAD 5055
***(Existing Traffic Volumes Based on Average Daily Traffic 2004 PM***

| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
|---|---|---|---|---|---|---|
| Northbound | 415 | | | | | |
| Southbound | 2134 | | | | | |
| Eastbound | 1999 | | | | | |
| Westbound | 2174 | | | | | |

☐ Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

☐ Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

***PROJECT:*** ***DATE:***

CH5055AM

INTERSECTION CAPACITY UTILIZATION ANALYSIS

INTERSECTION: COAST HIGHWAY & JAMBOREE ROAD 5055
EXISTING TRAFFIC VOLUMES BASED ON AVERAGE DAILY TRAFFIC 2004 AM

| Movement | EXISTING Lanes Capacity | PROPOSED Lanes Capacity | EXISTING PK HR Volume | EXISTING V/C Ratio | REGIONAL GROWTH Volume | COMMITTED PROJECT Volume | PROJECTED V/C Ratio w/o Project Volume | PROJECT Volume | PROJECT V/C Ratio |
|---|---|---|---|---|---|---|---|---|---|
| NL | 1600 | | 15 | 0.009 | | | | | |
| NT | 3200 | | 423 | 0.155 * | | | | | |
| NR | | | 74 | | | | | | |
| SL | 1600 | | 146 | 0.091 * | | | | | |
| ST | 3200 | | 238 | 0.074 | | | | | |
| SR | N.S. | | 590 | | | | | | |
| EL | 4800 | | 1093 | 0.228 * | | | | | |
| ET | 6400 | | 1787 | 0.282 | | | | | |
| ER | | | 16 | | | | | | |
| WL | 3200 | | 83 | 0.026 | | | | | |
| WT | 6400 | | 956 | 0.149 * | | | | | |
| WR | N.S. | | 120 | | | | | | |
| EXISTING I.C.U. | | | | 0.623 | | | | | |
| EXISTING + REGIONAL GROWTH + COMMITTED W/PROPOSED IMPROVEMENTS I.C.U. | | | | | | | | | |
| EXISTING + COMMITTED + REGIONAL GROWTH + PROJECT I.C.U. | | | | | | | | | |

☐ Projected + project traffic I.C.U. will be less than or equal to 0.90

☐ Projected + project traffic I.C.U. will be greater than 0.90

☐ Projected + project traffic I.C.U. w/systems improvement will be less than or equal to 0.90

☐ Projected + project traffic I.C.U. with project improvements will be less than I.C.U. without project

Description of system improvement:

CH5055PM

INTERSECTION CAPACITY UTILIZATION ANALYSIS

INTERSECTION: COAST HIGHWAY & JAMBOREE ROAD 5055
EXISTING TRAFFIC VOLUMES BASED ON AVERAGE DAILY TRAFFIC 2004 PM

| Movement | EXISTING Lanes Capacity | PROPOSED Lanes Capacity | EXISTING PK HR Volume | EXISTING V/C Ratio | REGIONAL GROWTH Volume | COMMITTED PROJECT Volume | PROJECTED V/C Ratio w/o Project Volume | PROJECT Volume | PROJECT V/C Ratio |
|---|---|---|---|---|---|---|---|---|---|
| NL | 1600 | | 38 | 0.024 | | | | | |
| NT | 3200 | | 298 | 0.118 * | | | | | |
| NR | | | 79 | | | | | | |
| SL | 1600 | | 154 | 0.096 * | | | | | |
| ST | 3200 | | 479 | 0.150 | | | | | |
| SR | N.S. | | 1501 | | | | | | |
| EL | 4800 | | 617 | 0.129 * | | | | | |
| ET | 6400 | | 1364 | 0.216 | | | | | |
| ER | | | 18 | | | | | | |
| WL | 3200 | | 169 | 0.053 | | | | | |
| WT | 6400 | | 1891 | 0.295 * | | | | | |
| WR | N.S. | | 114 | | | | | | |
| EXISTING I.C.U. | | | | 0.638 | | | | | |
| EXISTING + REGIONAL GROWTH + COMMITTED W/PROPOSED IMPROVEMENTS I.C.U. | | | | | | | | | |
| EXISTING + COMMITTED + REGIONAL GROWTH + PROJECT I.C.U. | | | | | | | | | |

☐ Projected + project traffic I.C.U. will be less than or equal to 0.90

☐ Projected + project traffic I.C.U. will be greater than 0.90

☐ Projected + project traffic I.C.U. w/systems improvement will be less than or equal to 0.90

☐ Projected + project traffic I.C.U. with project improvements will be less than I.C.U. without project

Description of system improvement:

## *1% TRAFFIC VOLUME ANALYSIS*

***INTERSECTION:*** SANTA CRUZ & SAN JOAQUIN HILLS RD 5060

***(Existing Traffic Volumes Based on Average Daily Traffic 2003 AM)***

| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
|---|---|---|---|---|---|---|
| Northbound | 77 | | | | | |
| Southbound | 69 | | | | | |
| Eastbound | 768 | | | | | |
| Westbound | 590 | | | | | |

☐ Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

☐ Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

## *1% TRAFFIC VOLUME ANALYSIS*

***INTERSECTION:*** SANTA CRUZ & SAN JOAQUIN HILLS RD 5060

***(Existing Traffic Volumes Based on Average Daily Traffic 2003 PM)***

| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
|---|---|---|---|---|---|---|
| Northbound | 538 | | | | | |
| Southbound | 43 | | | | | |
| Eastbound | 631 | | | | | |
| Westbound | 457 | | | | | |

☐ Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

☐ Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

***PROJECT:*** ***DATE:***

SJ5060AM

INTERSECTION CAPACITY UTILIZATION ANALYSIS

INTERSECTION: SANTA CRUZ & SAN JOAQUIN HILLS RD 5060
EXISTING TRAFFIC VOLUMES BASED ON AVERAGE DAILY TRAFFIC 2003 AM

| Movement | EXISTING Lanes Capacity | PROPOSED Lanes Capacity | EXISTING PK HR Volume | EXISTING V/C Ratio | REGIONAL GROWTH Volume | COMMITTED PROJECT Volume | PROJECTED V/C Ratio w/o Project Volume | PROJECT Volume | PROJECT V/C Ratio |
|---|---|---|---|---|---|---|---|---|---|
| NL | 1600 | | 57 | 0.036 * | | | | | |
| NT | 3200 | | 5 | 0.006 | | | | | |
| NR | | | 15 | | | | | | |
| SL | 1600 | | 17 | 0.011 | | | | | |
| ST | 3200 | | 9 | 0.016 * | | | | | |
| SR | | | 43 | | | | | | |
| EL | 1600 | | 57 | 0.036 | | | | | |
| ET | 4800 | | 511 | 0.148 * | | | | | |
| ER | | | 200 | | | | | | |
| WL | 1600 | | 227 | 0.142 * | | | | | |
| WT | 4800 | | 343 | 0.076 | | | | | |
| WR | | | 20 | | | | | | |
| EXISTING I.C.U. | | | | 0.342 | | | | | |
| EXISTING + REG GROWTH + COMMITTED W/PROPOSED IMPROVEMENTS I.C.U. | | | | | | | | | |
| EXISTING + COMMITTED + REGIONAL GROWTH + PROJECT I.C.U. | | | | | | | | | |

☐ Projected + project traffic I.C.U. will be less than or equal to 0.90

☐ Projected + project traffic I.C.U. will be greater than 0.90

☐ Projected + project traffic I.C.U. w/systems improvement will be less than or equal to 0.90

☐ Projected + project traffic I.C.U. with project improvements will be less than I.C.U. without project

Description of system improvement:

PROJECT
SJ5060AM

FORM II

SJ5060PM

INTERSECTION CAPACITY UTILIZATION ANALYSIS

INTERSECTION: SANTA CRUZ & SAN JOAQUIN HILLS RD 5060
EXISTING TRAFFIC VOLUMES BASED ON AVERAGE DAILY TRAFFIC

2003 PM

| Movement | EXISTING Lanes Capacity | PROPOSED Lanes Capacity | EXISTING PK HR Volume | EXISTING V/C Ratio | REGIONAL GROWTH Volume | COMMITTED PROJECT Volume | PROJECTED V/C Ratio w/o Project Volume | PROJECT Volume | PROJECT V/C Ratio |
|---|---|---|---|---|---|---|---|---|---|
| NL | 1600 | | 389 | 0.243 * | | | | | |
| NT | 3200 | | 19 | 0.047 | | | | | |
| NR | | | 130 | | | | | | |
| SL | 1600 | | 12 | 0.008 | | | | | |
| ST | 3200 | | 8 | 0.010 * | | | | | |
| SR | | | 23 | | | | | | |
| EL | 1600 | | 120 | 0.075 * | | | | | |
| ET | 4800 | | 358 | 0.106 | | | | | |
| ER | | | 153 | | | | | | |
| WL | 1600 | | 43 | 0.027 | | | | | |
| WT | 4800 | | 414 | 0.086 * | | | | | |
| WR | | | 0 | | | | | | |
| EXISTING I.C.U. | | | | 0.414 | | | | | |
| EXISTING + REG GROWTH + COMMITTED W/PROPOSED IMPROVEMENTS I.C.U. | | | | | | | | | |
| EXISTING + COMMITTED + REGIONAL GROWTH + PROJECT I.C.U. | | | | | | | | | |

☐ Projected + project traffic I.C.U. will be less than or equal to 0.90

☐ Projected + project traffic I.C.U. will be greater than 0.90

☐ Projected + project traffic I.C.U. w/systems improvement will be less than or equal to 0.90

☐ Projected + project traffic I.C.U. with project improvements will be less than I.C.U. without project

Description of system improvement:

## *1% TRAFFIC VOLUME ANALYSIS*

***INTERSECTION:*** SAN CLEMENTE DRIVE & SANTA CRUZ DRIVE 5277

***(Existing Traffic Volumes Based on Average Daily Traffic 2003 AM)***

| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
|---|---|---|---|---|---|---|
| Northbound | 95 | | | | | |
| Southbound | 312 | | | | | |
| Eastbound | 159 | | | | | |
| Westbound | 56 | | | | | |

☐ Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

☐ Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

## *1% TRAFFIC VOLUME ANALYSIS*

***INTERSECTION:*** SAN CLEMENTE DRIVE & SANTA CRUZ DRIVE 5277

***(Existing Traffic Volumes Based on Average Daily Traffic 2003 PM)***

| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
|---|---|---|---|---|---|---|
| Northbound | 333 | | | | | |
| Southbound | 263 | | | | | |
| Eastbound | 298 | | | | | |
| Westbound | 100 | | | | | |

☐ Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

☐ Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

***PROJECT:*** ***DATE:***

SC5277AM

INTERSECTION CAPACITY UTILIZATION ANALYSIS

INTERSECTION: SAN CLEMENTE DRIVE & SANTA CRUZ DRIVE 5277
EXISTING TRAFFIC VOLUMES BASED ON AVERAGE DAILY TRAFFIC 2003 AM

| Movement | EXISTING Lanes Capacity | PROPOSED Lanes Capacity | EXISTING PK HR Volume | EXISTING V/C Ratio | REGIONAL GROWTH Volume | COMMITTED PROJECT Volume | PROJECTED V/C Ratio w/o Project Volume | PROJECT Volume | PROJECT V/C Ratio |
|---|---|---|---|---|---|---|---|---|---|
| NL | 1600 | | 28 | 0.018 * | | | | | |
| NT | 4800 | | 50 | 0.014 | | | | | |
| NR | | | 17 | | | | | | |
| SL | 1600 | | 18 | 0.011 | | | | | |
| ST | 3200 | | 111 | 0.092 * | | | | | |
| SR | | | 183 | | | | | | |
| EL | | | 57 | | | | | | |
| ET | 3200 | | 56 | 0.050 * | | | | | |
| ER | | | 46 | | | | | | |
| WL | | | 13 | | | | | | |
| WT | 4800 | | 17 | 0.012 | | | | | |
| WR | | | 26 | | | | | | |
| EXISTING I.C.U. | | | | 0.160 | | | | | |
| EXISTING + REG GROWTH + COMMITTED W/PROPOSED IMPROVEMENTS I.C.U. | | | | | | | | | |
| EXISTING + COMMITTED + REGIONAL GROWTH + PROJECT I.C.U. | | | | | | | | | |

☐ Projected + project traffic I.C.U. will be less than or equal to 0.90

☐ Projected + project traffic I.C.U. will be greater than 0.90

☐ Projected + project traffic I.C.U. w/systems improvement will be less than or equal to 0.90

☐ Projected + project traffic I.C.U. with project improvements will be less than I.C.U. without project

Description of system improvement:

SC5277PM

INTERSECTION CAPACITY UTILIZATION ANALYSIS

INTERSECTION: SAN CLEMENTE DRIVE & SANTA CRUZ DRIVE 5277
EXISTING TRAFFIC VOLUMES BASED ON AVERAGE DAILY TRAFFIC 2003 PM

| Movement | EXISTING Lanes Capacity | PROPOSED Lanes Capacity | EXISTING PK HR Volume | EXISTING V/C Ratio | REGIONAL GROWTH Volume | COMMITTED PROJECT Volume | PROJECTED V/C Ratio w/o Project Volume | PROJECT Volume | PROJECT V/C Ratio |
|---|---|---|---|---|---|---|---|---|---|
| NL | 1600 | | 40 | 0.025 * | | | | | |
| NT | 4800 | | 268 | 0.061 | | | | | |
| NR | | | 25 | | | | | | |
| SL | 1600 | | 28 | 0.018 | | | | | |
| ST | 3200 | | 197 | 0.073 * | | | | | |
| SR | | | 38 | | | | | | |
| EL | 3200 | | 252 | | | | | | |
| ET | | | 13 | 0.093 * | | | | | |
| ER | | | 33 | | | | | | |
| WL | 4800 | | 20 | | | | | | |
| WT | | | 54 | 0.021 | | | | | |
| WR | | | 26 | | | | | | |
| EXISTING I.C.U. | | | | 0.191 | | | | | |
| EXISTING + REG GROWTH + COMMITTED W/PROPOSED IMPROVEMENTS I.C.U. | | | | | | | | | |
| EXISTING + COMMITTED + REGIONAL GROWTH + PROJECT I.C.U. | | | | | | | | | |

☐ Projected + project traffic I.C.U. will be less than or equal to 0.90

☐ Projected + project traffic I.C.U. will be greater than 0.90

☐ Projected + project traffic I.C.U. w/systems improvement will be less than or equal to 0.90

☐ Projected + project traffic I.C.U. with project improvements will be less than I.C.U. without project

Description of system improvement:

## *1% TRAFFIC VOLUME ANALYSIS*

***INTERSECTION:*** NEWPORT CENTER DRIVE & SANTA BARBARA DRIVE 5280
***(Existing Traffic Volumes Based on Average Daily Traffic 2003 AM)***

| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
|---|---|---|---|---|---|---|
| Northbound | 219 | | | | | |
| Southbound | 124 | | | | | |
| Eastbound | 210 | | | | | |
| Westbound | 10 | | | | | |

☐ Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

☐ Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

## *1% TRAFFIC VOLUME ANALYSIS*

***INTERSECTION:*** NEWPORT CENTER DRIVE & SANTA BARBARA DRIVE 5280
***(Existing Traffic Volumes Based on Average Daily Traffic 2003 PM)***

| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
|---|---|---|---|---|---|---|
| Northbound | 265 | | | | | |
| Southbound | 323 | | | | | |
| Eastbound | 281 | | | | | |
| Westbound | 136 | | | | | |

☐ Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

☐ Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

***PROJECT:*** ***DATE:***

NC5280AM

INTERSECTION CAPACITY UTILIZATION ANALYSIS

INTERSECTION: NEWPORT CENTER DRIVE & SANTA BARBARA DRIVE 5280
EXISTING TRAFFIC VOLUMES BASED ON AVERAGE DAILY TRAFFIC 2003 AM

| Movement | EXISTING Lanes Capacity | PROPOSED Lanes Capacity | EXISTING PK HR Volume | EXISTING V/C Ratio | REGIONAL GROWTH Volume | COMMITTED PROJECT Volume | PROJECTED V/C Ratio w/o Project Volume | PROJECT Volume | PROJECT V/C Ratio |
|---|---|---|---|---|---|---|---|---|---|
| NL | 1600 | | 73 | 0.046 * | | | | | |
| NT | 3200 | | 138 | 0.043 | | | | | |
| NR | 1600 | | 8 | 0.005 | | | | | |
| SL | 1600 | | 9 | 0.006 | | | | | |
| ST | 3200 | | 69 | 0.022 * | | | | | |
| SR | 1600 | | 46 | 0.029 | | | | | |
| EL | 1600 | | 41 | 0.026 | | | | | |
| ET | 3200 | | 33 | 0.053 * | | | | | |
| ER | | | 136 | | | | | | |
| WL | 3200 | | 3 | 0.003 | | | | | |
| WT | | | 6 | | | | | | |
| WR | | | 1 | | | | | | |
| EXISTING I.C.U. | | | | 0.121 | | | | | |
| EXISTING + REG GROWTH + COMMITTED W/PROPOSED IMPROVEMENTS I.C.U. | | | | | | | | | |
| EXISTING + COMMITTED + REGIONAL GROWTH + PROJECT I.C.U. | | | | | | | | | |

[ ] Projected + project traffic I.C.U. will be less than or equal to 0.90

[ ] Projected + project traffic I.C.U. will be greater than 0.90

[ ] Projected + project traffic I.C.U. w/systems improvement will be less than or equal to 0.90

[ ] Projected + project traffic I.C.U. with project improvements will be less than I.C.U. without project

Description of system improvement:

PROJECT
NC5280AM

FORM II

NC5280PM

INTERSECTION CAPACITY UTILIZATION ANALYSIS

INTERSECTION: NEWPORT CENTER DRIVE & SANTA BARBARA DRIVE 5280
EXISTING TRAFFIC VOLUMES BASED ON AVERAGE DAILY TRAFFIC 2003 PM

| Movement | EXISTING Lanes Capacity | PROPOSED Lanes Capacity | EXISTING PK HR Volume | EXISTING V/C Ratio | REGIONAL GROWTH Volume | COMMITTED PROJECT Volume | PROJECTED V/C Ratio w/o Project Volume | PROJECT Volume | PROJECT V/C Ratio |
|---|---|---|---|---|---|---|---|---|---|
| NL | 1600 | | 135 | 0.084 * | | | | | |
| NT | 3200 | | 94 | 0.029 | | | | | |
| NR | 1600 | | 36 | 0.023 | | | | | |
| SL | 1600 | | 47 | 0.029 | | | | | |
| ST | 3200 | | 182 | 0.057 * | | | | | |
| SR | 1600 | | 94 | 0.059 | | | | | |
| EL | 1600 | | 43 | 0.027 | | | | | |
| ET | 3200 | | 115 | 0.074 * | | | | | |
| ER | | | 123 | | | | | | |
| WL | 3200 | | 29 | 0.043 | | | | | |
| WT | | | 82 | | | | | | |
| WR | | | 25 | | | | | | |
| EXISTING I.C.U. | | | | 0.215 | | | | | |
| EXISTING + REG GROWTH + COMMITTED W/PROPOSED IMPROVEMENTS I.C.U. | | | | | | | | | |
| EXISTING + COMMITTED + REGIONAL GROWTH + PROJECT I.C.U. | | | | | | | | | |

☐ Projected + project traffic I.C.U. will be less than or equal to 0.90

☐ Projected + project traffic I.C.U. will be greater than 0.90

☐ Projected + project traffic I.C.U. w/systems improvement will be less than or equal to 0.90

☐ Projected + project traffic I.C.U. with project improvements will be less than I.C.U. without project

Description of system improvement:

## *1% TRAFFIC VOLUME ANALYSIS*

***INTERSECTION:*** COAST HIGHWAY & NEWPORT CENTER DRIVE 5330
***(Existing Traffic Volumes Based on Average Daily Traffic 2003 AM)***

| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
|---|---|---|---|---|---|---|
| Northbound | 0 | | | | | |
| Southbound | 115 | | | | | |
| Eastbound | 1660 | | | | | |
| Westbound | 1287 | | | | | |

☐ Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

☐ Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

## *1% TRAFFIC VOLUME ANALYSIS*

***INTERSECTION:*** COAST HIGHWAY & NEWPORT CENTER DRIVE 5330
***(Existing Traffic Volumes Based on Average Daily Traffic 2003 PM)***

| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
|---|---|---|---|---|---|---|
| Northbound | 0 | | | | | |
| Southbound | 796 | | | | | |
| Eastbound | 1967 | | | | | |
| Westbound | 1843 | | | | | |

☐ Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

☐ Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

***PROJECT:*** ***DATE:***

## INTERSECTION CAPACITY UTILIZATION ANALYSIS

INTERSECTION: COAST HIGHWAY & NEWPORT CENTER DRIVE 5330
EXISTING TRAFFIC VOLUMES BASED ON AVERAGE DAILY TRAFFIC 2003 AM

| Movement | EXISTING Lanes Capacity | PROPOSED Lanes Capacity | EXISTING PK HR Volume | EXISTING V/C Ratio | REGIONAL GROWTH Volume | COMMITTED PROJECT Volume | PROJECTED V/C Ratio w/o Project Volume | PROJECT Volume | PROJECT V/C Ratio |
|---|---|---|---|---|---|---|---|---|---|
| NL | | | | | | | | | |
| NT | | | | | | | | | |
| NR | | | | | | | | | |
| SL | 3200 | | 37 | 0.012 * | | | | | |
| ST | | | | | | | | | |
| SR | N.S. | | 78 | | | | | | |
| EL | 3200 | | 300 | 0.094 * | | | | | |
| ET | 4800 | | 1360 | 0.283 | | | | | |
| ER | | | | | | | | | |
| WL | | | | | | | | | |
| WT | 4800 | | 1137 | 0.237 * | | | | | |
| WR | N.S. | | 150 | | | | | | |
| EXISTING I.C.U. | | | | 0.343 | | | | | |
| EXISTING + REG GROWTH + COMMITTED W/PROPOSED IMPROVEMENTS I.C.U. | | | | | | | | | |
| EXISTING + COMMITTED + REGIONAL GROWTH + PROJECT I.C.U. | | | | | | | | | |

☐ Projected + project traffic I.C.U. will be less than or equal to 0.90

☐ Projected + project traffic I.C.U. will be greater than 0.90

☐ Projected + project traffic I.C.U. w/systems improvement will be less than or equal to 0.90

☐ Projected + project traffic I.C.U. with project improvements will be less than I.C.U. without project

Description of system improvement:

## INTERSECTION CAPACITY UTILIZATION ANALYSIS

INTERSECTION: COAST HIGHWAY & NEWPORT CENTER DRIVE 5330
EXISTING TRAFFIC VOLUMES BASED ON AVERAGE DAILY TRAFFIC 2003 PM

| Movement | EXISTING Lanes Capacity | PROPOSED Lanes Capacity | EXISTING PK HR Volume | EXISTING V/C Ratio | REGIONAL GROWTH Volume | COMMITTED PROJECT Volume | PROJECTED V/C Ratio w/o Project Volume | PROJECT Volume | PROJECT V/C Ratio |
|---|---|---|---|---|---|---|---|---|---|
| NL | | | | | | | | | |
| NT | | | | | | | | | |
| NR | | | | | | | | | |
| SL | 3200 | | 300 | 0.094 * | | | | | |
| ST | | | | | | | | | |
| SR | N.S. | | 496 | | | | | | |
| EL | 3200 | | 335 | 0.105 * | | | | | |
| ET | 4800 | | 1632 | 0.340 | | | | | |
| ER | | | | | | | | | |
| WL | | | | | | | | | |
| WT | 4800 | | 1690 | 0.352 * | | | | | |
| WR | N.S. | | 153 | | | | | | |
| EXISTING I.C.U. | | | | 0.551 | | | | | |
| EXISTING + REG GROWTH + COMMITTED W/PROPOSED IMPROVEMENTS I.C.U. | | | | | | | | | |
| EXISTING + COMMITTED + REGIONAL GROWTH + PROJECT I.C.U. | | | | | | | | | |

☐ Projected + project traffic I.C.U. will be less than or equal to 0.90

☐ Projected + project traffic I.C.U. will be greater than 0.90

☐ Projected + project traffic I.C.U. w/systems improvement will be less than or equal to 0.90

☐ Projected + project traffic I.C.U. with project improvements will be less than I.C.U. without project

Description of system improvement:

## *1% TRAFFIC VOLUME ANALYSIS*

***INTERSECTION:*** SAN JOAQUIN HILLS ROAD & SANTA ROSA DR / BIG CANYON 5065

***(Existing Traffic Volumes Based on Average Daily Traffic 2003 AM)***

| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
|---|---|---|---|---|---|---|
| Northbound | 102 | | | | | |
| Southbound | 120 | | | | | |
| Eastbound | 543 | | | | | |
| Westbound | 1020 | | | | | |

☐ Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

☐ Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

## *1% TRAFFIC VOLUME ANALYSIS*

***INTERSECTION:*** SAN JOAQUIN HILLS ROAD & SANTA ROSA DR / BIG CANYON 5065

***(Existing Traffic Volumes Based on Average Daily Traffic 2003 PM)***

| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
|---|---|---|---|---|---|---|
| Northbound | 641 | | | | | |
| Southbound | 96 | | | | | |
| Eastbound | 564 | | | | | |
| Westbound | 518 | | | | | |

☐ Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

☐ Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

***PROJECT:*** ***DATE:***

SJ5065AM

INTERSECTION CAPACITY UTILIZATION ANALYSIS

INTERSECTION: SAN JOAQUIN HILLS ROAD & SANTA ROSA DRIVE / BIG CANYON 5065
EXISTING TRAFFIC VOLUMES BASED ON AVERAGE DAILY TRAFFIC

2003 AM

| Movement | EXISTING Lanes Capacity | PROPOSED Lanes Capacity | EXISTING PK HR Volume | EXISTING V/C Ratio | | REGIONAL GROWTH Volume | COMMITTED PROJECT Volume | PROJECTED V/C Ratio w/o Project Volume | PROJECT Volume | PROJECT V/C Ratio |
|---|---|---|---|---|---|---|---|---|---|---|
| NL | 1600 | | 36 | 0.023 | | | | | | |
| NT | 1600 | | 7 | 0.004 | | | | | | |
| NR | 1600 | | 59 | 0.037 | * | | | | | |
| SL | 1600 | | 75 | 0.047 | * | | | | | |
| ST | 1600 | | 10 | 0.006 | | | | | | |
| SR | 1600 | | 35 | 0.022 | | | | | | |
| EL | 1600 | | 47 | 0.029 | | | | | | |
| ET | 4800 | | 389 | 0.103 | * | | | | | |
| ER | | | 107 | | | | | | | |
| WL | 3200 | | 443 | 0.138 | * | | | | | |
| WT | 4800 | | 510 | 0.120 | | | | | | |
| WR | | | 67 | | | | | | | |
| EXISTING I.C.U. | | | | 0.325 | | | | | | |
| EXISTING + REG GROWTH + COMMITTED W/PROPOSED IMPROVEMENTS I.C.U. | | | | | | | | | | |
| EXISTING + COMMITTED + REGIONAL GROWTH + PROJECT I.C.U. | | | | | | | | | | |

**Split Phase N/S Direction**

☐ Projected + project traffic I.C.U. will be less than or equal to 0.90

☐ Projected + project traffic I.C.U. will be greater than 0.90

☐ Projected + project traffic I.C.U. w/systems improvement will be less than or equal to 0.90

☐ Projected + project traffic I.C.U. with project improvements will be less than I.C.U. without project

Description of system improvement:

SJ5065PM

INTERSECTION CAPACITY UTILIZATION ANALYSIS

INTERSECTION: SAN JOAQUIN HILLS ROAD & SANTA ROSA DRIVE / BIG CANYON 5065
EXISTING TRAFFIC VOLUMES BASED ON AVERAGE DAILY TRAFFIC 2003 PM

| Movement | EXISTING Lanes Capacity | PROPOSED Lanes Capacity | EXISTING PK HR Volume | EXISTING V/C Ratio | REGIONAL GROWTH Volume | COMMITTED PROJECT Volume | PROJECTED V/C Ratio w/o Project Volume | PROJECT Volume | PROJECT V/C Ratio |
|---|---|---|---|---|---|---|---|---|---|
| NL | 1600 | | 203 | 0.127 | | | | | |
| NT | 1600 | | 37 | 0.023 | | | | | |
| NR | 1600 | | 401 | 0.251 * | | | | | |
| SL | 1600 | | 57 | 0.036 * | | | | | |
| ST | 1600 | | 10 | 0.006 | | | | | |
| SR | 1600 | | 29 | 0.018 | | | | | |
| EL | 1600 | | 22 | 0.014 | | | | | |
| ET | 4800 | | 433 | 0.113 * | | | | | |
| ER | | | 109 | | | | | | |
| WL | 3200 | | 214 | 0.067 * | | | | | |
| WT | 4800 | | 256 | 0.063 | | | | | |
| WR | | | 48 | | | | | | |
| EXISTING I.C.U. | | | | 0.467 | | | | | |
| EXISTING + REG GROWTH + COMMITTED W/PROPOSED IMPROVEMENTS I.C.U. | | | | | | | | | |
| EXISTING + COMMITTED + REGIONAL GROWTH + PROJECT I.C.U. | | | | | | | | | |

**Split Phase N/S Direction**
** Assumed WBL included in NBR.

☐ Projected + project traffic I.C.U. will be less than or equal to 0.90

☐ Projected + project traffic I.C.U. will be greater than 0.90

☐ Projected + project traffic I.C.U. w/systems improvement will be less than or equal to 0.90

☐ Projected + project traffic I.C.U. with project improvements will be less than I.C.U. without project

Description of system improvement:

## *1% TRAFFIC VOLUME ANALYSIS*

***INTERSECTION:*** COAST HIGHWAY & AVOCADO AVENUE 6085
***(Existing Traffic Volumes Based on Average Daily Traffic 2004 AM)***

| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
|---|---|---|---|---|---|---|
| Northbound | 223 | | | | | |
| Southbound | 185 | | | | | |
| Eastbound | 1591 | | | | | |
| Westbound | 1152 | | | | | |

☐ Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

☐ Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

## *1% TRAFFIC VOLUME ANALYSIS*

***INTERSECTION:*** COAST HIGHWAY & AVOCADO AVENUE 6085
***(Existing Traffic Volumes Based on Average Daily Traffic 2004 PM)***

| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
|---|---|---|---|---|---|---|
| Northbound | 228 | | | | | |
| Southbound | 524 | | | | | |
| Eastbound | 1435 | | | | | |
| Westbound | 1485 | | | | | |

☐ Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

☐ Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

***PROJECT:*** ***DATE:***

CH6085AM

INTERSECTION CAPACITY UTILIZATION ANALYSIS

INTERSECTION: COAST HIGHWAY & AVOCADO AVENUE 6085
EXISTING TRAFFIC VOLUMES BASED ON AVERAGE DAILY TRAFFIC

2004 AM

| Movement | EXISTING Lanes Capacity | PROPOSED Lanes Capacity | EXISTING PK HR Volume | EXISTING V/C Ratio | REGIONAL GROWTH Volume | COMMITTED PROJECT Volume | PROJECTED V/C Ratio w/o Project Volume | PROJECT Volume | PROJECT V/C Ratio |
|---|---|---|---|---|---|---|---|---|---|
| NL | 1600 | | 66 | 0.041 * | | | | | |
| NT | 1600 | | 55 | 0.034 | | | | | |
| NR | 1600 | | 102 | 0.064 | | | | | |
| SL | 3200 | | 70 | 0.044 * | | | | | |
| ST | | | 72 | | | | | | |
| SR | N.S. | | 43 | | | | | | |
| EL | 1600 | | 192 | 0.120 * | | | | | |
| ET | 4800 | | 1373 | 0.291 | | | | | |
| ER | | | 26 | | | | | | |
| WL | 1600 | | 83 | 0.052 | | | | | |
| WT | 4800 | | 952 | 0.223 * | | | | | |
| WR | | | 117 | | | | | | |
| EXISTING I.C.U. | | | | 0.428 | | | | | |
| EXISTING + REG GROWTH + COMMITTED W/PROPOSED IMPROVEMENTS I.C.U. | | | | | | | | | |
| EXISTING + COMMITTED + REGIONAL GROWTH + PROJECT I.C.U. | | | | | | | | | |

**Split Phase N/S Direction**

☐ Projected + project traffic I.C.U. will be less than or equal to 0.90

☐ Projected + project traffic I.C.U. will be greater than 0.90

☐ Projected + project traffic I.C.U. w/systems improvement will be less than or equal to 0.90

☐ Projected + project traffic I.C.U. with project improvements will be less than I.C.U. without project

Description of system improvement:

INTERSECTION CAPACITY UTILIZATION ANALYSIS

INTERSECTION: COAST HIGHWAY & AVOCADO AVENUE 6085
EXISTING TRAFFIC VOLUMES BASED ON AVERAGE DAILY TRAFFIC 2004 PM

| Movement | EXISTING Lanes Capacity | PROPOSED Lanes Capacity | EXISTING PK HR Volume | EXISTING V/C Ratio | REGIONAL GROWTH Volume | COMMITTED PROJECT Volume | PROJECTED V/C Ratio w/o Project Volume | PROJECT Volume | PROJECT V/C Ratio |
|---|---|---|---|---|---|---|---|---|---|
| NL | 1600 | | 100 | 0.063 * | | | | | |
| NT | 1600 | | 24 | 0.015 | | | | | |
| NR | 1600 | | 104 | 0.065 | | | | | |
| SL | 3200 | | 217 | 0.118 * | | | | | |
| ST | | | 160 | | | | | | |
| SR | N.S. | | 147 | | | | | | |
| EL | 1600 | | 110 | 0.069 * | | | | | |
| ET | 4800 | | 1277 | 0.276 | | | | | |
| ER | | | 48 | | | | | | |
| WL | 1600 | | 71 | 0.044 | | | | | |
| WT | 4800 | | 1370 | 0.295 * | | | | | |
| WR | | | 44 | | | | | | |
| EXISTING I.C.U. | | | | 0.545 | | | | | |
| EXISTING + REG GROWTH + COMMITTED W/PROPOSED IMPROVEMENTS I.C.U. | | | | | | | | | |
| EXISTING + COMMITTED + REGIONAL GROWTH + PROJECT I.C.U. | | | | | | | | | |

**Split Phase N/S Direction**

☐ Projected + project traffic I.C.U. will be less than or equal to 0.90

☐ Projected + project traffic I.C.U. will be greater than 0.90

☐ Projected + project traffic I.C.U. w/systems improvement will be less than or equal to 0.90

☐ Projected + project traffic I.C.U. with project improvements will be less than I.C.U. without project

Description of system improvement:

## *1% TRAFFIC VOLUME ANALYSIS*

***INTERSECTION:*** MACARTHUR BOULEVARD & FORD ROAD 4985

***(Existing Traffic Volumes Based on Average Daily Traffic 2003 AM)***

| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
|---|---|---|---|---|---|---|
| Northbound | 2372 | | | | | |
| Southbound | 2464 | | | | | |
| Eastbound | 300 | | | | | |
| Westbound | 2331 | | | | | |

☐ Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

☐ Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

## *1% TRAFFIC VOLUME ANALYSIS*

***INTERSECTION:*** MACARTHUR BOULEVARD & FORD ROAD 4985

***(Existing Traffic Volumes Based on Average Daily Traffic 2003 PM)***

| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
|---|---|---|---|---|---|---|
| Northbound | 2503 | | | | | |
| Southbound | 2118 | | | | | |
| Eastbound | 292 | | | | | |
| Westbound | 1235 | | | | | |

☐ Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

☐ Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

MA4985AM

INTERSECTION CAPACITY UTILIZATION ANALYSIS

INTERSECTION: MACARTHUR BOULEVARD & FORD ROAD 4985
EXISTING TRAFFIC VOLUMES BASED ON AVERAGE DAILY TRAFFIC

2003 AM

| Movement | EXISTING Lanes Capacity | PROPOSED Lanes Capacity | EXISTING PK HR Volume | EXISTING V/C Ratio | REGIONAL GROWTH Volume | COMMITTED PROJECT Volume | PROJECTED V/C Ratio w/o Project Volume | PROJECT Volume | PROJECT V/C Ratio |
|---|---|---|---|---|---|---|---|---|---|
| NL | 3200 | | 70 | 0.022 | | | | | |
| NT | 6400 | | 2187 | 0.342 * | | | | | |
| NR | N.S. | | 115 | | | | | | |
| SL | 3200 | | 355 | 0.111 * | | | | | |
| ST | 6400 | | 2105 | 0.329 | | | | | |
| SR | N.S. | | 4 | | | | | | |
| EL | 3200 | | 43 | 0.013 | | | | | |
| ET | 3200 | | 178 | 0.056 * | | | | | |
| ER | 1600 | | 79 | 0.049 | | | | | |
| WL | 3200 | | 687 | 0.215 * | | | | | |
| WT | 3200 | | 376 | 0.118 | | | | | |
| WR | N.S. | | 1268 | | | | | | |
| EXISTING I.C.U. | | | | 0.724 | | | | | |
| EXISTING + REG GROWTH + COMMITTED W/PROPOSED IMPROVEMENTS I.C.U. | | | | | | | | | |
| EXISTING + COMMITTED + REGIONAL GROWTH + PROJECT I.C.U. | | | | | | | | | |

☐ Projected + project traffic I.C.U. will be less than or equal to 0.90

☐ Projected + project traffic I.C.U. will be greater than 0.90

☐ Projected + project traffic I.C.U. w/systems improvement will be less than or equal to 0.90

☐ Projected + project traffic I.C.U. with project improvements will be less than I.C.U. without project

Description of system improvement:

MA4985PM

INTERSECTION CAPACITY UTILIZATION ANALYSIS

INTERSECTION: MACARTHUR BOULEVARD & FORD ROAD 4985
EXISTING TRAFFIC VOLUMES BASED ON AVERAGE DAILY TRAFFIC 2003 PM

| Movement | EXISTING Lanes Capacity | PROPOSED Lanes Capacity | EXISTING PK HR Volume | EXISTING V/C Ratio | REGIONAL GROWTH Volume | COMMITTED PROJECT Volume | PROJECTED V/C Ratio w/o Project Volume | PROJECT Volume | PROJECT V/C Ratio |
|---|---|---|---|---|---|---|---|---|---|
| NL | 3200 | | 0 | 0.000 | | | | | |
| NT | 6400 | | 2350 | 0.367 * | | | | | |
| NR | N.S. | | 153 | | | | | | |
| SL | 3200 | | 492 | 0.154 * | | | | | |
| ST | 6400 | | 1606 | 0.251 | | | | | |
| SR | N.S. | | 20 | | | | | | |
| EL | 3200 | | 31 | 0.010 | | | | | |
| ET | 3200 | | 197 | 0.062 * | | | | | |
| ER | 1600 | | 64 | 0.040 | | | | | |
| WL | 3200 | | 257 | 0.080 * | | | | | |
| WT | 3200 | | 229 | 0.072 | | | | | |
| WR | N.S. | | 749 | | | | | | |
| EXISTING I.C.U. | | | | 0.663 | | | | | |
| EXISTING + REG GROWTH + COMMITTED W/PROPOSED IMPROVEMENTS I.C.U. | | | | | | | | | |
| EXISTING + COMMITTED + REGIONAL GROWTH + PROJECT I.C.U. | | | | | | | | | |

☐ Projected + project traffic I.C.U. will be less than or equal to 0.90

☐ Projected + project traffic I.C.U. will be greater than 0.90

☐ Projected + project traffic I.C.U. w/systems improvement will be less than or equal to 0.90

☐ Projected + project traffic I.C.U. with project improvements will be less than I.C.U. without project

Description of system improvement:

## *1% TRAFFIC VOLUME ANALYSIS*

***INTERSECTION:*** MACARTHUR BOULEVARD & SAN JOAQUIN HILLS ROAD 5070

***(Existing Traffic Volumes Based on Average Daily Traffic 2003 AM)***

| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
|---|---|---|---|---|---|---|
| Northbound | 1526 | | | | | |
| Southbound | 2815 | | | | | |
| Eastbound | 351 | | | | | |
| Westbound | 1188 | | | | | |

☐ Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

☐ Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

## *1% TRAFFIC VOLUME ANALYSIS*

***INTERSECTION:*** MACARTHUR BOULEVARD & SAN JOAQUIN HILLS ROAD 5070

***(Existing Traffic Volumes Based on Average Daily Traffic 2003 PM)***

| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
|---|---|---|---|---|---|---|
| Northbound | 1625 | | | | | |
| Southbound | 1999 | | | | | |
| Eastbound | 1119 | | | | | |
| Westbound | 707 | | | | | |

☐ Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

☐ Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

MA5070AM

INTERSECTION CAPACITY UTILIZATION ANALYSIS

INTERSECTION: MACARTHUR BOULEVARD & SAN JOAQUIN HILLS ROAD 5070
EXISTING TRAFFIC VOLUMES BASED ON AVERAGE DAILY TRAFFIC 2003 AM

| Movement | EXISTING Lanes Capacity | PROPOSED Lanes Capacity | EXISTING PK HR Volume | EXISTING V/C Ratio | | REGIONAL GROWTH Volume | COMMITTED PROJECT Volume | PROJECTED V/C Ratio w/o Project Volume | PROJECT Volume | PROJECT V/C Ratio |
|---|---|---|---|---|---|---|---|---|---|---|
| NL | 3200 | | 67 | 0.021 | | | | | | |
| NT | 4800 | | 1453 | 0.303 | * | | | | | |
| NR | 1600 | | 6 | 0.004 | | | | | | |
| SL | 3200 | | 408 | 0.128 | * | | | | | |
| ST | 4800 | | 1420 | 0.296 | | | | | | |
| SR | N.S. | | 987 | | | | | | | |
| EL | 3200 | | 107 | 0.033 | * | | | | | |
| ET | 4800 | | 199 | 0.051 | | | | | | |
| ER | | | 45 | | | | | | | |
| WL | 1600 | | 19 | 0.012 | | | | | | |
| WT | 3200 | | 464 | 0.145 | * | | | | | |
| WR | N.S. | | 705 | | | | | | | |
| EXISTING I.C.U. | | | | 0.609 | | | | | | |
| EXISTING + REG GROWTH + COMMITTED W/PROPOSED IMPROVEMENTS I.C.U. | | | | | | | | | | |
| EXISTING + COMMITTED + REGIONAL GROWTH + PROJECT I.C.U. | | | | | | | | | | |

☐ Projected + project traffic I.C.U. will be less than or equal to 0.90

☐ Projected + project traffic I.C.U. will be greater than 0.90

☐ Projected + project traffic I.C.U. w/systems improvement will be less than or equal to 0.90

☐ Projected + project traffic I.C.U. with project improvements will be less than I.C.U. without project

Description of system improvement:

PROJECT
MA5070AM

FORM II

MA5070PM

INTERSECTION CAPACITY UTILIZATION ANALYSIS

INTERSECTION: MACARTHUR BOULEVARD & SAN JOAQUIN HILLS ROAD 5070
EXISTING TRAFFIC VOLUMES BASED ON AVERAGE DAILY TRAFFIC 2003 PM

| Movement | EXISTING Lanes Capacity | PROPOSED Lanes Capacity | EXISTING PK HR Volume | EXISTING V/C Ratio | REGIONAL GROWTH Volume | COMMITTED PROJECT Volume | PROJECTED V/C Ratio w/o Project Volume | PROJECT Volume | PROJECT V/C Ratio |
|---|---|---|---|---|---|---|---|---|---|
| NL | 3200 | | 44 | 0.014 | | | | | |
| NT | 4800 | | 1567 | 0.326 * | | | | | |
| NR | 1600 | | 14 | 0.009 | | | | | |
| SL | 3200 | | 570 | 0.178 * | | | | | |
| ST | 4800 | | 1209 | 0.252 | | | | | |
| SR | N.S. | | 220 | | | | | | |
| EL | 3200 | | 588 | 0.184 * | | | | | |
| ET | 4800 | | 403 | 0.111 | | | | | |
| ER | | | 128 | | | | | | |
| WL | 1600 | | 27 | 0.017 | | | | | |
| WT | 3200 | | 285 | 0.089 * | | | | | |
| WR | N.S. | | 395 | | | | | | |
| EXISTING I.C.U. | | | | 0.777 | | | | | |
| EXISTING + REG GROWTH + COMMITTED W/PROPOSED IMPROVEMENTS I.C.U. | | | | | | | | | |
| EXISTING + COMMITTED + REGIONAL GROWTH + PROJECT I.C.U. | | | | | | | | | |

☐ Projected + project traffic I.C.U. will be less than or equal to 0.90

☐ Projected + project traffic I.C.U. will be greater than 0.90

☐ Projected + project traffic I.C.U. w/systems improvement will be less than or equal to 0.90

☐ Projected + project traffic I.C.U. with project improvements will be less than I.C.U. without project

Description of system improvement:

## *1% TRAFFIC VOLUME ANALYSIS*

***INTERSECTION:*** MACARTHUR BOULEVARD & SAN MIGUEL DRIVE 7135
***(Existing Traffic Volumes Based on Average Daily Traffic 2003 AM)***

| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
|---|---|---|---|---|---|---|
| Northbound | 1606 | | | | | |
| Southbound | 1380 | | | | | |
| Eastbound | 303 | | | | | |
| Westbound | 516 | | | | | |

☐ Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

☐ Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

## *1% TRAFFIC VOLUME ANALYSIS*

***INTERSECTION:*** MACARTHUR BOULEVARD & SAN MIGUEL DRIVE 7135
***(Existing Traffic Volumes Based on Average Daily Traffic 2003 PM)***

| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
|---|---|---|---|---|---|---|
| Northbound | 1235 | | | | | |
| Southbound | 1355 | | | | | |
| Eastbound | 1098 | | | | | |
| Westbound | 458 | | | | | |

☐ Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

☐ Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

***PROJECT:*** ***DATE:***

INTERSECTION CAPACITY UTILIZATION ANALYSIS

INTERSECTION: MACARTHUR BOULEVARD & SAN MIGUEL DRIVE 7135
EXISTING TRAFFIC VOLUMES BASED ON AVERAGE DAILY TRAFFIC 2003 AM

| Movement | EXISTING Lanes Capacity | PROPOSED Lanes Capacity | EXISTING PK HR Volume | EXISTING V/C Ratio | REGIONAL GROWTH Volume | COMMITTED PROJECT Volume | PROJECTED V/C Ratio w/o Project Volume | PROJECT Volume | PROJECT V/C Ratio |
|---|---|---|---|---|---|---|---|---|---|
| NL | 3200 | | 142 | 0.044 | | | | | |
| NT | 4800 | | 1245 | 0.259 * | | | | | |
| NR | 1600 | | 219 | 0.137 | | | | | |
| SL | 3200 | | 1 | 0.000 * | | | | | |
| ST | 4800 | | 749 | 0.156 | | | | | |
| SR | 1600 | | 630 | 0.394 | | | | | |
| EL | 3200 | | 204 | 0.064 * | | | | | |
| ET / ER | 3200 | | 78 / 21 | 0.031 | | | | | |
| WL | 3200 | | 212 | 0.066 | | | | | |
| WT / WR | 3200 | | 297 / 7 | 0.095 * | | | | | |
| EXISTING I.C.U. | | | | 0.418 | | | | | |
| EXISTING + REG GROWTH + COMMITTED W/PROPOSED IMPROVEMENTS I.C.U. | | | | | | | | | |
| EXISTING + COMMITTED + REGIONAL GROWTH + PROJECT I.C.U. | | | | | | | | | |

☐ Projected + project traffic I.C.U. will be less than or equal to 0.90

☐ Projected + project traffic I.C.U. will be greater than 0.90

☐ Projected + project traffic I.C.U. w/systems improvement will be less than or equal to 0.90

☐ Projected + project traffic I.C.U. with project improvements will be less than I.C.U. without project

Description of system improvement:

MA7135PM

INTERSECTION CAPACITY UTILIZATION ANALYSIS

INTERSECTION: MACARTHUR BOULEVARD & SAN MIGUEL DRIVE 7135
EXISTING TRAFFIC VOLUMES BASED ON AVERAGE DAILY TRAFFIC 2003 PM

| Movement | EXISTING Lanes Capacity | PROPOSED Lanes Capacity | EXISTING PK HR Volume | EXISTING V/C Ratio | REGIONAL GROWTH Volume | COMMITTED PROJECT Volume | PROJECTED V/C Ratio w/o Project Volume | PROJECT Volume | PROJECT V/C Ratio |
|---|---|---|---|---|---|---|---|---|---|
| NL | 3200 | | 74 | 0.023 * | | | | | |
| NT | 4800 | | 911 | 0.190 | | | | | |
| NR | 1600 | | 250 | 0.156 | | | | | |
| SL | 3200 | | 8 | 0.003 | | | | | |
| ST | 4800 | | 1034 | 0.215 * | | | | | |
| SR | 1600 | | 313 | 0.196 | | | | | |
| EL | 3200 | | 687 | 0.215 * | | | | | |
| ET | 3200 | | 362 | 0.128 | | | | | |
| ER | | | 49 | | | | | | |
| WL | 3200 | | 199 | 0.062 | | | | | |
| WT | 3200 | | 239 | 0.081 * | | | | | |
| WR | | | 20 | | | | | | |
| EXISTING I.C.U. | | | | 0.534 | | | | | |
| EXISTING + REG GROWTH + COMMITTED W/PROPOSED IMPROVEMENTS I.C.U. | | | | | | | | | |
| EXISTING + COMMITTED + REGIONAL GROWTH + PROJECT I.C.U. | | | | | | | | | |

☐ Projected + project traffic I.C.U. will be less than or equal to 0.90

☐ Projected + project traffic I.C.U. will be greater than 0.90

☐ Projected + project traffic I.C.U. w/systems improvement will be less than or equal to 0.90

☐ Projected + project traffic I.C.U. with project improvements will be less than I.C.U. without project

Description of system improvement:

## *1% TRAFFIC VOLUME ANALYSIS*

***INTERSECTION:*** COAST HIGHWAY & MACARTHUR BOULEVARD 5335
***(Existing Traffic Volumes Based on Average Daily Traffic 2004 AM)***

| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
|---|---|---|---|---|---|---|
| Northbound | 0 | | | | | |
| Southbound | 776 | | | | | |
| Eastbound | 1241 | | | | | |
| Westbound | 2085 | | | | | |

☐ Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

☐ Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

## *1% TRAFFIC VOLUME ANALYSIS*

***INTERSECTION:*** COAST HIGHWAY & MACARTHUR BOULEVARD 5335
***(Existing Traffic Volumes Based on Average Daily Traffic 2004 PM)***

| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
|---|---|---|---|---|---|---|
| Northbound | 0 | | | | | |
| Southbound | 1264 | | | | | |
| Eastbound | 2141 | | | | | |
| Westbound | 2193 | | | | | |

☐ Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

☐ Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

***PROJECT:*** ***DATE:***

CH5335AM

INTERSECTION CAPACITY UTILIZATION ANALYSIS

INTERSECTION: COAST HIGHWAY & MACARTHUR BOULEVARD 5335
EXISTING TRAFFIC VOLUMES BASED ON AVERAGE DAILY TRAFFIC 2004 AM

| Movement | EXISTING Lanes Capacity | PROPOSED Lanes Capacity | EXISTING PK HR Volume | EXISTING V/C Ratio | REGIONAL GROWTH Volume | COMMITTED PROJECT Volume | PROJECTED V/C Ratio w/o Project Volume | PROJECT Volume | PROJECT V/C Ratio |
|---|---|---|---|---|---|---|---|---|---|
| NL | | | | | | | | | |
| NT | | | | | | | | | |
| NR | | | | | | | | | |
| SL | 3200 | | 516 | 0.161 * | | | | | |
| ST | | | | | | | | | |
| SR | N.S. | | 371 | | | | | | |
| EL | 3200 | | 513 | 0.160 * | | | | | |
| ET | 4800 | | 987 | 0.206 | | | | | |
| ER | | | | | | | | | |
| WL | | | | | | | | | |
| WT | 4800 | | 787 | 0.164 * | | | | | |
| WR | N.S. | | 1071 | | | | | | |
| EXISTING I.C.U. | | | | 0.485 | | | | | |
| EXISTING + REGIONAL GROWTH + COMMITTED W/PROPOSED IMPROVEMENTS I.C.U. | | | | | | | | | |
| EXISTING + COMMITTED + REGIONAL GROWTH + PROJECT I.C.U. | | | | | | | | | |

☐ Projected + project traffic I.C.U. will be less than or equal to 0.90

☐ Projected + project traffic I.C.U. will be greater than 0.90

☐ Projected + project traffic I.C.U. w/systems improvement will be less than or equal to 0.90

☐ Projected + project traffic I.C.U. with project improvements will be less than I.C.U. without project

Description of system improvement:

INTERSECTION CAPACITY UTILIZATION ANALYSIS

INTERSECTION: COAST HIGHWAY & MACARTHUR BOULEVARD 5335
EXISTING TRAFFIC VOLUMES BASED ON AVERAGE DAILY TRAFFIC 2004 PM

| Movement | EXISTING Lanes Capacity | PROPOSED Lanes Capacity | EXISTING PK HR Volume | EXISTING V/C Ratio | REGIONAL GROWTH Volume | COMMITTED PROJECT Volume | PROJECTED V/C Ratio w/o Project Volume | PROJECT Volume | PROJECT V/C Ratio |
|---|---|---|---|---|---|---|---|---|---|
| NL | | | | | | | | | |
| NT | | | | | | | | | |
| NR | | | | | | | | | |
| SL | 3200 | | 772 | 0.241 * | | | | | |
| ST | | | | | | | | | |
| SR | N.S. | | 390 | | | | | | |
| EL | 3200 | | 476 | 0.149 * | | | | | |
| ET | 4800 | | 1225 | 0.255 | | | | | |
| ER | | | | | | | | | |
| WL | | | | | | | | | |
| WT | 4800 | | 1086 | 0.226 * | | | | | |
| WR | N.S. | | 675 | | | | | | |
| EXISTING I.C.U. | | | | 0.616 | | | | | |
| EXISTING + REGIONAL GROWTH + COMMITTED W/PROPOSED IMPROVEMENTS I.C.U. | | | | | | | | | |
| EXISTING + COMMITTED + REGIONAL GROWTH + PROJECT I.C.U. | | | | | | | | | |

[ ] Projected + project traffic I.C.U. will be less than or equal to 0.90

[ ] Projected + project traffic I.C.U. will be greater than 0.90

[ ] Projected + project traffic I.C.U. w/systems improvement will be less than or equal to 0.90

[ ] Projected + project traffic I.C.U. with project improvements will be less than I.C.U. without project

Description of system improvement:

# APPENDIX C

## Approved Project Data

# Traffic Phasing Data
## Projects Less Than 100% Complete



| Project Number | Project Name | Percent |
|---|---|---|
| 148 | FASHION ISLAND EXPANSION | 36 % |
| 154 | TEMPLE BAT YAHM EXPANSION | 65 % |
| 157 | FORD REDEVELOPMENT | 95 % |
| 167 | CANNERY LOFTS VILLAGE | 0 % |
| 168 | HOAG HOSPITAL PHASE II | 0 % |
| 555 | CIOSA - IRVINE PROJECT | 91 % |
| 910 | NEWPORT DUNES | 0 % |
| 936 | 1401 DOVE STREET | 0 % |
| 937 | NEWPORT AUTO CENTER EXPAN | 0 % |
| 938 | OLSEN TOWNHOME PROJECT (1 | 0 % |
| 939 | BAYVIEW LANDING SENIOR HO | 0 % |
| 940 | BIRCH BAYVIEW PLAZA II | 0 % |
| 941 | 494/496 OLD NEWPORT BL | 0 % |
| 942 | 401 OLD NEWPORT BL | 0 % |

# Traffic Phasing Ordinance
## Approved Projects 80% Volume Summary
## Intersection Report

| Int. Number | Int. Name |
|---|---|
| 4980 | EASTBLUFF DR / FORD RD JAMBOREE RD |

| | 1 Hr Peak Totals | | | | 1 Hr Peak | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | NB | SB | EB | WB | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR |
| AM | 75 | 105 | 1 | 3 | | 74 | 1 | | 105 | | | | 1 | 2 | | 1 |
| PM | 113 | 95 | 2 | 4 | 3 | 105 | 5 | 1 | 95 | | | | 2 | 4 | | |

# Traffic Phasing Ordinance
## Approved Projects 80% Volume Summary
## Intersection Report

| Int. Number | Int. Name |
|---|---|
| 5045 | JAMBOREE RD / SAN JOAQUIN HILLS RD |

| | 1 Hr Peak Totals | | | | 1 Hr Peak | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | NB | SB | EB | WB | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR |
| AM | 83 | 107 | | 10 | | 77 | 6 | 1 | 106 | | | | | 10 | | |
| PM | 97 | 105 | 5 | 30 | 1 | 87 | 9 | 20 | 84 | | 1 | 4 | | 7 | | 23 |

# Traffic Phasing Ordinance
## Approved Projects 80% Volume Summary
## Intersection Report



| Int. Number | Int. Name |
|---|---|
| 5310 | JAMBOREE RD / SANTA BARBARA DR |

| | 1 Hr Peak Totals | | | | 1 Hr Peak | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | NB | SB | EB | WB | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR |
| AM | 75 | 114 | 6 | 6 | | 72 | 3 | 1 | 112 | 1 | 6 | | | 2 | | 4 |
| PM | 94 | 93 | 3 | 4 | | 92 | 2 | 4 | 83 | 6 | 2 | 1 | | 2 | 1 | 1 |

# Traffic Phasing Ordinance
## Approved Projects 80% Volume Summary
## Intersection Report



| Int. Number | Int. Name |
|---|---|
| 5055 | JAMBOREE RD / COAST HWY E |

| | 1 Hr Peak Totals | | | | 1 Hr Peak | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | NB | SB | EB | WB | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR |
| AM | 1 | 118 | 81 | 44 | | 1 | | 12 | 1 | 105 | 51 | 29 | 1 | | 43 | 1 |
| PM | 3 | 79 | 128 | 61 | 1 | 1 | 2 | 8 | 3 | 68 | 88 | 40 | | 3 | 53 | 5 |

# Traffic Phasing Ordinance
## Approved Projects 80% Volume Summary
## Intersection Report



| Int. Number | Int. Name |
|---|---|
| 5060 | SANTA CRUZ DR / SAN JOAQUIN HILLS RD BIG CANYON DR W |

| | 1 Hr Peak Totals | | | | 1 Hr Peak | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | NB | SB | EB | WB | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR |
| AM | 1 | 1 | 1 | 1 | 1 | | 1 | | 1 | | | 1 | | 1 | | |
| PM | | 1 | 1 | 1 | | | | 1 | | | | | 1 | | 1 | |

# Traffic Phasing Ordinance
## Approved Projects 80% Volume Summary
## Intersection Report

| Int. Number | Int. Name |
|---|---|
| 5330 | NEWPORT CENTER DR / COAST HWY E |

| | 1 Hr Peak Totals | | | | | | | | | 1 Hr Peak | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | NB | SB | EB | WB | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR |
| AM | | 9 | 26 | 32 | | | | | | 9 | 5 | 21 | | | 31 | 1 |
| PM | | 34 | 46 | 23 | | | | 3 | | 31 | 13 | 34 | | | 18 | 6 |

# Traffic Phasing Ordinance
## Approved Projects 80% Volume Summary
## Intersection Report

Int. Number: 5065
Int. Name: SANTA ROSA DR / SAN JOAQUIN HILLS RD BIG CANYON DR E

| | 1 Hr Peak Totals | | | | 1 Hr Peak | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | NB | SB | EB | WB | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR |
| AM | 10 | | 7 | 1 | 9 | | 1 | | | | 1 | 1 | 6 | | 1 | |
| PM | 26 | | 9 | 12 | 6 | | 19 | | | | | 1 | 8 | 12 | 1 | |

# Traffic Phasing Ordinance
## Approved Projects 80% Volume Summary
## Intersection Report

| Int. Number | Int. Name |
|---|---|
| 6085 | COAST HWY E / AVOCADO AVE |

| | 1 Hr Peak Totals | | | | | | | | | 1 Hr Peak | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | NB | SB | EB | WB | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR |
| AM | | | 26 | 33 | | | | | | | | 26 | | | 33 | |
| PM | | 1 | 35 | 20 | | | | | | 1 | | 34 | 1 | | 20 | |

# Traffic Phasing Ordinance
## Approved Projects 80% Volume Summary
## Intersection Report



| Int. Number | Int. Name |
|---|---|
| 4985 | FORD RD / MACARTHUR BLVD |

| | 1 Hr Peak Totals | | | | 1 Hr Peak | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | NB | SB | EB | WB | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR |
| AM | 2 | 3 | 4 | 2 | 1 | 1 | | | 3 | | 1 | 1 | 2 | 1 | | 1 |
| PM | 24 | 14 | 2 | 3 | 2 | 14 | 8 | 1 | 13 | 1 | | 1 | 1 | 2 | 1 | |

# Traffic Phasing Ordinance
## Approved Projects 80% Volume Summary
## Intersection Report

Int. Number: 5070
Int. Name: SAN JOAQUIN HILLS RD / MACARTHUR BLVD

| | 1 Hr Peak Totals | | | | 1 Hr Peak | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | NB | SB | EB | WB | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR |
| AM | | 4 | 1 | 1 | | | | | 3 | 1 | | 1 | | | 1 | |
| PM | 3 | 15 | 19 | 1 | | 3 | | | 3 | 12 | 19 | | | | 1 | |

# Traffic Phasing Ordinance
## Approved Projects 80% Volume Summary
## Intersection Report

| Int. Number | Int. Name |
|---|---|
| 7135 | MACARTHUR BLVD / SAN MIGUEL DR |

| | 1 Hr Peak Totals | | | | | | | | | 1 Hr Peak | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | NB | SB | EB | WB | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | |
| AM | | 2 | 1 | 1 | | | | | | 2 | | 1 | | | 1 | | |
| PM | 2 | 3 | 24 | 12 | 2 | | | | | 3 | 3 | 10 | 10 | | 12 | | |

# Traffic Phasing Ordinance
## Approved Projects 80% Volume Summary
## Intersection Report

| Int. Number | Int. Name |
|---|---|
| 5335 | MACARTHUR BLVD / COAST HWY E |

| | 1 Hr Peak Totals | | | | | | | | | 1 Hr Peak | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | NB | SB | EB | WB | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR |
| AM | | 13 | 29 | 22 | | | | | 1 | 12 | 9 | 20 | | | 22 | |
| PM | | 6 | 38 | 15 | | | | | | 6 | 14 | 23 | | | 15 | |

# APPENDIX D

## TPO One-Percent Analysis
## Calculation Worksheets

## *1% TRAFFIC VOLUME ANALYSIS*

***INTERSECTION:*** JAMBOREE ROAD & EASTBLUFF DRIVE/FORD ROAD

***(Existing Traffic Volumes Based on Average Daily Traffic 2003 AM)***

| AM PEAK HOUR | | | | | | |
|---|---|---|---|---|---|---|
| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
| Northbound | 1766 | 88 | 75 | 1929 | 19 | 12 |
| Southbound | 1722 | 86 | 105 | 1913 | 19 | 2 |
| Eastbound | 1203 | 0 | 1 | 1204 | 12 | 0 |
| Westbound | 508 | 0 | 3 | 511 | 5 | 1 |

[X] Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

[ ] Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

## *1% TRAFFIC VOLUME ANALYSIS*

***INTERSECTION:*** JAMBOREE ROAD & EASTBLUFF DRIVE/FORD ROAD

***(Existing Traffic Volumes Based on Average Daily Traffic 2003 PM)***

| PM PEAK HOUR | | | | | | |
|---|---|---|---|---|---|---|
| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
| Northbound | 1770 | 89 | 113 | 1972 | 20 | 6 |
| Southbound | 1798 | 90 | 95 | 1983 | 20 | 6 |
| Eastbound | 641 | 0 | 2 | 643 | 6 | 0 |
| Westbound | 233 | 0 | 4 | 237 | 2 | 2 |

[ ] Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

[X] Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

**PROJECT:** Santa Barbara Condominium Project **DATE:** 12/22/2004

## *1% TRAFFIC VOLUME ANALYSIS*

***INTERSECTION:*** JAMBOREE ROAD & SAN JOAQUIN HILLS ROAD

***(Existing Traffic Volumes Based on Average Daily Traffic 2003 AM)***

| AM PEAK HOUR | | | | | | |
|---|---|---|---|---|---|---|
| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
| Northbound | 1402 | 70 | 83 | 1555 | 16 | 12 |
| Southbound | 2018 | 101 | 107 | 2226 | 22 | 3 |
| Eastbound | 391 | 0 | 0 | 391 | 4 | 0 |
| Westbound | 151 | 0 | 10 | 161 | 2 | 0 |

[X] Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

[ ] Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

## *1% TRAFFIC VOLUME ANALYSIS*

***INTERSECTION:*** JAMBOREE ROAD & SAN JOAQUIN HILLS ROAD

***(Existing Traffic Volumes Based on Average Daily Traffic 2003 PM)***

| PM PEAK HOUR | | | | | | |
|---|---|---|---|---|---|---|
| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
| Northbound | 1321 | 66 | 97 | 1484 | 15 | 5 |
| Southbound | 1957 | 98 | 105 | 2160 | 22 | 8 |
| Eastbound | 186 | 0 | 5 | 191 | 2 | 0 |
| Westbound | 298 | 0 | 30 | 328 | 3 | 0 |

[X] Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

[ ] Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

**PROJECT:** Santa Barbara Condominium Project **DATE:** 12/22/2004

## *1% TRAFFIC VOLUME ANALYSIS*

***INTERSECTION:*** JAMBOREE ROAD & SANTA BARBARA DRIVE

***(Existing Traffic Volumes Based on Average Daily Traffic 2003 AM)***

| AM PEAK HOUR | | | | | | |
|---|---|---|---|---|---|---|
| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
| Northbound | 1724 | 86 | 75 | 1885 | 19 | 2 |
| Southbound | 1388 | 69 | 114 | 1571 | 16 | 3 |
| Eastbound | 28 | 0 | 6 | 34 | 0 | 0 |
| Westbound | 125 | 0 | 6 | 131 | 1 | 19 |

[ ] Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

[X] Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

## *1% TRAFFIC VOLUME ANALYSIS*

***INTERSECTION:*** JAMBOREE ROAD & SANTA BARBARA DRIVE

***(Existing Traffic Volumes Based on Average Daily Traffic 2003 PM)***

| PM PEAK HOUR | | | | | | |
|---|---|---|---|---|---|---|
| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
| Northbound | 1051 | 53 | 94 | 1198 | 12 | 5 |
| Southbound | 1685 | 84 | 93 | 1862 | 19 | 8 |
| Eastbound | 40 | 0 | 3 | 43 | 0 | 0 |
| Westbound | 771 | 0 | 4 | 775 | 8 | 8 |

[ ] Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

[X] Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

**PROJECT:** Santa Barbara Condominium Project **DATE:** 12/22/2004

## *1% TRAFFIC VOLUME ANALYSIS*

***INTERSECTION:*** JAMBOREE ROAD & COAST HIGHWAY

***(Existing Traffic Volumes Based on Average Daily Traffic 2004 AM)***

| AM PEAK HOUR | | | | | | |
|---|---|---|---|---|---|---|
| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
| Northbound | 512 | 0 | 1 | 513 | 5 | 0 |
| Southbound | 974 | 49 | 118 | 1141 | 11 | 7 |
| Eastbound | 2896 | 145 | 81 | 3122 | 31 | 2 |
| Westbound | 1159 | 58 | 44 | 1261 | 13 | 0 |

[X] Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

[ ] Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

## *1% TRAFFIC VOLUME ANALYSIS*

***INTERSECTION:*** JAMBOREE ROAD & COAST HIGHWAY

***(Existing Traffic Volumes Based on Average Daily Traffic 2004 PM)***

| PM PEAK HOUR | | | | | | |
|---|---|---|---|---|---|---|
| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
| Northbound | 415 | 0 | 3 | 418 | 4 | 0 |
| Southbound | 2134 | 107 | 79 | 2320 | 23 | 3 |
| Eastbound | 1999 | 100 | 128 | 2227 | 22 | 5 |
| Westbound | 2174 | 109 | 61 | 2344 | 23 | 0 |

[X] Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

[ ] Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

**PROJECT:** Santa Barbara Condominium Project **DATE:** 12/22/2004

## *1% TRAFFIC VOLUME ANALYSIS*

***INTERSECTION:*** SANTA CRUZ ROAD & SAN JOAQUIN HILLS ROAD

***(Existing Traffic Volumes Based on Average Daily Traffic 2003 AM)***

| AM PEAK HOUR | | | | | | |
|---|---|---|---|---|---|---|
| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
| Northbound | 77 | 0 | 1 | 78 | 1 | 2 |
| Southbound | 69 | 0 | 1 | 70 | 1 | 0 |
| Eastbound | 768 | 0 | 1 | 769 | 8 | 0 |
| Westbound | 590 | 0 | 1 | 591 | 6 | 0 |

[ ] Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

[X] Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

## *1% TRAFFIC VOLUME ANALYSIS*

***INTERSECTION:*** SANTA CRUZ ROAD & SAN JOAQUIN HILLS ROAD

***(Existing Traffic Volumes Based on Average Daily Traffic 2003 PM)***

| PM PEAK HOUR | | | | | | |
|---|---|---|---|---|---|---|
| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
| Northbound | 538 | 0 | 0 | 538 | 5 | 1 |
| Southbound | 43 | 0 | 1 | 44 | 0 | 0 |
| Eastbound | 631 | 0 | 1 | 632 | 6 | 0 |
| Westbound | 457 | 0 | 1 | 458 | 5 | 1 |

[X] Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

[ ] Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

**PROJECT:** Santa Barbara Condominium Project **DATE:** 12/22/2004

## *1% TRAFFIC VOLUME ANALYSIS*

***INTERSECTION:*** SANTA CRUZ DRIVE & SAN CLEMENTE DRIVE

***(Existing Traffic Volumes Based on Average Daily Traffic 2003 AM)***

| AM PEAK HOUR | | | | | | |
|---|---|---|---|---|---|---|
| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
| Northbound | 95 | 0 | 0 | 95 | 1 | 0 |
| Southbound | 312 | 0 | 0 | 312 | 3 | 0 |
| Eastbound | 159 | 0 | 0 | 159 | 2 | 2 |
| Westbound | 56 | 0 | 0 | 56 | 1 | 0 |

[ ] Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

[X] Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

## *1% TRAFFIC VOLUME ANALYSIS*

***INTERSECTION:*** SANTA CRUZ DRIVE & SAN CLEMENTE DRIVE

***(Existing Traffic Volumes Based on Average Daily Traffic 2003 PM)***

| PM PEAK HOUR | | | | | | |
|---|---|---|---|---|---|---|
| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
| Northbound | 333 | 0 | 0 | 333 | 3 | 0 |
| Southbound | 263 | 0 | 0 | 263 | 3 | 1 |
| Eastbound | 298 | 0 | 0 | 298 | 3 | 1 |
| Westbound | 100 | 0 | 0 | 100 | 1 | 0 |

[X] Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

[ ] Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

**PROJECT:** Santa Barbara Condominium Project **DATE:** 12/22/2004

## *1% TRAFFIC VOLUME ANALYSIS*

***INTERSECTION:*** NEWPORT CENTER DRIVE & SANTA BARBARA DRIVE

***(Existing Traffic Volumes Based on Average Daily Traffic 2003 AM)***

| AM PEAK HOUR | | | | | | |
|---|---|---|---|---|---|---|
| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
| Northbound | 219 | 0 | 0 | 219 | 2 | 2 |
| Southbound | 124 | 0 | 0 | 124 | 1 | 1 |
| Eastbound | 210 | 0 | 0 | 210 | 2 | 14 |
| Westbound | 10 | 0 | 0 | 10 | 0 | 0 |

[ ] Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

[X] Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

## *1% TRAFFIC VOLUME ANALYSIS*

***INTERSECTION:*** NEWPORT CENTER DRIVE & SANTA BARBARA DRIVE

***(Existing Traffic Volumes Based on Average Daily Traffic 2003 PM)***

| PM PEAK HOUR | | | | | | |
|---|---|---|---|---|---|---|
| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
| Northbound | 265 | 0 | 0 | 265 | 3 | 6 |
| Southbound | 323 | 0 | 0 | 323 | 3 | 2 |
| Eastbound | 281 | 0 | 0 | 281 | 3 | 7 |
| Westbound | 136 | 0 | 0 | 136 | 1 | 1 |

[ ] Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

[X] Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

**PROJECT:** Santa Barbara Condominium Project **DATE:** 12/22/2004

## *1% TRAFFIC VOLUME ANALYSIS*

***INTERSECTION:*** NEWPORT CENTER DRIVE & COAST HIGHWAY

***(Existing Traffic Volumes Based on Average Daily Traffic 2003 AM)***

| AM PEAK HOUR | | | | | | |
|---|---|---|---|---|---|---|
| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
| Northbound | 0 | 0 | 0 | 0 | 0 | 0 |
| Southbound | 115 | 0 | 9 | 124 | 1 | 5 |
| Eastbound | 1660 | 83 | 26 | 1769 | 18 | 0 |
| Westbound | 1287 | 64 | 32 | 1383 | 14 | 1 |

[ ] Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

[X] Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

## *1% TRAFFIC VOLUME ANALYSIS*

***INTERSECTION:*** NEWPORT CENTER DRIVE & COAST HIGHWAY

***(Existing Traffic Volumes Based on Average Daily Traffic 2003 PM)***

| PM PEAK HOUR | | | | | | |
|---|---|---|---|---|---|---|
| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
| Northbound | 0 | 0 | 0 | 0 | 0 | 0 |
| Southbound | 796 | 0 | 34 | 830 | 8 | 2 |
| Eastbound | 1967 | 98 | 46 | 2111 | 21 | 0 |
| Westbound | 1843 | 92 | 23 | 1958 | 20 | 4 |

[X] Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

[ ] Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

**PROJECT:** Santa Barbara Condominium Project **DATE:** 12/22/2004

## *1% TRAFFIC VOLUME ANALYSIS*

***INTERSECTION:*** SANTA ROSA DRIVE/BIG CANYON DRIVE & SAN JOAQUIN HILLS ROAD

***(Existing Traffic Volumes Based on Average Daily Traffic 2003 AM)***

| AM PEAK HOUR | | | | | | |
|---|---|---|---|---|---|---|
| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
| Northbound | 102 | 0 | 10 | 112 | 1 | 3 |
| Southbound | 120 | 0 | 0 | 120 | 1 | 0 |
| Eastbound | 543 | 0 | 7 | 550 | 6 | 2 |
| Westbound | 1020 | 0 | 1 | 1021 | 10 | 1 |

[ ] Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

[X] Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

## *1% TRAFFIC VOLUME ANALYSIS*

***INTERSECTION:*** SANTA ROSA DRIVE/BIG CANYON DRIVE & SAN JOAQUIN HILLS ROAD

***(Existing Traffic Volumes Based on Average Daily Traffic 2003 PM)***

| PM PEAK HOUR | | | | | | |
|---|---|---|---|---|---|---|
| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
| Northbound | 641 | 0 | 26 | 667 | 7 | 2 |
| Southbound | 96 | 0 | 0 | 96 | 1 | 0 |
| Eastbound | 564 | 0 | 9 | 573 | 6 | 1 |
| Westbound | 518 | 0 | 12 | 530 | 5 | 3 |

[X] Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

[ ] Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

**PROJECT:** Santa Barbara Condominium Project **DATE:** 12/22/2004

## *1% TRAFFIC VOLUME ANALYSIS*

***INTERSECTION:*** AVOCADO AVENUE & COAST HIGHWAY

***(Existing Traffic Volumes Based on Average Daily Traffic 2004 AM)***

| AM PEAK HOUR | | | | | | |
|---|---|---|---|---|---|---|
| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
| Northbound | 223 | 0 | 0 | 223 | 2 | 0 |
| Southbound | 185 | 0 | 0 | 185 | 2 | 0 |
| Eastbound | 1591 | 80 | 26 | 1697 | 17 | 5 |
| Westbound | 1152 | 58 | 33 | 1243 | 12 | 1 |

[X] Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

[ ] Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

## *1% TRAFFIC VOLUME ANALYSIS*

***INTERSECTION:*** AVOCADO AVENUE & COAST HIGHWAY

***(Existing Traffic Volumes Based on Average Daily Traffic 2004 PM)***

| PM PEAK HOUR | | | | | | |
|---|---|---|---|---|---|---|
| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
| Northbound | 228 | 0 | 0 | 228 | 2 | 0 |
| Southbound | 524 | 0 | 1 | 525 | 5 | 0 |
| Eastbound | 1435 | 72 | 35 | 1542 | 15 | 2 |
| Westbound | 1485 | 74 | 20 | 1579 | 16 | 4 |

[X] Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

[ ] Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

**PROJECT:** Santa Barbara Condominium Project **DATE:** 12/22/2004

## *1% TRAFFIC VOLUME ANALYSIS*

***INTERSECTION:*** MACARTHUR BOULEVARD & FORD ROAD

***(Existing Traffic Volumes Based on Average Daily Traffic 2003 AM)***

| AM PEAK HOUR | | | | | | |
|---|---|---|---|---|---|---|
| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
| Northbound | 2372 | 119 | 2 | 2493 | 25 | 4 |
| Southbound | 2464 | 123 | 3 | 2590 | 26 | 0 |
| Eastbound | 300 | 0 | 4 | 304 | 3 | 3 |
| Westbound | 2331 | 0 | 2 | 2333 | 23 | 1 |

[ ] Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

[X] Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

## *1% TRAFFIC VOLUME ANALYSIS*

***INTERSECTION:*** MACARTHUR BOULEVARD & FORD ROAD

***(Existing Traffic Volumes Based on Average Daily Traffic 2003 PM)***

| PM PEAK HOUR | | | | | | |
|---|---|---|---|---|---|---|
| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
| Northbound | 2503 | 125 | 24 | 2652 | 27 | 2 |
| Southbound | 2118 | 106 | 14 | 2238 | 22 | 1 |
| Eastbound | 292 | 0 | 2 | 294 | 3 | 2 |
| Westbound | 1235 | 0 | 3 | 1238 | 12 | 3 |

[X] Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

[ ] Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

**PROJECT:** Santa Barbara Condominium Project **DATE:** 12/22/2004

## *1% TRAFFIC VOLUME ANALYSIS*

***INTERSECTION:*** MACARTHUR BOULEVARD & SAN JOAQUIN HILLS ROAD

***(Existing Traffic Volumes Based on Average Daily Traffic 2003 AM)***

| AM PEAK HOUR | | | | | | |
|---|---|---|---|---|---|---|
| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
| Northbound | 1526 | 76 | 0 | 1602 | 16 | 0 |
| Southbound | 2815 | 141 | 4 | 2960 | 30 | 1 |
| Eastbound | 351 | 0 | 1 | 352 | 4 | 5 |
| Westbound | 1188 | 0 | 1 | 1189 | 12 | 0 |

[ ] Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

[X] Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

## *1% TRAFFIC VOLUME ANALYSIS*

***INTERSECTION:*** MACARTHUR BOULEVARD & SAN JOAQUIN HILLS ROAD

***(Existing Traffic Volumes Based on Average Daily Traffic 2003 PM)***

| PM PEAK HOUR | | | | | | |
|---|---|---|---|---|---|---|
| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
| Northbound | 1625 | 81 | 3 | 1709 | 17 | 0 |
| Southbound | 1999 | 100 | 15 | 2114 | 21 | 2 |
| Eastbound | 1119 | 0 | 19 | 1138 | 11 | 3 |
| Westbound | 707 | 0 | 1 | 708 | 7 | 1 |

[X] Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

[ ] Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

**PROJECT:** Santa Barbara Condominium Project **DATE:** 12/22/2004

## *1% TRAFFIC VOLUME ANALYSIS*

***INTERSECTION:*** MACARTHUR BOULEVARD & SAN MIGUEL DRIVE

***(Existing Traffic Volumes Based on Average Daily Traffic 2003 AM)***

| AM PEAK HOUR | | | | | | |
|---|---|---|---|---|---|---|
| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
| Northbound | 1606 | 80 | 0 | 1686 | 17 | 0 |
| Southbound | 1380 | 69 | 2 | 1451 | 15 | 0 |
| Eastbound | 303 | 0 | 1 | 304 | 3 | 2 |
| Westbound | 516 | 0 | 1 | 517 | 5 | 0 |

[X] Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

[ ] Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

## *1% TRAFFIC VOLUME ANALYSIS*

***INTERSECTION:*** MACARTHUR BOULEVARD & SAN MIGUEL DRIVE

***(Existing Traffic Volumes Based on Average Daily Traffic 2003 PM)***

| PM PEAK HOUR | | | | | | |
|---|---|---|---|---|---|---|
| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
| Northbound | 1235 | 62 | 2 | 1299 | 13 | 0 |
| Southbound | 1355 | 68 | 3 | 1426 | 14 | 0 |
| Eastbound | 1098 | 0 | 24 | 1122 | 11 | 1 |
| Westbound | 458 | 0 | 12 | 470 | 5 | 1 |

[X] Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

[ ] Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

**PROJECT:** Santa Barbara Condominium Project **DATE:** 12/22/2004

## *1% TRAFFIC VOLUME ANALYSIS*

***INTERSECTION:*** MACARTHUR BOULEVARD & COAST HIGHWAY

***(Existing Traffic Volumes Based on Average Daily Traffic 2004 AM)***

| AM PEAK HOUR | | | | | | |
|---|---|---|---|---|---|---|
| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
| Northbound | 0 | 0 | 0 | 0 | 0 | 0 |
| Southbound | 776 | 39 | 13 | 828 | 8 | 0 |
| Eastbound | 1241 | 62 | 29 | 1332 | 13 | 5 |
| Westbound | 2085 | 104 | 22 | 2211 | 22 | 1 |

[X] Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

[ ] Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

## *1% TRAFFIC VOLUME ANALYSIS*

***INTERSECTION:*** MACARTHUR BOULEVARD & COAST HIGHWAY

***(Existing Traffic Volumes Based on Average Daily Traffic 2004 PM)***

| PM PEAK HOUR | | | | | | |
|---|---|---|---|---|---|---|
| APPROACH DIRECTION | EXISTING PEAK HOUR VOLUME | PEAK HOUR REGIONAL GROWTH VOLUME | APPROVED PROJECTS PEAK HOUR VOLUME | PROJECTED PEAK HOUR VOLUME | 1% OF PROJECTED PEAK HOUR VOLUME | PROJECT PEAK HOUR VOLUME |
| Northbound | 0 | 0 | 0 | 0 | 0 | 0 |
| Southbound | 1264 | 63 | 6 | 1333 | 13 | 0 |
| Eastbound | 2141 | 107 | 38 | 2286 | 23 | 2 |
| Westbound | 2193 | 110 | 15 | 2318 | 23 | 4 |

[X] Project Traffic is estimated to be less than 1% of Projected Peak Hour Traffic Volumes.

[ ] Project Traffic is estimated to be equal to or greater than 1% of Projected Peak Hour Traffic Volumes. Intersection Capacity Utilization (ICU) Analysis is required.

**PROJECT:** Santa Barbara Condominium Project **DATE:** 12/22/2004

# APPENDIX E

## Cumulative Project Data

## Table E-1

## Cumulative Project Traffic Generation

| Project | Peak Hour | | | | | | Daily[1] |
|---|---|---|---|---|---|---|---|
| | Morning | | | Evening | | | |
| | Inbound | Outbound | Total | Inbound | Outbound | Total | |
| South Coast Shipyard | 35 | 20 | 55 | 41 | 38 | 79 | 892 |
| Morman Temple | 20 | 5 | 25 | 16 | 10 | 26 | 410 |
| Saint Mark Presbyterian | 36 | 30 | 66 | 42 | 44 | 86 | N/A |
| Our Lady Queen of Angels | 47 | 31 | 78 | 6 | 6 | 12 | N/A |
| St. Andrews Church | 3 | 1 | 4 | 11 | 10 | 21 | N/A |
| Mariners Church | 157 | 95 | 252 | 182 | 137 | 319 | 4,505 |
| Exodus Community Center | 331 | 253 | 584 | 240 | 333 | 573 | 5,365 |
| Newport Coast - TAZ 1 | 74 | 244 | 318 | 238 | 159 | 397 | 3,928 |
| Newport Coast - TAZ 2 | 91 | 327 | 418 | 327 | 183 | 510 | 5,105 |
| Newport Coast - TAZ 3 | 51 | 178 | 229 | 178 | 102 | 280 | 2,794 |
| Newport Coast - TAZ 4 | 56 | 186 | 242 | 184 | 113 | 297 | 2,960 |
| Subtotal | 272 | 935 | 1,207 | 927 | 557 | 1,484 | 14,787 |
| Newport Ridge - TAZ 1 | 135 | 317 | 452 | 464 | 353 | 817 | 8,778 |
| Newport Ridge - TAZ 2 | 63 | 222 | 285 | 222 | 127 | 349 | 3,487 |
| Newport Ridge - TAZ 3 | 26 | 119 | 145 | 122 | 57 | 179 | 1,822 |
| Subtotal | 224 | 658 | 882 | 808 | 537 | 1,345 | 14,087 |
| Bonita Canyon - Residential | 39 | 183 | 222 | 187 | 87 | 274 | 2,821 |
| Total | 1,164 | 2,211 | 3,375 | 2,460 | 1,759 | 4,219 | 42,867 |

[1] N/A = Not Available

**TABLE 3-1**

**TRIP GENERATION RATES[1]**

| LAND USE | UNITS[2] | PEAK HOUR | | | | DAILY |
|---|---|---|---|---|---|---|
| | | AM | | PM | | |
| | | IN | OUT | IN | OUT | |
| Residential - Apartments | DU | 0.90 | 0.42 | 0.43 | 0.20 | 6.47 |
| Commercial Retail | TSF | 0.60 | 0.50 | 1.90 | 2.00 | 45.00 |
| General Office | TSF | 2.60 | 0.35 | 1.49 | 7.26 | 22.44 |

[1] Source: City of Newport Beach Trip Generation Rates, Institue of Transportation Engineers (ITE), Trip Generation, Sixth Edition, 1997, Land Use Category 710

[2] DU = Dwelling Units
TSF = Thousand Square Feet

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**TABLE 3-2**

**PROJECT TRIP GENERATION**

| LAND USE | QUANTITY | UNITS[1] | PEAK HOUR | | | | DAILY |
|---|---|---|---|---|---|---|---|
| | | | AM | | PM | | |
| | | | IN | OUT | IN | OUT | |
| **Existing Credits** | | | | | | | |
| Commercial Retail | 3.8 | TSF | 2 | 2 | 7 | 8 | 171 |
| Commercial Office | 10.4 | TSF | 27 | 4 | 15 | 76 | 233 |
| TOTAL CREDITS | | | 29 | 6 | 23 | 83 | 404 |
| **Proposed Project** | | | | | | | |
| Residential - Apartments | 28 | DU | 25 | 12 | 12 | 6 | 181 |
| Commercial Retail | 19.6 | TSF | 12 | 10 | 37 | 39 | 882 |
| Commercial Office | 10.4 | TSF | 27 | 4 | 15 | 76 | 233 |
| TOTAL | | | 64 | 26 | 64 | 121 | 1,296 |
| NET NEW TRIPS | | | 35 | 20 | 41 | 38 | 892 |

[1] DU = Dwelling Unit
TSF = Thousand Square Feet

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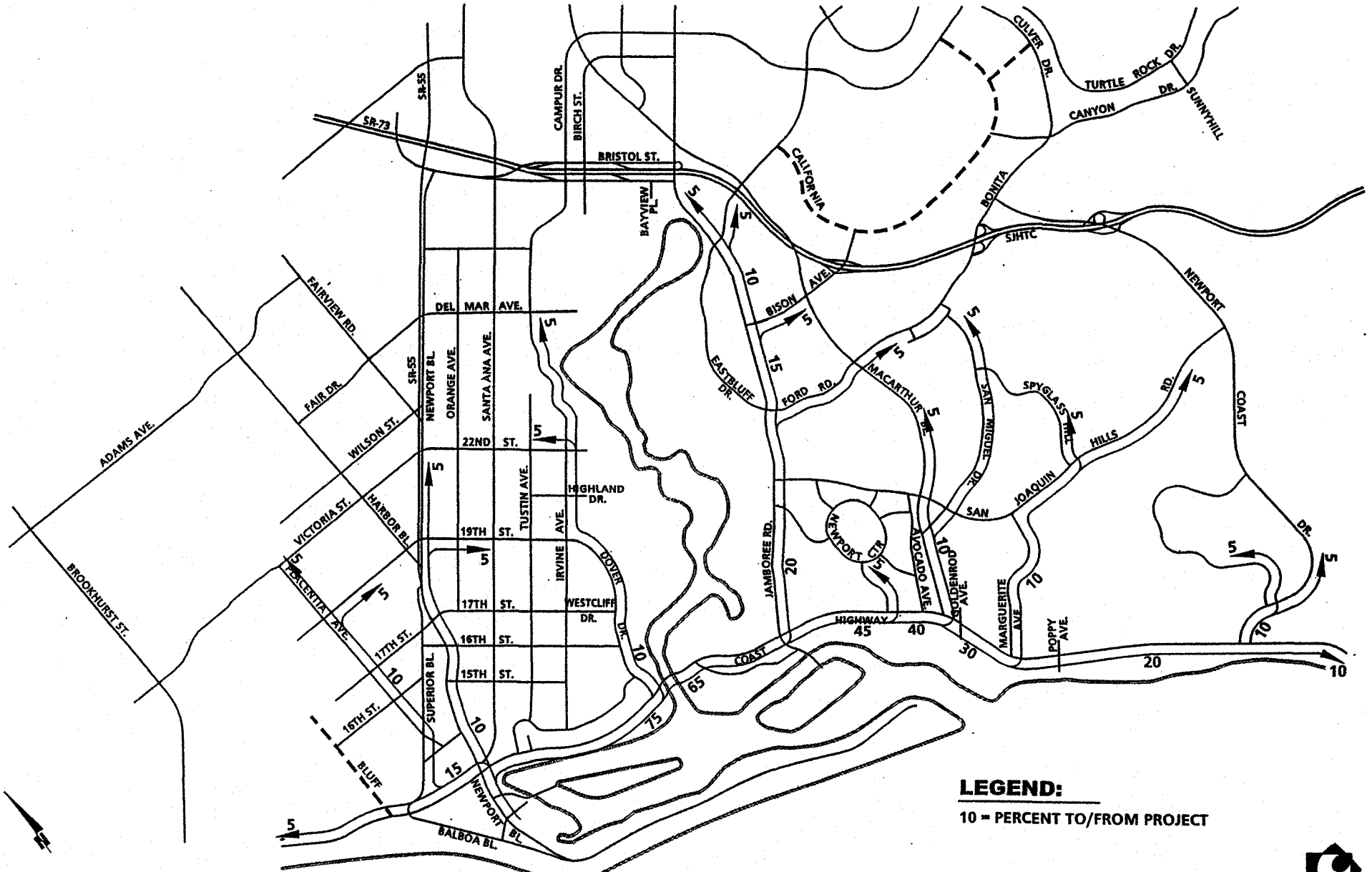
EXHIBIT 3-A

# SOUTH COAST SHIPYARD TRIP DISTRIBUTION




**LEGEND:**

10 = PERCENT TO/FROM PROJECT

## TABLE 4-1

## TRIP GENERATION RATES[1]

### WEEKDAY CONDITIONS

| LAND USE | PEAK HOUR TRIP RATES | | | | DAILY RATE |
|---|---|---|---|---|---|
| | AM | | PM | | |
| | IN | OUT | IN | OUT | |
| Morman Temple Rates Based on: | | | | | |
| Thousand Square Feet | 1.12 | 0.28 | 0.93 | 0.56 | 23.46 |

### WEEKEND CONDITIONS

| LAND USE | PEAK HOUR TRIP | | DAILY RATE |
|---|---|---|---|
| | IN | OUT | |
| Morman Temple Rates Based on: | | | |
| Thousand Square Feet | 3.12 | 2.99 | 44.11 |

[1] Source: Empirical data collection/trip generation analysis conducted by Solaegui Engineers, LTD (September 15, 2001)

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## TABLE 4-2

## NEWPORT BEACH MORMON TEMPLE TRIP GENERATION SUMMARY

### WEEKDAY

| LAND USE | QUANTITY | UNITS[1] | PEAK HOUR | | | | DAILY |
|---|---|---|---|---|---|---|---|
| | | | AM | | PM | | |
| | | | IN | OUT | IN | OUT | |
| Mormon Temple | | | | | | | |
| Thousand Square Feet | 17.46 | TSF | 20 | 5 | 16 | 10 | 410 |

### WEEKEND

| LAND USE | QUANTITY | UNITS[1] | PEAK HOUR | | DAILY |
|---|---|---|---|---|---|
| | | | IN | OUT | |
| Mormon Temple | | | | | |
| Thousand Square Feet | 17.46 | TSF | 54 | 52 | 770 |

[1] TSF = Thousand Square Feet

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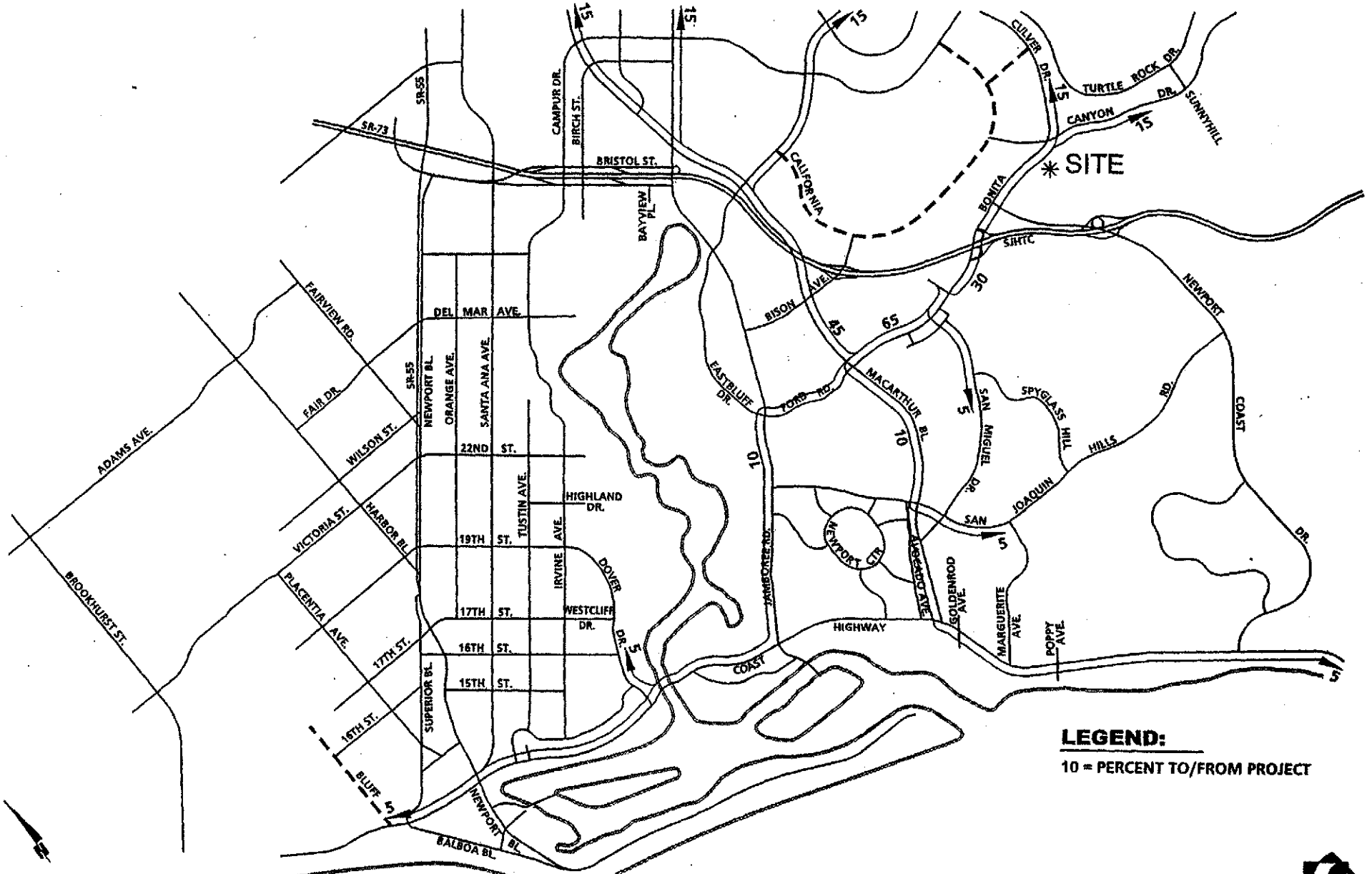
EXHIBIT 4-A

# MORMAN TEMPLE TRIP DISTRIBUTION








URBAN CROSSROADS

**TABLE 5-1**

**TRIP GENERATION RATES[1]**

| LAND USE | UNITS[2] | PEAK HOUR | | | | DAILY |
|---|---|---|---|---|---|---|
| | | AM | | PM | | |
| | | IN | OUT | IN | OUT | |
| Church | TSF | 0.08 | 0.03 | 0.34 | 0.30 | N/A[3] |
| Daycare | TSF | 6.90 | 6.12 | 6.40 | 7.22 | 79.26 |

[1] Source: City of Newport Beach Trip Generation Rates

[2] TSF = Thousand Square Feet

[3] N/A = Not Available

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**TABLE 5-2**

**PROJECT TRIP GENERATION**

| LAND USE | QUANTITY | UNITS[1] | PEAK HOUR | | | | DAILY |
|---|---|---|---|---|---|---|---|
| | | | AM | | PM | | |
| | | | IN | OUT | IN | OUT | |
| Church | 34.8 | TSF | 3 | 1 | 12 | 10 | N/A[2] |
| Daycare | 4.720 | TSF | 33 | 29 | 30 | 34 | 374 |
| TOTAL | | | 36 | 30 | 42 | 44 | N/A |

[1] TSF = Thousand Square Feet

[2] N/A = Not Available

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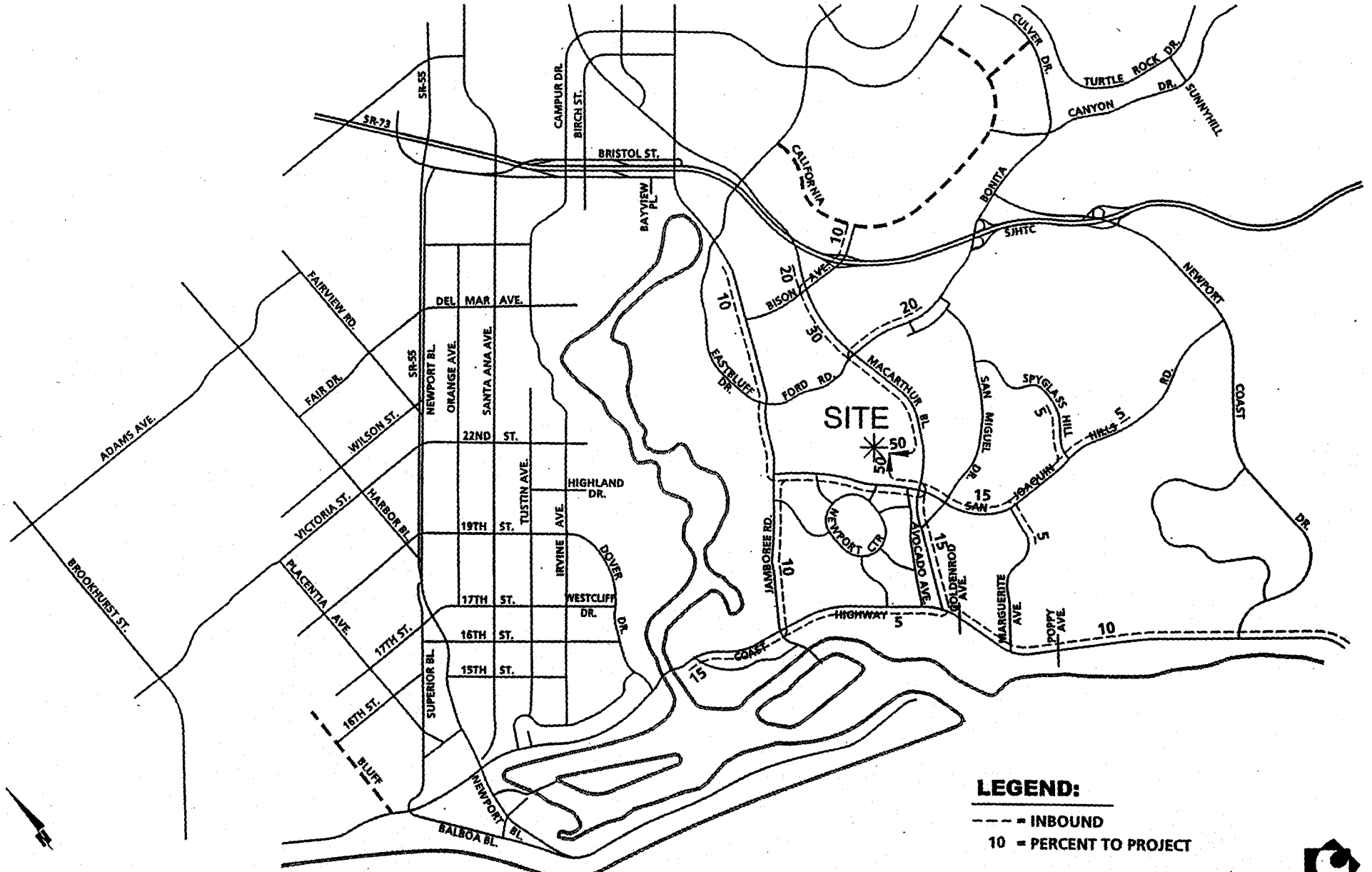
EXHIBIT 5-A

# SAINT MARK PRESBYTERIAN CHURCH
# INBOUND TRIP DISTRIBUTION



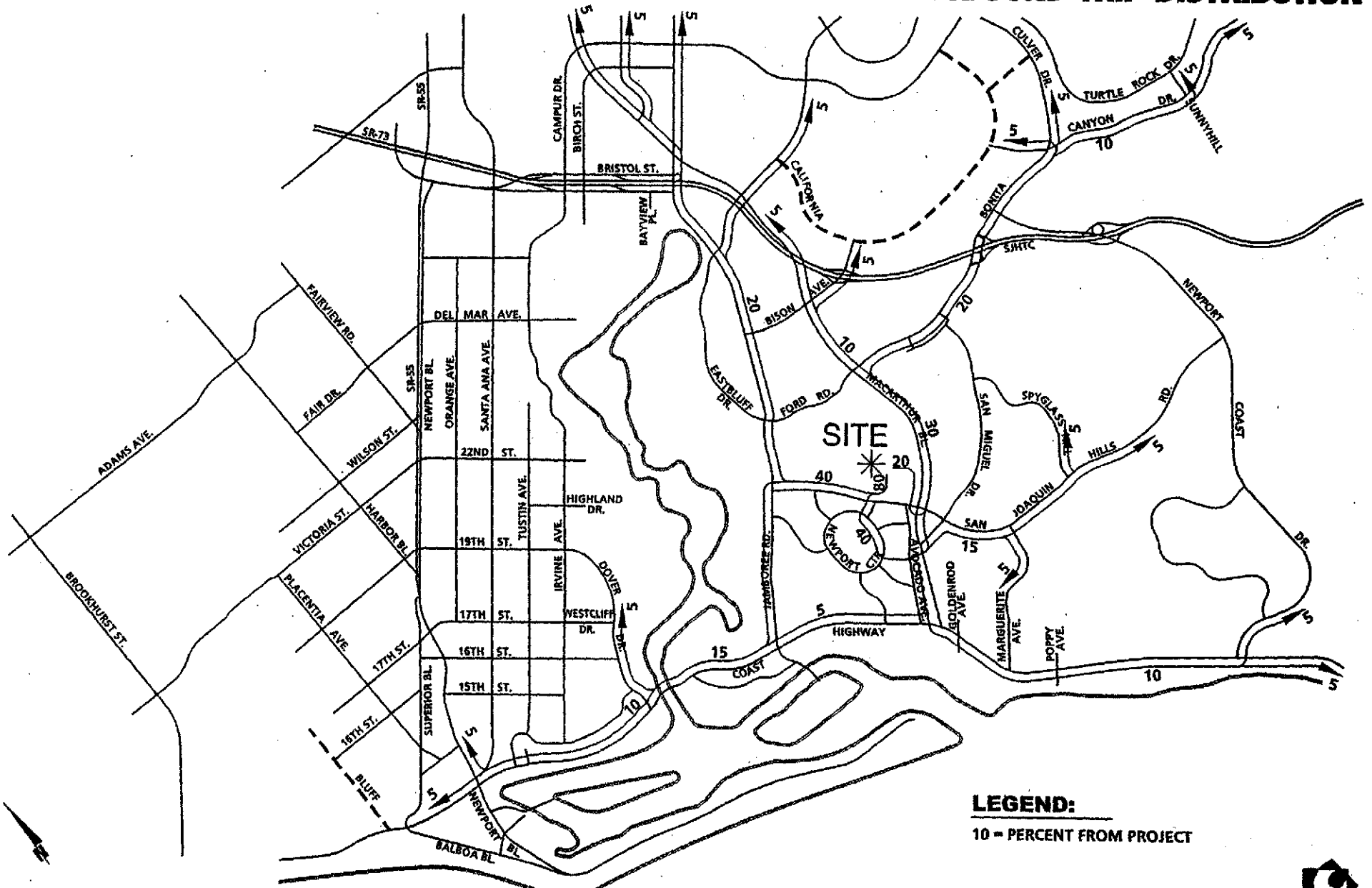





URBAN CROSSROADS

EXHIBIT 5-B

# SAINT MARK PRESBYTERIAN CHURCH
# OUTBOUND TRIP DISTRIBUTION




**LEGEND:**

10 = PERCENT FROM PROJECT

**TABLE 6-1**

**TRIP GENERATION RATES[1]**

| LAND USE | UNITS[2] | PEAK HOUR | | | | DAILY |
|---|---|---|---|---|---|---|
| | | AM | | PM | | |
| | | IN | OUT | IN | OUT | |
| Church | TSF | 0.08 | 0.03 | 0.34 | 0.30 | N/A[3] |
| Classrooms | STU | 0.18 | 0.12 | NOM[4] | NOM | 1.09 |

[1] Source: City of Newport Beach Trip Generation Rates

[2] TSF = Thousand Square Feet ; STU = Students

[3] N/A = Not Available

[4] NOM = Nominal

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**TABLE 6-2**

**PROJECT TRIP GENERATION**

| LAND USE | UNITS[1] | PEAK HOUR | | | | DAILY |
|---|---|---|---|---|---|---|
| | | AM | | PM | | |
| | | IN | OUT | IN | OUT | |
| Church | TSF | 2 | 1 | 6 | 6 | N/A[2] |
| Classrooms | STU | 45 | 30 | 0 | 0 | 273 |
| Total | | 47 | 31 | 6 | 6 | N/A |

[1] TSF = Thousand Square Feet ; STU = Students

[2] N/A = Not Available

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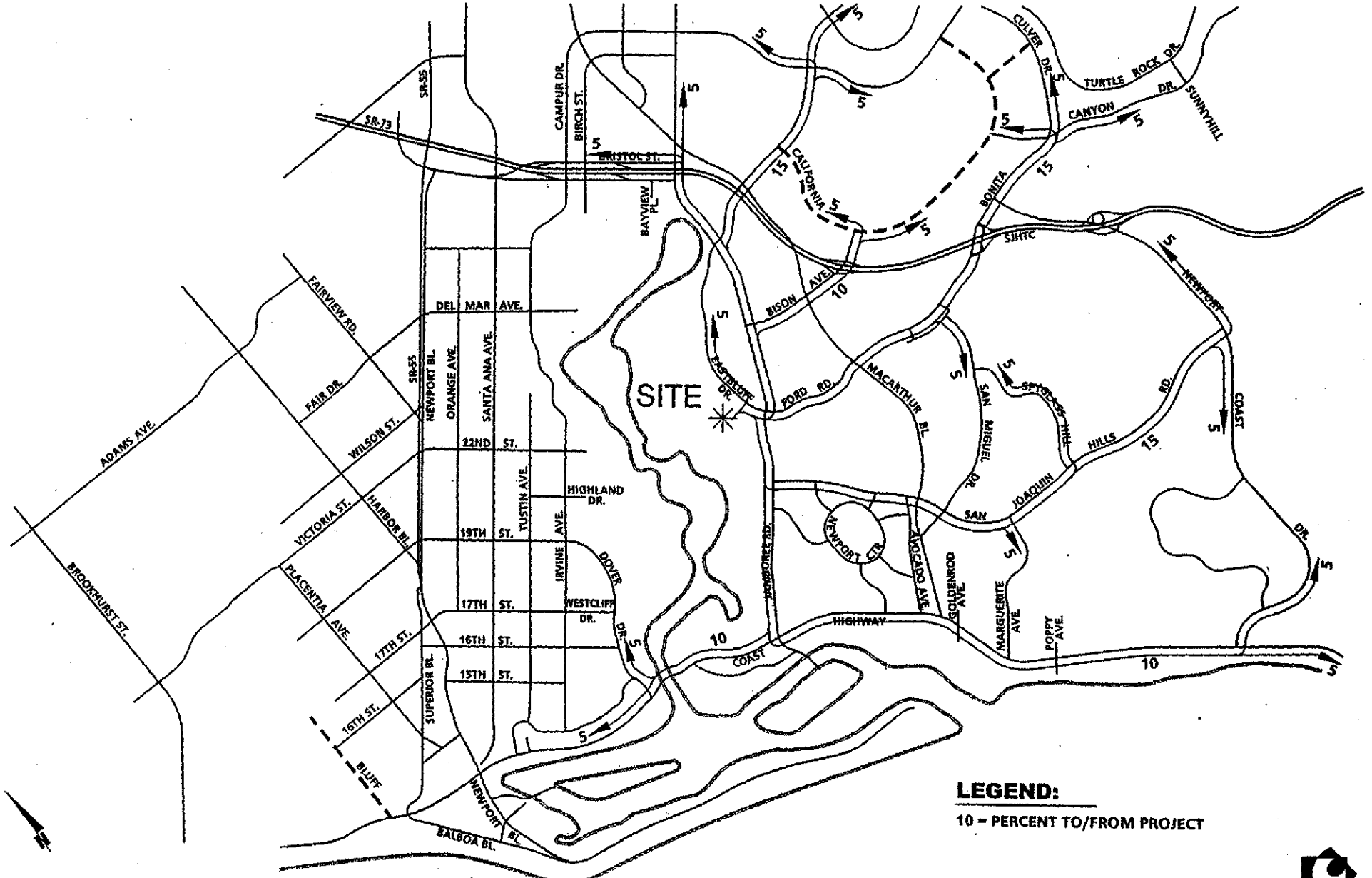
EXHIBIT 6-A

# OUR LADY QUEEN OF ANGELS
# TRIP DISTRIBUTION








URBAN CROSSROADS

## TABLE 7-1

## TRIP GENERATION RATES[1]

| LAND USE | UNITS[2] | PEAK HOUR | | | | DAILY |
|---|---|---|---|---|---|---|
| | | AM | | PM | | |
| | | IN | OUT | IN | OUT | |
| Church | TSF | 0.08 | 0.03 | 0.34 | 0.30. | N/A[3] |

---

[1] Source: City of Newport Beach Trip Generation Rates

[2] TSF = Thousand Square Feet

[3] N/A = Not Available

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## TABLE 7-2

## PROJECT TRIP GENERATION

| LAND USE | UNITS[1] | PEAK HOUR | | | | DAILY |
|---|---|---|---|---|---|---|
| | | AM | | PM | | |
| | | IN | OUT | IN | OUT | |
| Church | TSF | 3 | 1 | 11 | 10 | N/A[2] |

[1] TSF = Thousand Square Feet

[2] N/A = Not Available

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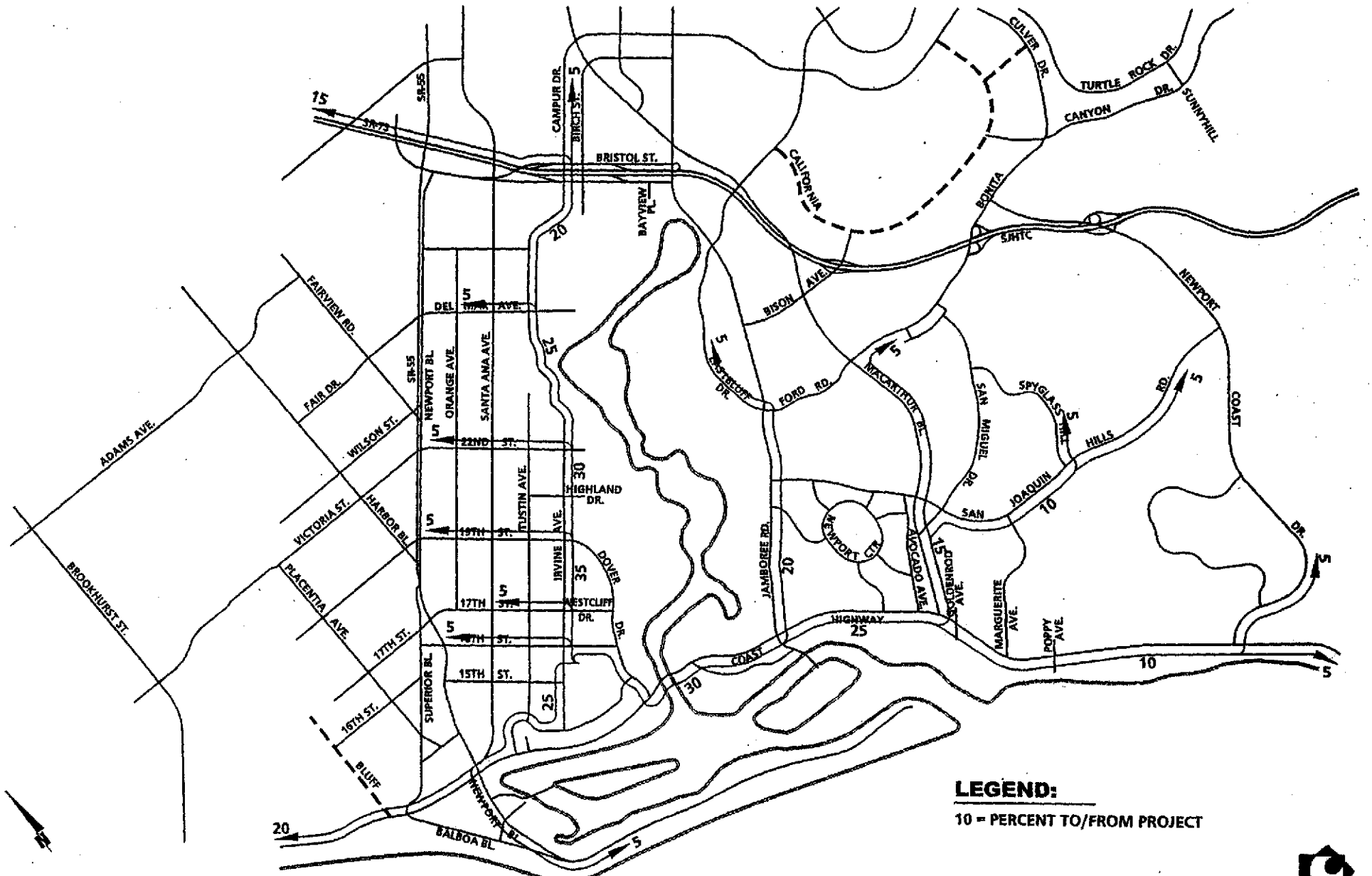
EXHIBIT 7-A

# ST. ANDREWS CHURCH
# TRIP DISTRIBUTION



## TABLE 10-1

## PERSON TRIP GENERATION RATES[1]

| LAND USE | UNITS[2] | PEAK HOUR | | | | DAILY |
|---|---|---|---|---|---|---|
| | | AM | | PM | | |
| | | IN | OUT | IN | OUT | |
| Health Club | TSF | 1.25 | 0.85 | 2.93 | 1.93 | 54.14 |
| Church, Synagogue | TSF | 0.63 | 0.38 | 0.55 | 0.46 | 13.09 |

[1] Source: City of Irvine Mariners Church Master Plan, Austin-Foust Associates, Inc.

[2] TSF = Thousand Square Feet

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**TABLE 10-2**

**PROJECT TRIP GENERATION**

| LAND USE | QUANTITY | UNITS[1] | PEAK HOUR | | | | DAILY |
|---|---|---|---|---|---|---|---|
| | | | AM | | PM | | |
| | | | IN | OUT | IN | OUT | |
| Person Trip Generation | | | | | | | |
| Health Club | 35.0 | TSF | 44 | 30 | 103 | 68 | 1,895 |
| Church, Synagogue | 328.25 | TSF | 207 | 125 | 181 | 151 | 4,297 |
| Total Person Trip Generation | | | 251 | 155 | 284 | 219 | 6,192 |
| Total Vehicle Trip Generation[2] | | | 157 | 95 | 182 | 137 | 4,505 |

[1] TSF = Thousand Square Feet

[2] Derived during traffic model mode choice process

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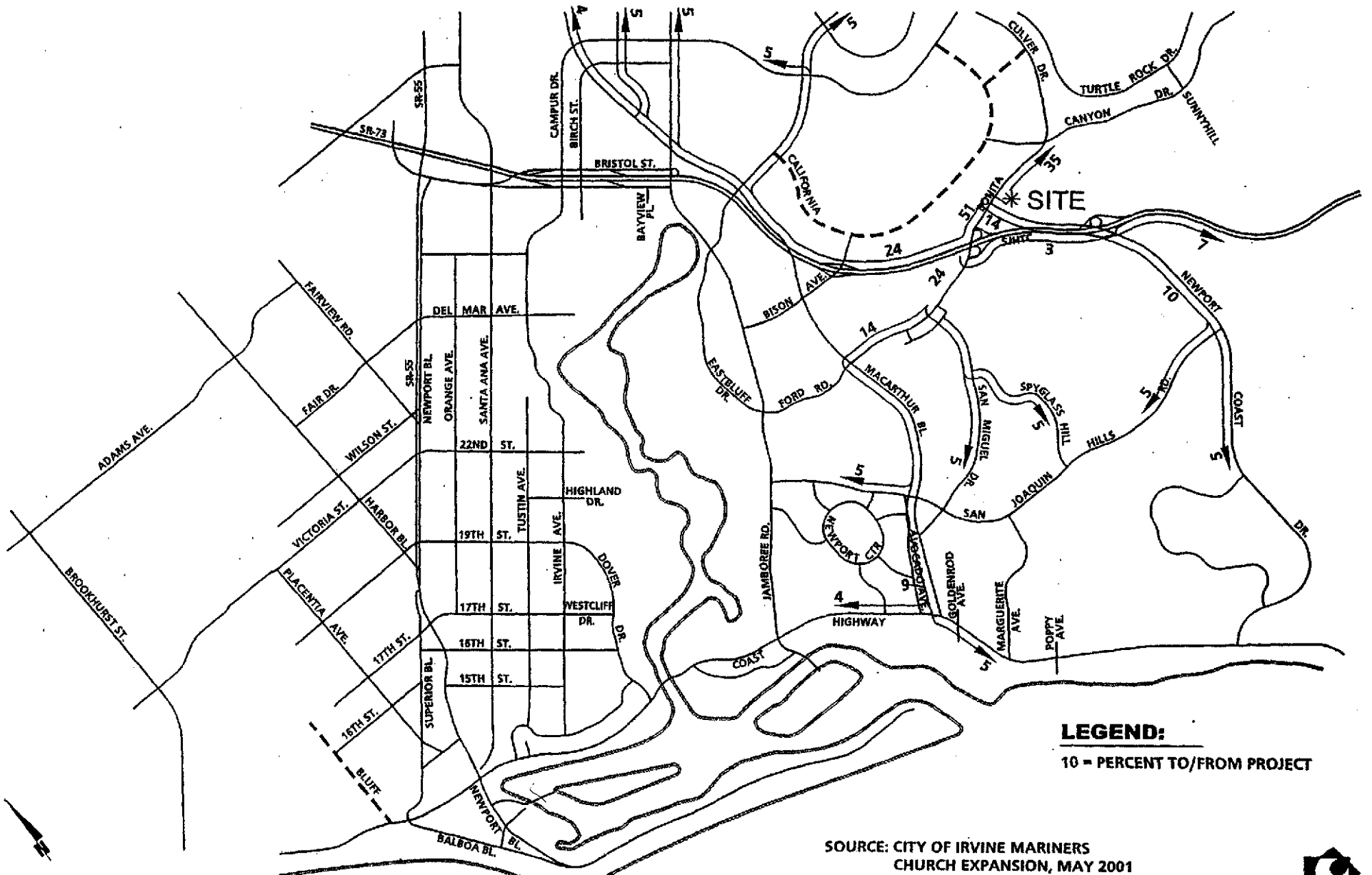
EXHIBIT 10-A

# MARINERS CHURCH TRIP DISTRIBUTION




SOURCE: CITY OF IRVINE MARINERS CHURCH EXPANSION, MAY 2001





URBAN CROSSROADS

## TABLE 11-1

## PERSON TRIP GENERATION RATES[1]

| LAND USE | UNITS[2] | PEAK HOUR | | | | DAILY |
|---|---|---|---|---|---|---|
| | | AM | | PM | | |
| | | IN | OUT | IN | OUT | |
| **ITAM Person Trip Rates** | | | | | | |
| Health Club | TSF | 1.25 | 0.85 | 2.93 | 1.93 | 54.14 |
| Church, Synagogue | TSF | 0.63 | 0.38 | 0.55 | 0.46 | 13.09 |
| High School | STU | 0.37 | 0.18 | 0.03 | 0.08 | 1.94 |
| Elementary, Middle School | STU | 0.24 | 0.17 | 0.03 | 0.07 | 1.54 |
| Child Care Center | TSF | 9.53 | 9.14 | 6.13 | 13.25 | 99.99 |

[1] Source: City of Irvine Exodus Community Center and Tarbut V'Torah Expansion Traffic Study
Austin-Foust Associates, Inc.

[2] STU = Students
TSF = Thousand Square Feet

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**TABLE 11-2**

**PROJECT TRIP GENERATION**

| LAND USE | QUANTITY | UNITS[1] | PEAK HOUR | | | | DAILY |
|---|---|---|---|---|---|---|---|
| | | | AM | | PM | | |
| | | | IN | OUT | IN | OUT | |
| **Person Trips** | | | | | | | |
| Health Club | 48.73 | TSF | 61 | 41 | 143 | 94 | 2638 |
| Church, Synagogue | 83.49 | TSF | 53 | 32 | 46 | 38 | 1093 |
| High School | 320 | STU | 118 | 58 | 10 | 26 | 621 |
| Elementary, Middle School | 160 | STU | 38 | 27 | 5 | 11 | 246 |
| Child Care Center | 27.78 | TSF | 265 | 254 | 170 | 368 | 2778 |
| TOTAL PERSON TRIP GENERATION | | | 535 | 412 | 374 | 537 | 7376 |
| TOTAL VEHICLE TRIP GENERATION[2] | | | 331 | 253 | 240 | 333 | 5365 |

[1] STU = Students
TSF = Thousand Square Feet

[2] Derived during traffic model mode choice process

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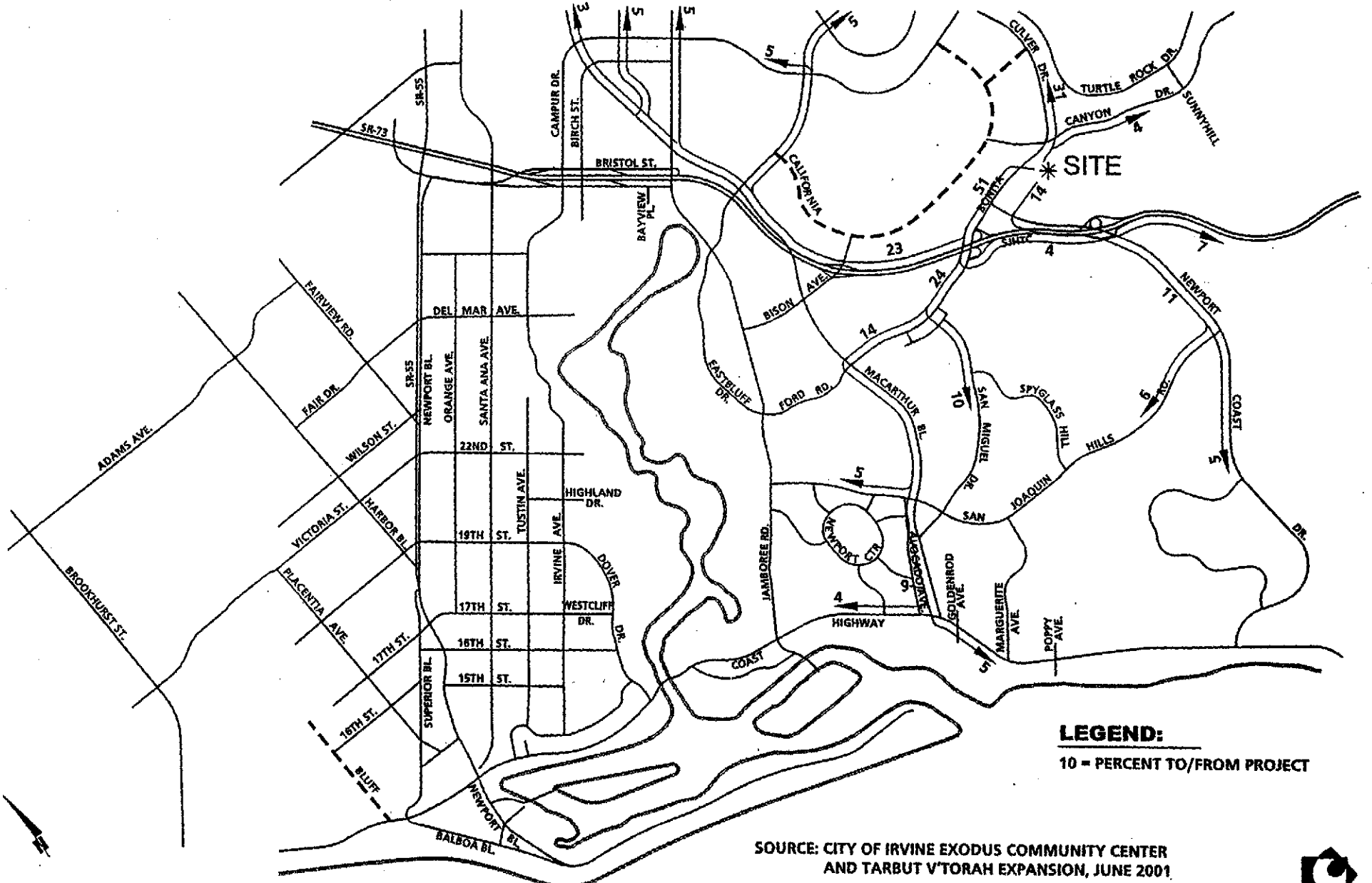
EXHIBIT 11-A

# EXODUS COMMUNITY CENTER AND TARBUT V'TORAH EXPANSION TRIP DISTRIBUTION




SOURCE: CITY OF IRVINE EXODUS COMMUNITY CENTER AND TARBUT V'TORAH EXPANSION, JUNE 2001





URBAN

**TABLE 12-1**

**TRIP GENERATION RATES[1]**

| LAND USE | UNITS[2] | PEAK HOUR | | | | DAILY |
|---|---|---|---|---|---|---|
| | | AM | | PM | | |
| | | IN | OUT | IN | OUT | |
| Condominium/Townhouse | DU | 0.17 | 0.49 | 0.47 | 0.36 | 8.10 |
| Multi Family Dwelling | DU | ~~0.90~~ 0.09 | 0.42 | 0.43 | 0.20 | 6.47 |
| Single Family Detached Residential | DU | 0.20 | 0.70 | 0.70 | 0.40 | 11.00 |
| State Park (gross acres) | AC | 0.21 | 0.90 | 0.29 | 0.31 | 19.15 |

[1] Source: City of Newport Beach Trip Generation Rates

[2] DU = Dwelling Units
AC = Acres

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**TABLE 12-2**

**PROJECT TRIP GENERATION**

| TAZ | PLANNING AREA | LAND USE | QUANTITY | UNITS[1] | PEAK HOUR AM IN | PEAK HOUR AM OUT | PEAK HOUR PM IN | PEAK HOUR PM OUT | DAILY |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1A | Condominium/Townhouse | 121 | DU | 21 | 59 | 57 | 44 | 980 |
| | 1B | Single Family Detached Residential | 36 | DU | 7 | 25 | 25 | 14 | 396 |
| | 1C | Condominium/Townhouse | 888 | DU | 151 | 435 | 417 | 320 | 7,193 |
| | 2A | Single Family Detached Residential | 206 | DU | 41 | 144 | 144 | 82 | 2,266 |
| | 13C | Multi Family Dwelling | 116 | DU | 104 | 49 | 50 | 23 | 751 |
| | 13D | Multi Family Dwelling | 116 | DU | 104 | 49 | 50 | 23 | 751 |
| | 13E | Multi Family Dwelling | 116 | DU | 104 | 49 | 50 | 23 | 751 |
| TOTAL FOR TAZ 1 | | | | | 532 | 810 | 793 | 529 | 13,088 |
| 2 | 3A | Single Family Detached Residential | 347 | DU | 69 | 243 | 243 | 139 | 3,817 |
| | 3B | Single Family Detached Residential | 450 | DU | 90 | 315 | 315 | 180 | 4,950 |
| | 4B | Single Family Detached Residential | 587 | DU | 117 | 411 | 411 | 235 | 6,457 |
| | 13A | Multi Family Dwelling | 117 | DU | 105 | 49 | 50 | 23 | 757 |
| | 13B | Multi Family Dwelling | 117 | DU | 105 | 49 | 50 | 23 | 757 |
| | 14 | Single Family Detached Residential | 26 | DU | 5 | 18 | 18 | 10 | 286 |
| | 17 | State Park (gross acres) | 2,807 | AC | 589 | 2,526 | 814 | 870 | 53,754 |
| TOTAL FOR TAZ 2 | | | | | 1,080 | 3,611 | 1,901 | 1,480 | 70,778 |
| 3 | 2B | Single Family Detached Residential | 62 | DU | 12 | 43 | 43 | 25 | 682 |
| | 4A | Single Family Detached Residential | 784 | DU | 157 | 549 | 549 | 314 | 8,624 |
| TOTAL FOR TAZ 3 | | | | | 169 | 592 | 592 | 339 | 9,306 |
| 4 | 2C | Single Family Detached Residential | 307 | DU | 61 | 215 | 215 | 123 | 3,377 |
| | 5 | Single Family Detached Residential | 300 | DU | 60 | 210 | 210 | 120 | 3,300 |
| | 6 | Single Family Detached Residential | 75 | DU | 15 | 53 | 53 | 30 | 825 |
| | 8 | Condominium/Townhouse | 289 | DU | 49 | 142 | 136 | 104 | 2,341 |
| TOTAL FOR TAZ 4 | | | | | 185 | 620 | 614 | 377 | 9,843 |
| TOTAL FOR ALL ZONES | | | | | 1,966 | 5,633 | 3,900 | 2,725 | 103,015 |

5060

RECALCULATE USING REVISED MULTI-FAMILY RATE

* ASSUME 70% OF DU'S ARE OCCUPIED. & REMOVE STATE PARK

[1] DU = Dwelling Units
AC = Acres

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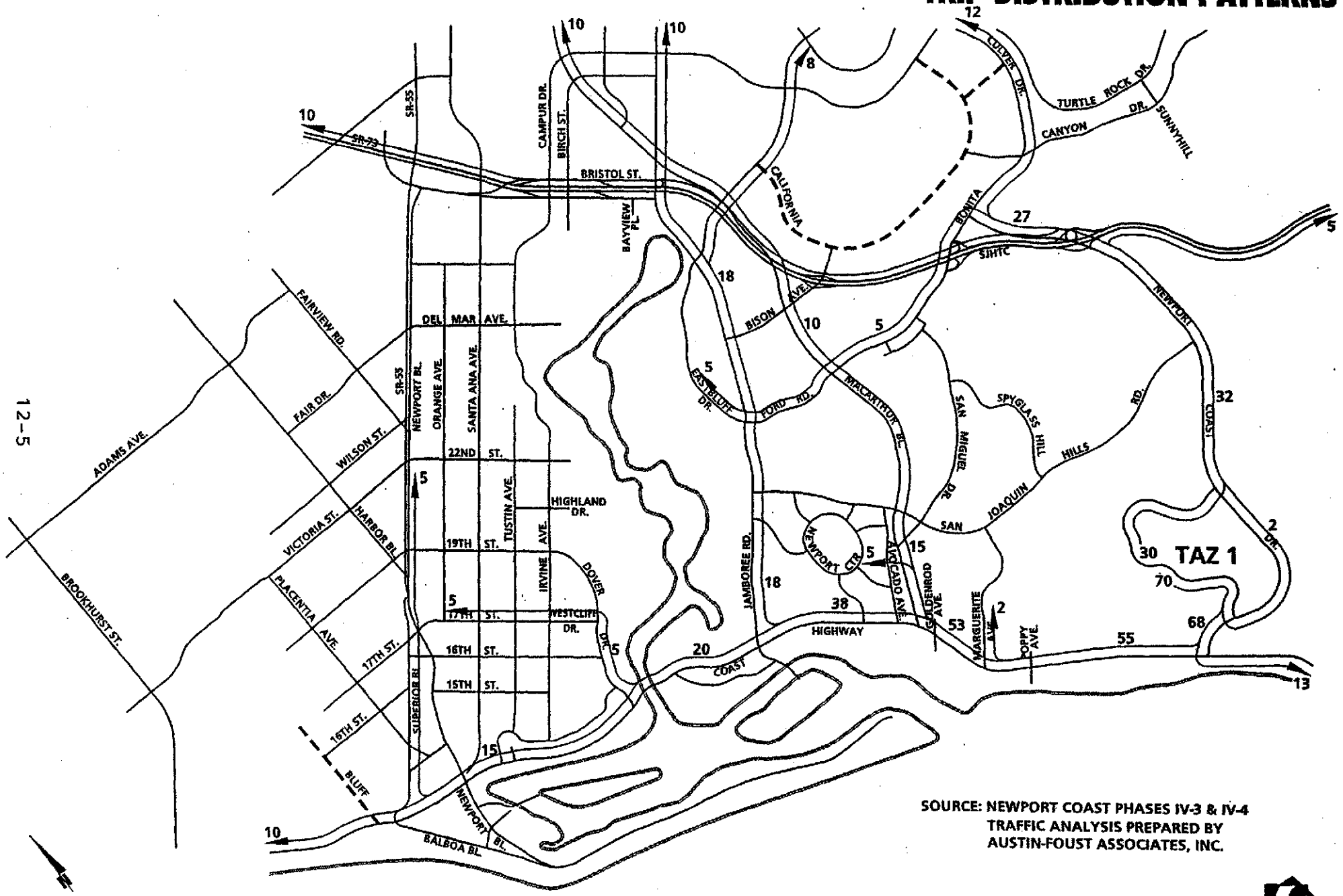
EXHIBIT 12-A

# NEWPORT COAST TRAFFIC ANALYSIS ZONE 1
# TRIP DISTRIBUTION PATTERNS




SOURCE: NEWPORT COAST PHASES IV-3 & IV-4
TRAFFIC ANALYSIS PREPARED BY
AUSTIN-FOUST ASSOCIATES, INC.

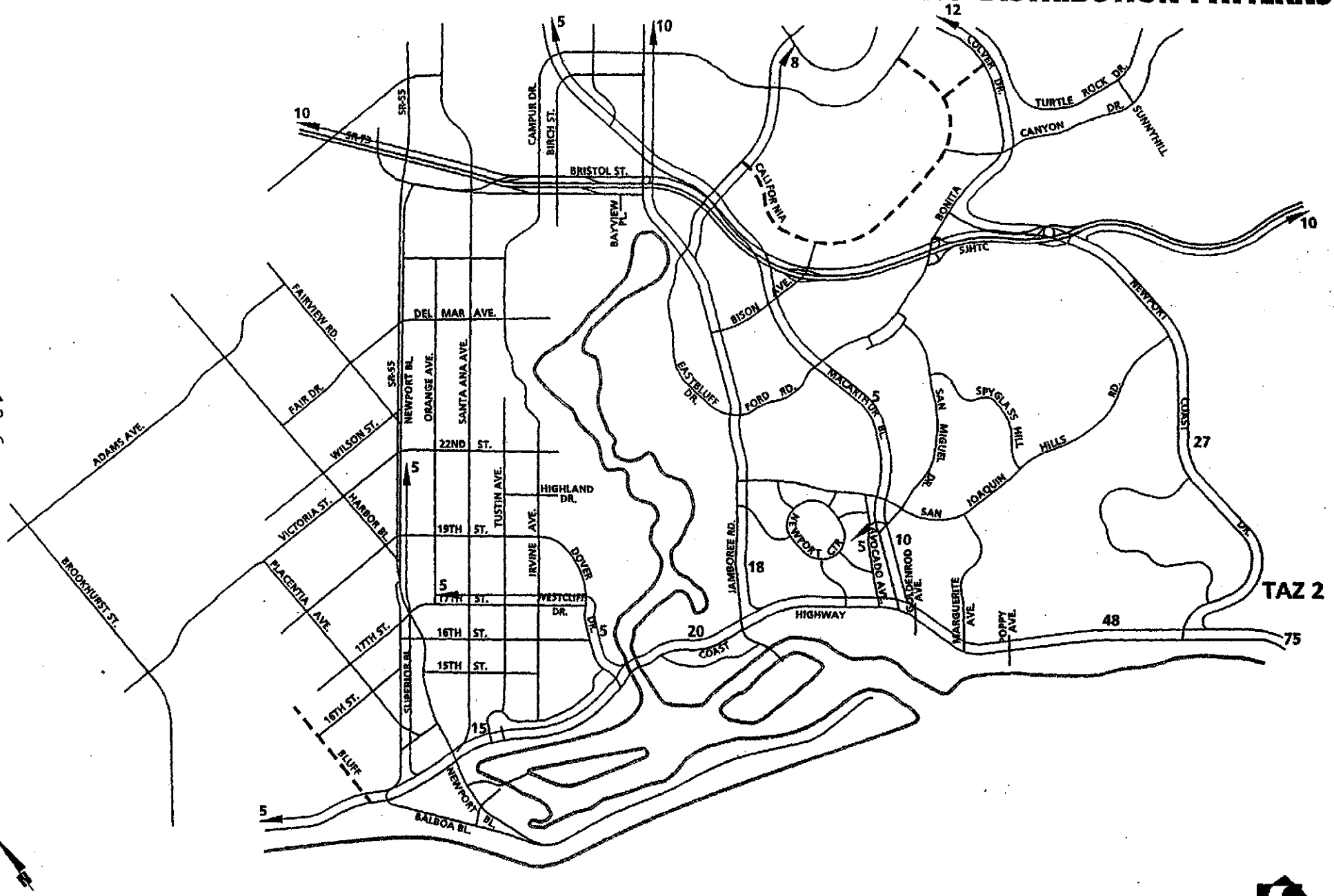




URBAN

EXHIBI 12-B

# NEWPORT COAST TRAFFIC ANALYSIS ZONE 2
# TRIP DISTRIBUTION PATTERNS



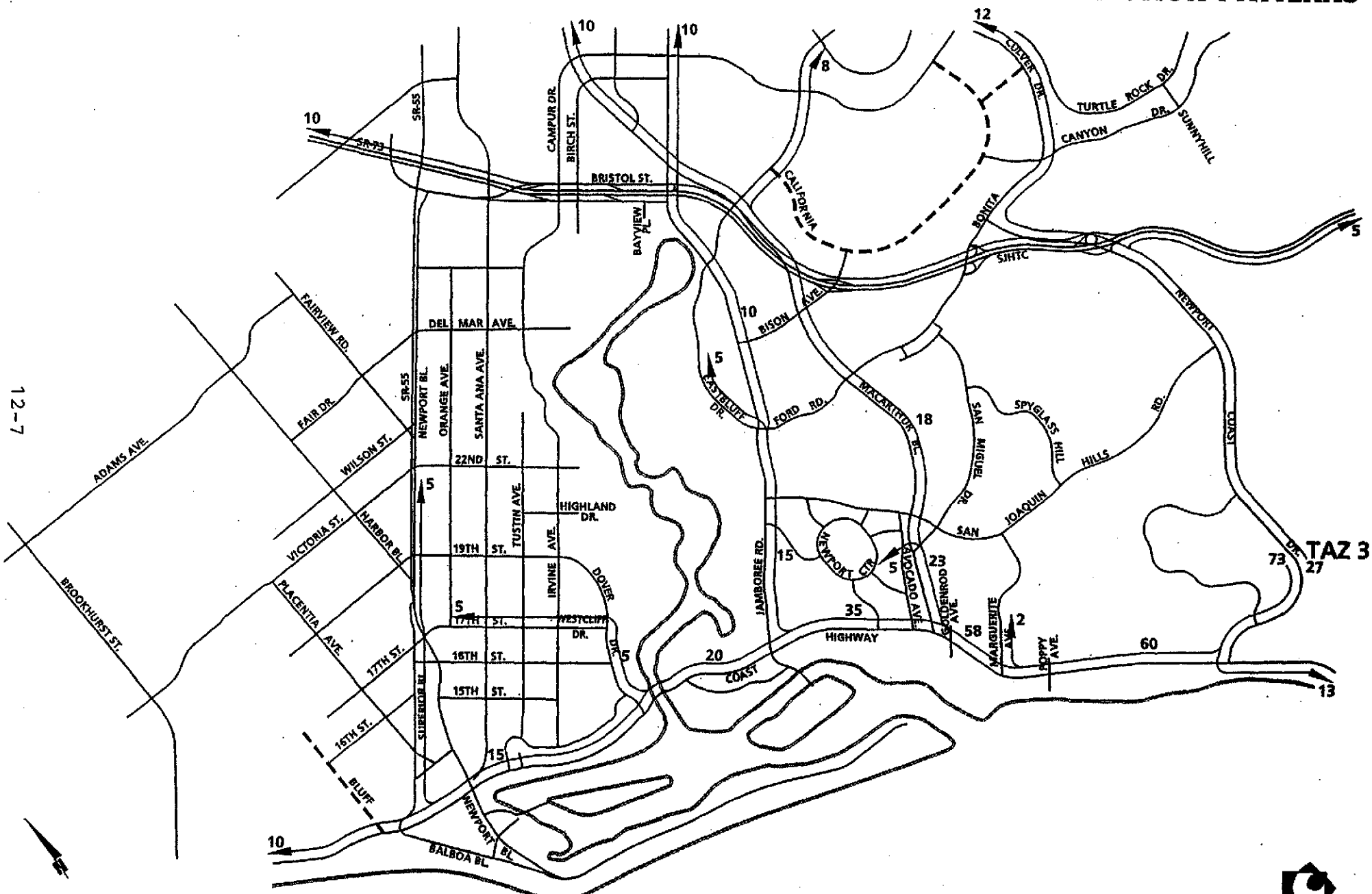





URBAN

EXHIBIT 12-C

# NEWPORT COAST TRAFFIC ANALYSIS ZONE 3
# TRIP DISTRIBUTION PATTERNS



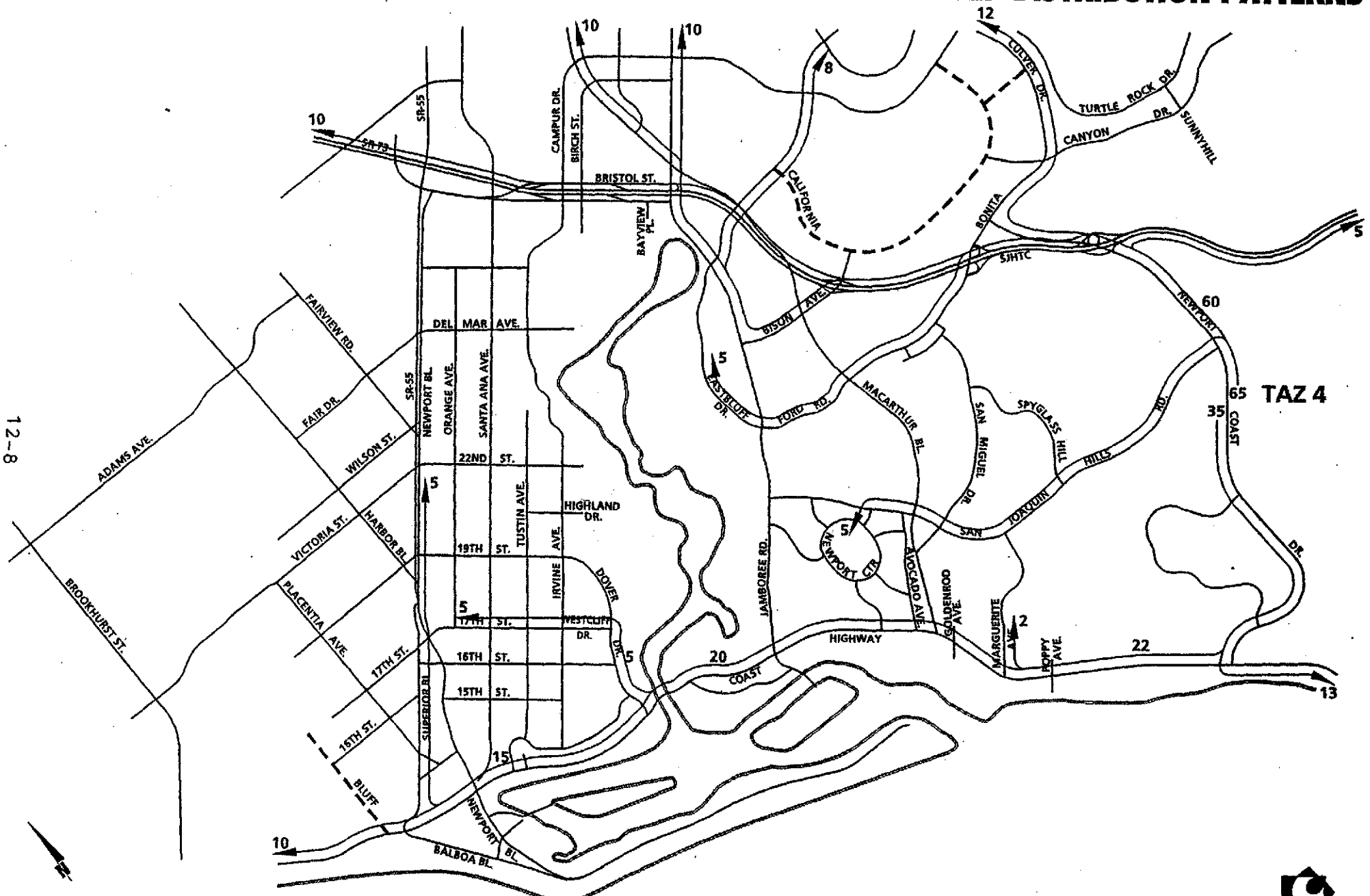





URBAN CROSSROADS

EXHIBIT 12-D

# NEWPORT COAST TRAFFIC ANALYSIS ZONE 4
# TRIP DISTRIBUTION PATTERNS








URBAN

**TABLE 13-1**

**TRIP GENERATION RATES[1]**

| LAND USE | UNITS[2] | PEAK HOUR | | | | DAILY |
|---|---|---|---|---|---|---|
| | | AM | | PM | | |
| | | IN | OUT | IN | OUT | |
| Multi Family Dwelling | DU | ~~0.80~~ 0.09 | 0.42 | 0.43 | 0.20 | 6.47 |
| Single Family Detached Residential | DU | 0.20 | 0.70 | 0.70 | 0.40 | 11.00 |
| Commercial | TSF | 0.60 | 0.50 | 1.90 | 2.00 | 45.00 |

[1] Source: City of Newport Beach Trip Generation Rates

[2] DU = Dwelling Units
TSF = Thousand Square Feet

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**TABLE 13-2**

**PROJECT TRIP GENERATION**

| TAZ | PLANNING AREA | LAND USE | QUANTITY | UNITS[1] | PEAK HOUR AM IN | PEAK HOUR AM OUT | PEAK HOUR PM IN | PEAK HOUR PM OUT | DAILY |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1A | Single Family Detached Residential | 93 | DU | 19 | 65 | 65 | 37 | 1,023 |
| | 2 | Single Family Detached Residential | 147 | DU | 29 | 103 | 103 | 59 | 1,617 |
| | 3 | Single Family Detached Residential | 138 | DU | 28 | 97 | 97 | 55 | 1,518 |
| | 4 | Single Family Detached Residential | 125 | DU | 25 | 88 | 88 | 50 | 1,375 |
| | 5 | Multi Family Dwelling | 100 | DU | 90 | 42 | 43 | 20 | 647 |
| | 7 | Multi Family Dwelling | 63 | DU | 57 | 26 | 27 | 13 | 408 |
| | 8 | Multi Family Dwelling | 112 | DU | 101 | 47 | 48 | 22 | 725 |
| | 9 | Multi Family Dwelling | 112 | DU | 101 | 47 | 48 | 22 | 725 |
| | 11 | Single Family Detached Residential | 323 | DU | 65 | 226 | 226 | 129 | 3,553 |
| | 12 | Commercial | 102.959 | TSF | 62 | 51 | 196 | 206 | 4,633 |
| | 12 | Single Family Detached Residential | 200 | DU | 34 | 98 | 94 | 72 | 1,620 |
| TOTAL FOR TAZ 1 | | | | | 611 | 890 | 1,035 | 685 | 17,844 |
| 2 | 21 | Single Family Detached Residential | 350 | DU | 70 | 245 | 245 | 140 | 3,850 |
| | 22 | Single Family Detached Residential | 705 | DU | 141 | 494 | 494 | 282 | 7,755 |
| TOTAL FOR TAZ 2 | | | | | 211 | 739 | 739 | 422 | 11,605 |
| 3 | 13 | Multi Family Dwelling | 347 | DU | 312 | 146 | 149 | 69 | 2,245 |
| | 14 | Single Family Detached Residential | 26 | DU | 5 | 18 | 18 | 10 | 286 |
| | 15 | Multi Family Dwelling | 547 | DU | 492 | 230 | 235 | 109 | 3,539 |
| TOTAL FOR TAZ 3 | | | | | 809 | 394 | 402 | 188 | 6,070 |
| TOTAL FOR ALL ZONES | | | | | 1,631 | 2,023 | 2,176 | 1,295 | 35,519 |

3398

REVISE USING REVISE MULTI-FAMILY RATE

* ASSUME 70% OF DU'S ARE OCCUPIED.

[1] DU = Dwelling Units
TSF = Thousand Square Feet

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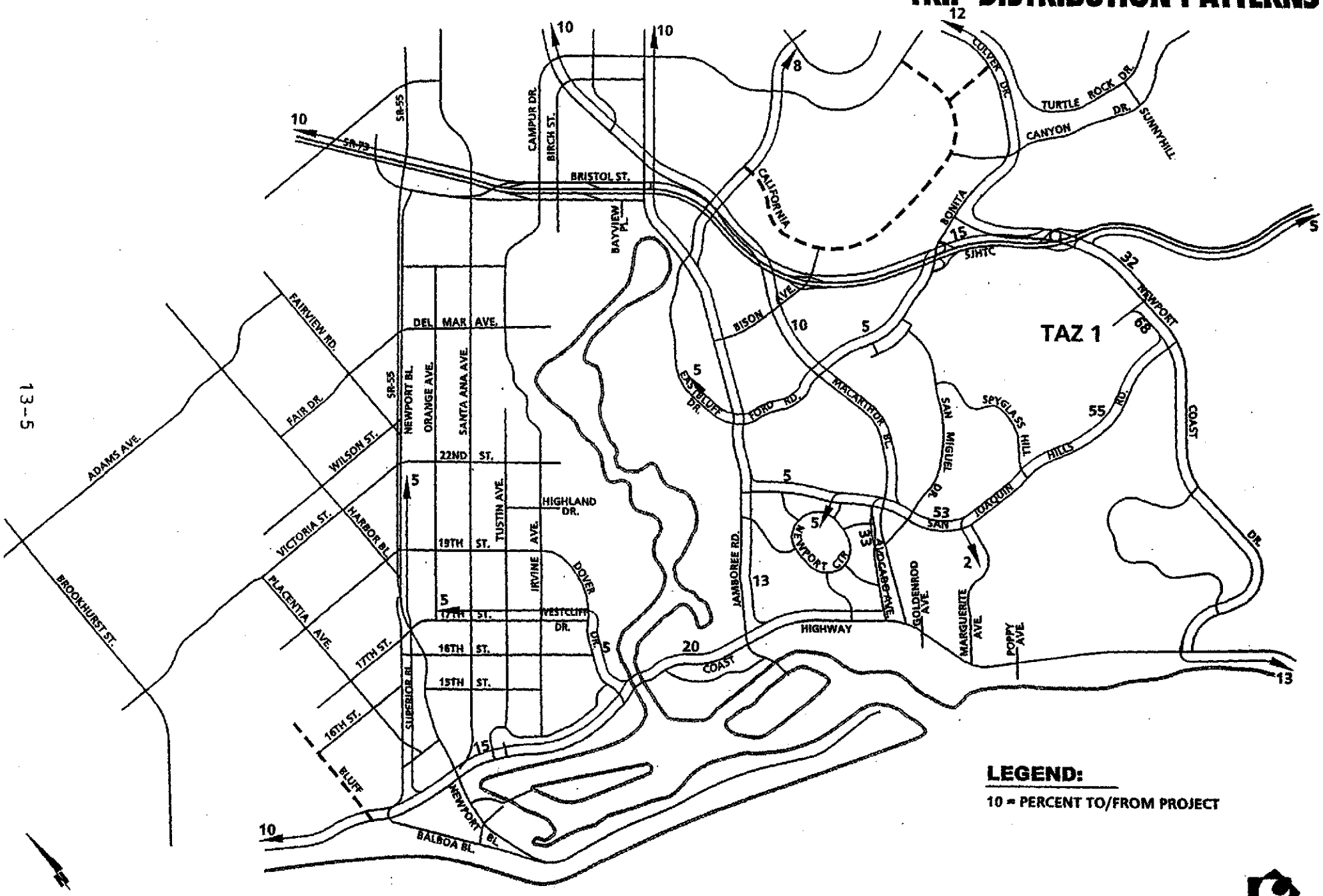
EXHIBIT 13-A

# NEWPORT RIDGE TRAFFIC ANALYSIS ZONE 1
# TRIP DISTRIBUTION PATTERNS




**LEGEND:**

10 = PERCENT TO/FROM PROJECT

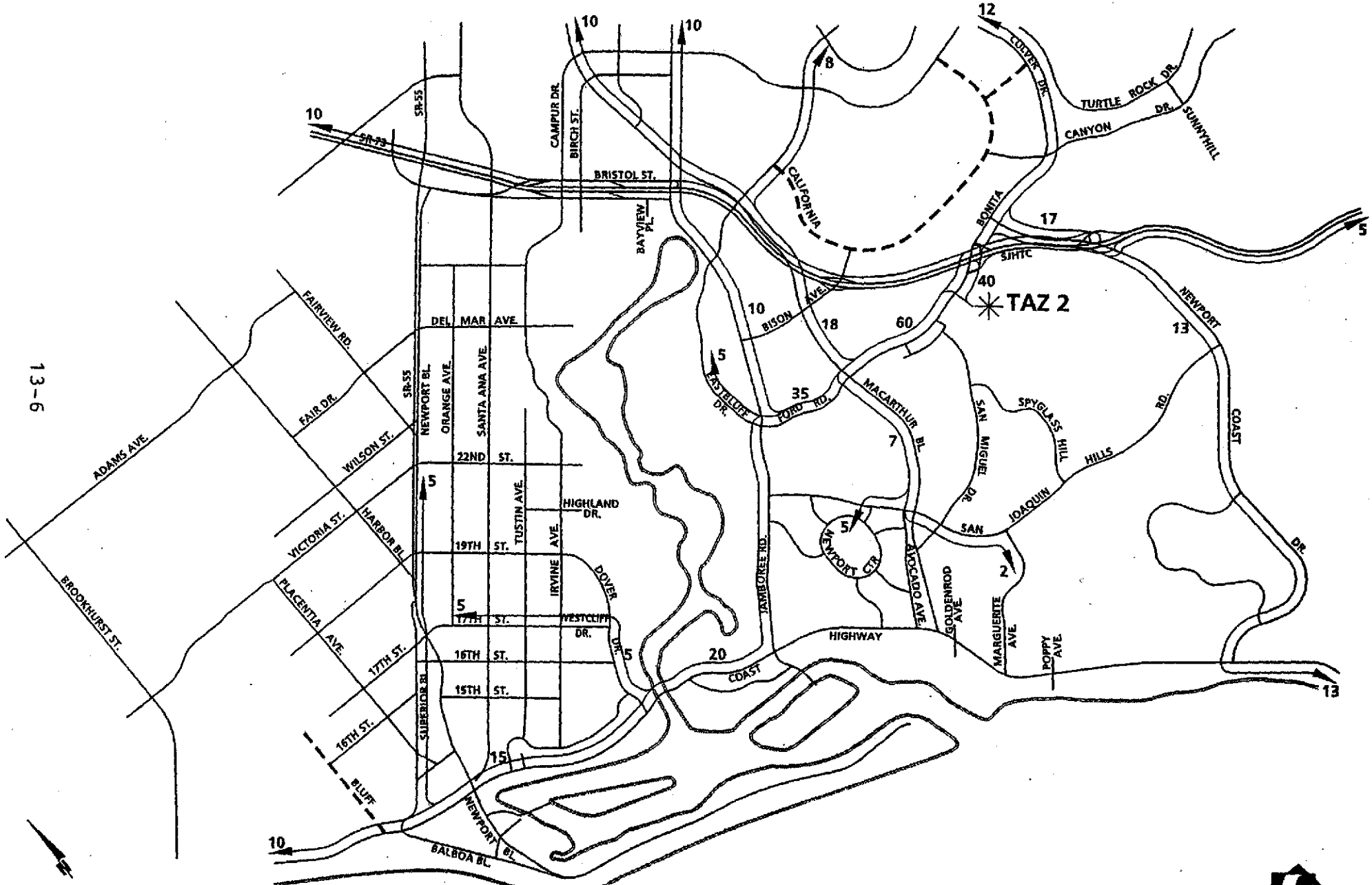




URBAN CROSSROADS

EXHIBIT 13-B

# NEWPORT RIDGE TRAFFIC ANALYSIS ZONE 2
# TRIP DISTRIBUTION PATTERNS








URBAN

EXHIBIT 13-C

# NEWPORT RIDGE TRAFFIC ANALYSIS ZONE 3
# TRIP DISTRIBUTION PATTERNS

URBAN CROSSROADS

**TABLE 16-1**

**TRIP GENERATION RATES[1]**

| LAND USE | UNITS[2] | PEAK HOUR | | | | DAILY |
|---|---|---|---|---|---|---|
| | | AM | | PM | | |
| | | IN | OUT | IN | OUT | |
| Apartments | DU | 0.09 | 0.42 | 0.43 | 0.20 | 6.47 |

[1] Source: City of Newport Beach Trip Generation Rates

[2] DU = Dwelling Units

U:\UcJobs\00636\Excel\[00636-02.xls]T 16-1

**TABLE 16-2**

**PROJECT TRIP GENERATION**

| LAND USE | UNITS[2] | PEAK HOUR | | | | DAILY |
|---|---|---|---|---|---|---|
| | | AM | | PM | | |
| | | IN | OUT | IN | OUT | |
| Apartments | DU | 39 | 183 | 187 | 87 | 2821 |

[2] DU = Dwelling Units

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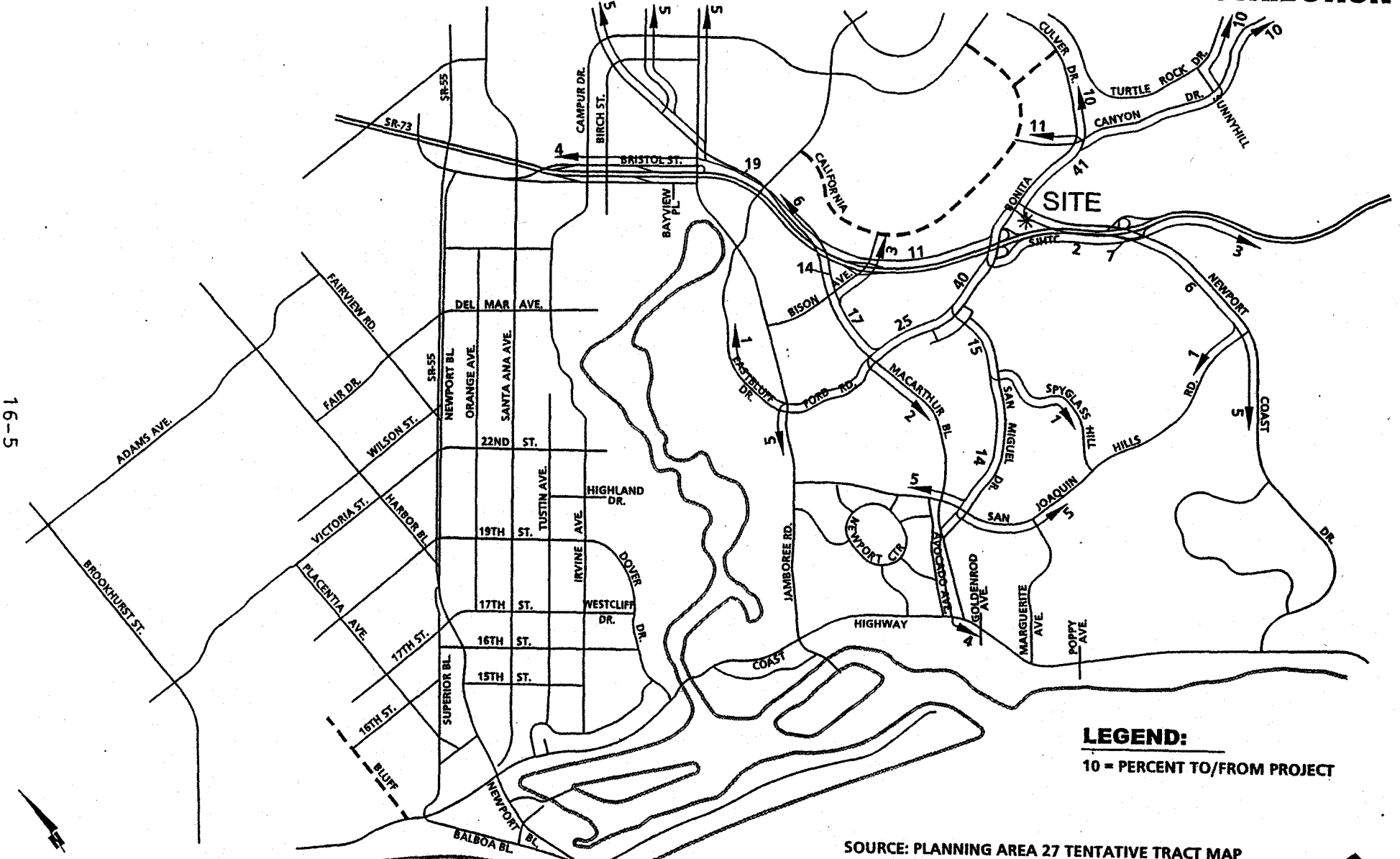
EXHIBIT 16-A

# BONITA CANYON - RESIDENTIAL TRIP DISTRIBUTION




SOURCE: PLANNING AREA 27 TENTATIVE TRACT MAP TRAFFIC STUDY, JUNE 2000





URBAN CROSSROADS

# APPENDIX F

## Explanation and Calculation of Intersection Capacity Utilization (ICU)

## EXPLANATION AND CALCULATION OF INTERSECTION CAPACITY UTILIZATION (ICU)

### Overview

The ability of a roadway to carry traffic is referred to as capacity. The capacity is usually greater between intersections and less at intersections because traffic flows continuously between them and only during the green phase at them. Capacity at intersections is best defined in terms of vehicles per lane per hour of green. If capacity is 1600 vehicles per lane per hour of green, and if the green phase is 50 percent of the cycle and there are three lanes, then the capacity is 1600 times 50 percent times 3 lanes, or 2400 vehicles per hour for that approach.

The technique used to compare the volume and capacity at an intersection is known as Intersection Capacity Utilization (ICU). ICU, usually expressed as a decimal, is the proportion of an hour required to provide sufficient capacity to accommodate all intersection traffic if all approaches operate at capacity. If an intersection is operating at 80 percent of capacity (i.e., an ICU of 80 percent), then 20 percent of the signal cycle is not used. The signal could show red on all indications 20 percent of the time and the signal would just accommodate approaching traffic.

ICU analysis consists of (a) determining the proportion of signal time needed to serve each conflicting movement of traffic, (b) summing the times for the movements, and (c) comparing the total time required to the total time available. For example, if for north-south traffic the northbound traffic is 1600 vehicles per hour, the southbound traffic is 1200 vehicles per hour, and the capacity of either direction is 3200 vehicles per hour, then the northbound traffic is critical and requires 1600/3200 or 50 percent of the signal time. If for east-west traffic, 30 percent of the signal time is required, then it can be seen that the ICU is 50 plus 30, or 80 percent. When left turn arrows (left turn phasing) exist, they are incorporated into the analysis. The critical movements are usually the heavy left turn movements and the opposing through movements.

The ICU technique is an ideal tool to quantify existing as well as future intersection operation. The impact of adding a lane can be quickly determined by examining the effect the lane has on the Intersection Capacity Utilization.

**ICU Worksheets That Follow This Discussion**

The ICU worksheet table contains the following information:

1. Peak hour turning movement volumes.
2. Number of lanes that serve each movement.
3. For right turn lanes, whether the lane is a free right turn lane, whether it has a right turn arrow, and the percent of right turns on red that are assumed.
4. Capacity assumed per lane.
5. Capacity available to serve each movement (number of lanes times capacity per lane).
6. Volume to capacity ratio for each movement.
7. Whether the movement's volume to capacity ratio is critical and adds to the ICU value.
8. The yellow time or clearance interval assumed.
9. Adjustments for right turn movements.
10. The ICU and LOS.

The ICU Worksheet also has two graphics on the same page. These two graphics show the following:

1. Peak hour turning movement volumes.
2. Number of lanes that serve each movement.

3. The approach and exit leg volumes.

4. The two-way leg volumes.

5. An estimate of daily traffic volumes that is fairly close to actual counts and is based strictly on the peak hour leg volumes multiplied by a factor.

6. Percent of daily traffic in peak hours.

7. Percent of peak hour leg volume that is inbound versus outbound.

A more detailed discussion of ICU and LOS follows.

**Level of Service (LOS)**

Level of Service is used to describe the quality of traffic flow. Levels of Service A to C operate quite well. Level of Service C is typically the standard to which rural roadways are designed.

Level of Service D is characterized by fairly restricted traffic flow. Level of Service D is the standard to which urban roadways are typically designed. Level of Service E is the maximum volume a facility can accommodate and will result in possible stoppages of momentary duration. Level of Service F occurs when a facility is overloaded and is characterized by stop-and-go traffic with stoppages of long duration.

A description of the various Levels of Service appears at the end of the ICU description, along with the relationship between ICU and Level of Service.

**Signalized and Unsignalized Intersections**

Although calculating an ICU value for an unsignalized intersection is invalid, the presumption is that a signal can be installed and the calculation shows whether the geometrics are capable of accommodating the expected volumes with a signal. A traffic signal becomes warranted before Level of Service D is reached for a signalized intersection.

## Signal Timing

The ICU calculation assumes that a signal is properly timed. It is possible to have an ICU well below 100 percent, yet have severe traffic congestion. This would occur if one or more movements is not getting sufficient green time to satisfy its demand, and excess green time exists on other movements. This is an operational problem that should be remedied.

## Lane Capacity

Capacity is often defined in terms of roadway width; however, standard lanes have approximately the same capacity whether they are 11 or 14 feet wide. Our data indicates a typical lane, whether a through lane or a left turn lane, has a capacity of approximately 1750 vehicles per hour of green time, with nearly all locations showing a capacity greater than 1600 vehicles per hour of green per lane. Right turn lanes have a slightly lower capacity; however 1600 vehicles per hour is a valid capacity assumption for right turn lanes.

This finding is published in the August, 1978 issue of ITE Journal in the article entitled, "Another Look at Signalized Intersection Capacity" by William Kunzman. A capacity of 1600 vehicles per hour per lane with no yellow time penalty, or 1700 vehicles per hour with a 3 or 5 percent yellow time penalty is reasonable.

## Yellow Time

The yellow time can either be assumed to be completely used and no penalty applied, or it can be assumed to be only partially usable. Total yellow time accounts for approximately 10 percent of a signal cycle, and a penalty of 3 to 5 percent is reasonable.

During peak hour traffic operation the yellow times are nearly completely used. If there is no left turn phasing, the left turn vehicles completely use the yellow time. Even if there is left turn phasing, the through traffic continues to enter the intersection on the yellow until just a split second before the red.

## Shared Lanes

Shared lanes occur in many locations. A shared lane is often found at the end of an off ramp where the ramp forms an intersection with the cross street. Often at a diamond interchange off ramp, there are three lanes. In the case of a diamond interchange, the middle lane is sometimes shared, and the driver can turn left, go through, or turn right from that lane.

If one assumes a three lane off ramp as described above, and if one assumes that each lane has 1600 capacity, and if one assumes that there are 1000 left turns per hour, 500 right turns per hour, and 100 through vehicles per hour, then how should one assume that the three lanes operate. There are three ways that it is done.

One way is to just assume that all 1600 vehicles (1000 plus 500 plus 100) are served simultaneously by three lanes. When this is done, the capacity is 3 times 1600 or 4800, and the amount of green time needed to serve the ramp is 1600 vehicles divided by 4800 capacity or 33.3 percent. This assumption effectively assumes perfect lane distribution between the three lanes that is not realistic. It also means a left turn can be made from the right lane.

Another way is to equally split the capacity of a shared lane and in this case to assume there are 1.33 left turn lanes, 1.33 right turn lanes, and 0.33 through lanes. With this assumption, the critical movement is the left turns and the 1000 left turns are served by a capacity of 1.33 times 1600, or 2133. The volume to capacity ratio of the critical move is 1000 divided by 2133 or 46.9 percent.

The first method results in a critical move of 33.3 percent and the second method results in a critical move of 46.9 percent. Neither is very accurate, and the difference in the calculated Level of Service will be approximately 1.5 Levels of Service (one Level of Service is 10 percent).

The way Kunzman Associates does it is to assign fractional lanes in a reasonable way. In this example, it would be assumed that there is 1.1 right turn lanes, 0.2 through lanes, and 1.7 left turn lanes. The volume to capacity ratios for each movement would be 31.3 percent for the through traffic, 28.4 percent for the right turn movement, and 36.8 percent for the

left turn movement. The critical movement would be the 36.8 percent for the left turns.

**Right Turn on Red**

Kunzman Associates' software treats right turn lanes in one of five different ways. Each right turn lane is classified into one of five cases. The five cases are (1) free right turn lane, (2) right turn lane with separate right turn arrow, (3) standard right turn lane with no right turns on red allowed, (4) standard right turn lane with a certain percentage of right turns on red allowed, and (5) separate right turn arrow and a certain percentage of right turns on red allowed.

**Free Right Turn Lane**

If it is a free right turn lane, then it is given a capacity of one full lane with continuous or 100 percent green time. A free right turn lane occurs when there is a separate approach lane for right turning vehicles, there is a separate departure lane for the right turning vehicles after they turn and are exiting the intersection, and the through cross street traffic does not interfere with the vehicles after they turn right.

**Separate Right Turn Arrow**

If there is a separate right turn arrow, then it is assumed that vehicles are given a green indication and can proceed on what is known as the left turn overlap.

The left turn overlap for a northbound right turn is the westbound left turn. When the left turn overlap has a green indication, the right turn lane is also given a green arrow indication. Thus, if there is a northbound right turn arrow, then it can be turned green for the period of time that the westbound left turns are proceeding.

If there are more right turns than can be accommodated during the northbound through green and the time that the northbound right turn arrow is on, then an adjustment is made to the ICU to account for the green time that needs to be added to the northbound through green to accommodate the northbound right turns.

**Standard Right Turn Lane, No Right Turns on Red**

A standard right turn lane, with no right turn on red assumed, proceeds only when there is a green indication displayed for the adjacent through movement. If additional green time is needed above that amount of time, then in the ICU calculation a right turn adjustment green time is added above the green time that is needed to serve the adjacent through movement.

**Standard Right Turn Lane, With Right Turns on Red**

A standard right turn lane with say 20 percent of the right turns allowed to turn right on a red indication is calculated the same as the standard right turn case where there is no right turn on red allowed, except that the right turn adjustment is reduced to account for the 20 percent of the right turning vehicles that can logically turn right on a red light. The right turns on red are never allowed to exceed the time the overlap left turns take plus the unused part of the green cycle that the cross street traffic moving from left to right has.

As an example of how 20 percent of the cars are allowed to turn right on a red indication, assume that the northbound right turn volume needs 40 percent of the signal cycle to be satisfied. To allow 20 percent of the northbound right turns to turn right on red, then during 8 percent of the signal cycle (40 percent of signal cycle times 20 percent that can turn right on red) right turns on red will be allowed if it is feasible.

For this example, assume that 15 percent of the signal cycle is green for the northbound through traffic, and that means that 15 percent of the signal cycle is available to satisfy northbound right turns. After the northbound through traffic has received its green, 25 percent of the signal cycle is still needed to satisfy the northbound right turns (40 percent of the signal cycle minus the 15 percent of the signal cycle that the northbound through used).

Assume that the westbound left turns require a green time of 6 percent of the signal cycle. This 6 percent of the signal cycle is used by northbound right turns on red. After accounting for the northbound right turns that occur on the westbound overlap left turn, 19 percent of the signal cycle is still needed for the northbound right turns (25 percent of

the cycle was needed after the northbound through green time was accounted for [see above paragraph], and 6 percent was served during the westbound left turn overlap). Also, at this point 6 percent of the signal cycle has been used for northbound right turns on red, and still 2 percent more of the right turns will be allowed to occur on the red if there is unused eastbound through green time.

For purpose of this example, assume that the westbound through green is critical, and that 15 percent of the signal cycle is unused by eastbound through traffic. Thus, 2 percent more of the signal cycle can be used by the northbound right turns on red since there is 15 seconds of unused green time being given to the eastbound through traffic.

At this point, 8 percent of the signal cycle was available to serve northbound right turning vehicles on red, and 15 percent of the signal cycle was available to serve right turning vehicles on the northbound through green. So 23 percent of the signal cycle has been available for northbound right turns.

Because 40 percent of the signal cycle is needed to serve northbound right turns, there is still a need for 17 percent more of the signal cycle to be available for northbound right turns. What this means is the northbound through traffic green time is increased by 17 percent of the cycle length to serve the unserved right turn volume, and a 17 percent adjustment is added to the ICU to account for the northbound right turns that were not served on the northbound through green time or when right turns on red were assumed.

**Separate Right Turn Arrow, With Right Turns on Red**

A right turn lane with a separate right turn arrow, plus a certain percentage of right turns allowed on red is calculated the same way as a standard right turn lane with a certain percentage of right turns allowed on red, except the turns which occur on the right turn arrow are not counted as part of the percentage of right turns that occur on red.

**Critical Lane Method**

ICU parallels another calculation procedure known as the Critical Lane Method with one exception. Critical Lane Method dimensions capacity in terms of standardized vehicles per hour per lane. A Critical Lane

Method result of 800 vehicles per hour means that the intersection operates as though 800 vehicles were using a single lane continuously. If one assumes a lane capacity of 1600 vehicles per hour, then a Critical Lane Method calculation resulting in 800 vehicles per hour is the same as an ICU calculation of 50 percent since 800/1600 is 50 percent. It is our opinion that the Critical Lane Method is inferior to the ICU method simply because a statement such as "The Critical Lane Method value is 800 vehicles per hour" means little to most persons, whereas a statement such as "The Intersection Capacity Utilization is 50 percent" communicates clearly. Critical Lane Method results directly correspond to ICU results. The correspondence is as follows, assuming a lane capacity of 1600 vehicles per hour and no clearance interval.

| Critical Lane Method Result | ICU Result |
|---|---|
| 800 vehicles per hour | 50 percent |
| 960 vehicles per hour | 60 percent |
| 1120 vehicles per hour | 70 percent |
| 1280 vehicles per hour | 80 percent |
| 1440 vehicles per hour | 90 percent |
| 1600 vehicles per hour | 100 percent |
| 1760 vehicles per hour | 110 percent |

# INTERSECTION CAPACITY UTILIZATION (ICU)
# LEVEL OF SERVICE (LOS) DESCRIPTION[1]

| Level of Service | Description | Volume to Capacity Ratio |
|---|---|---|
| A | Level of Service A occurs when progression is extremely favorable and vehicles arrive during the green phase. Most vehicles do not stop at all. Short cycle lengths may also contribute to low delay. | 0.600 and below |
| B | Level of Service B generally occurs with good progression and/or short cycle lengths. More vehicles stop than for LOS A, causing higher levels of average delay. | 0.601 to 0.700 |
| C | Level of Service C generally results when there is fair progression and/or longer cycle lengths. Individual cycle failures may begin to appear in this level. The number of vehicles stopping is significant at this level, although many still pass through the intersection without stopping. | 0.701 to 0.800 |
| D | Level of Service D generally results in noticeable congestion. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or high volume to capacity ratios. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable. | 0.801 to 0.900 |
| E | Level of Service E is considered to be the limit of acceptable delay. These high delay values generally indicate poor progression, long cycle lengths, and high volume to capacity ratios. Individual cycle failures are frequent. | 0.901 to 1.000 |
| F | Level of Service F is considered to be unacceptable to most drivers. This condition often occurs when oversaturation, i.e., when arrival flow rates exceed the capacity of the intersection. It may also occur at high volume to capacity ratios below 1.00 with many individual cycle failures. Poor progression and long cycle lengths may also be major contributing causes to such delay levels. | 1.001 and up |

[1]Source: Highway Capacity Manual Special Report 209, Transportation Research Board, National Research Council Washington D.C., 2000.

# Existing + Approved Projects

# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

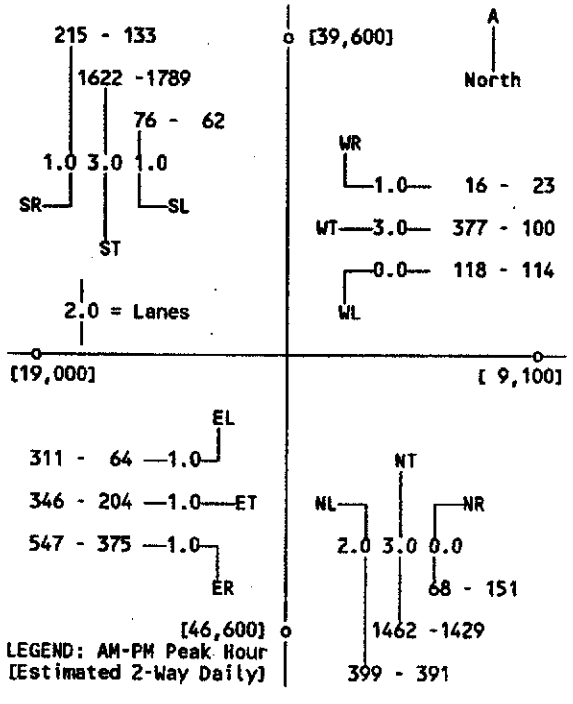
INTERSECTION: JAMBOREE ROAD (NS) and EASTBLUFF DRIVE/FORD ROAD (EW)
LAND USE: EXISTING + APPROVED PROJECTS

COUNT DATE: 01-01-04
GEOMETRICS: Existing

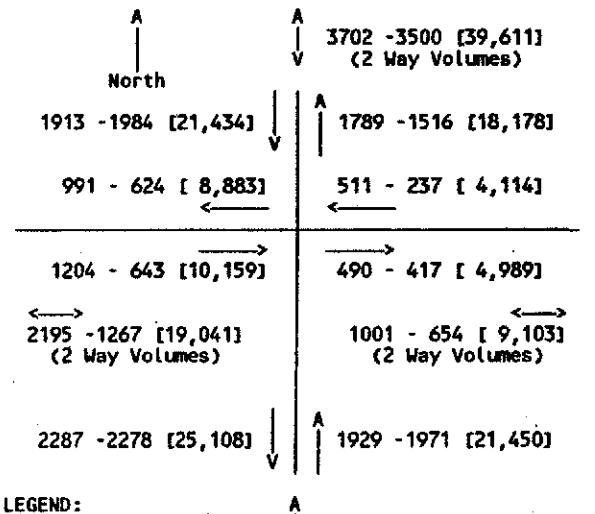
| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 2 | 3200 | 399 | 388 | 0 | 3 | 399 | 391 | 0.125* | 0.122* |
| Northbound Through | 3 | 4800 | 1388 | 1324 | 74 | 105 | 1462 | 1429 | 0.319 | 0.329 |
| Northbound Right | 0 | 0 | 67 | 146 | 1 | 5 | 68 | 151 | 0.000 | 0.000 |
| Southbound Left | 1 | 1600 | 76 | 61 | 0 | 1 | 76 | 62 | 0.048 | 0.039 |
| Southbound Through | 3 | 4800 | 1517 | 1694 | 105 | 95 | 1622 | 1789 | 0.338* | 0.373* |
| Southbound Right | 1 | 1600 | 215 | 133 | 0 | 0 | 215 | 133 | 0.134 | 0.083 |
| Eastbound Left | 1 | 1600 | 311 | 64 | 0 | 0 | 311 | 64 | 0.194 | 0.040 |
| Eastbound Through | 1 | 1600 | 346 | 204 | 0 | 0 | 346 | 204 | 0.216* | 0.128* |
| Eastbound Right | Free 1 | 1600 | 546 | 373 | 1 | 2 | 547 | 375 | 0.342 | 0.234 |
| Westbound Left | 0 | 0 | 116 | 110 | 2 | 4 | 118 | 114 | 0.000 | 0.000 |
| Westbound Through | 3 | 4800 | 377 | 100 | 0 | 0 | 377 | 100 | 0.103* | 0.045* |
| Westbound Right | 1 | 1600 | 15 | 23 | 1 | 0 | 16 | 23 | 0.010 | 0.014 |
| Northbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Clearance Interval | | | | | | | | | 0.000* | 0.000* |
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) | | | | | | | | | 0.78 | 0.67 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | | | | | | | | | C | B |

None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted.

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




PLOT OF INTERSECTION LEG VOLUMES




| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 52 - 57 | 46 - 46 | 51 - 36 | 55 - 51 |
| % of Daily in Peak Hour (AM-PM) | 9 - 9 | 9 - 9 | 11 - 7 | 12 - 7 |

# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

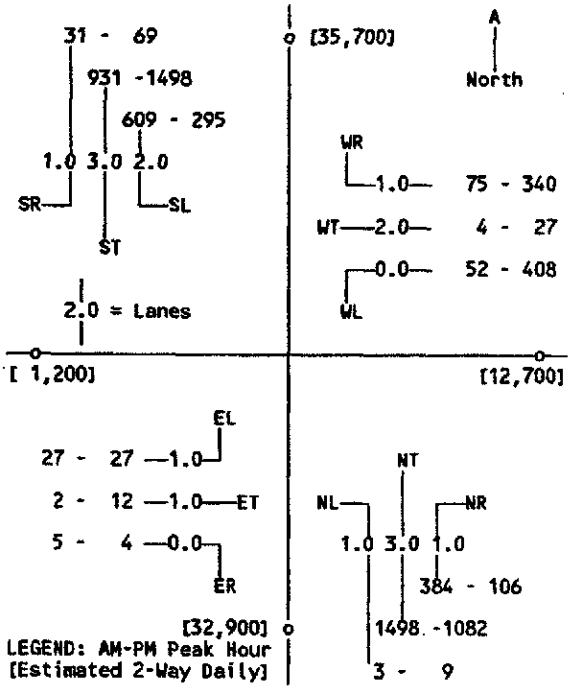
INTERSECTION: JAMBOREE ROAD (NS) and SANTA BARBARA DRIVE (EW)
LAND USE: EXISTING + APPROVED PROJECTS

COUNT DATE: 01-01-04
GEOMETRICS: Existing

| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 1 | 1600 | 3 | 9 | 0 | 0 | 3 | 9 | 0.002 | 0.006* |
| Northbound Through | 3 | 4800 | 1426 | 990 | 72 | 92 | 1498 | 1082 | 0.312* | 0.225 |
| Northbound Right | 1 | 1600 | 381 | 104 | 3 | 2 | 384 | 106 | 0.240 | 0.066 |
| Southbound Left | 2 | 3200 | 608 | 291 | 1 | 4 | 609 | 295 | 0.190* | 0.092 |
| Southbound Through | 3 | 4800 | 819 | 1415 | 112 | 83 | 931 | 1498 | 0.194 | 0.312* |
| Southbound Right | 1 | 1600 | 30 | 63 | 1 | 6 | 31 | 69 | 0.019 | 0.043 |
| Eastbound Left | 1 | 1600 | 21 | 25 | 6 | 2 | 27 | 27 | 0.017* | 0.017* |
| Eastbound Through | 1 | 1600 | 2 | 11 | 0 | 1 | 2 | 12 | 0.004 | 0.010 |
| Eastbound Right | 0 | 0 | 5 | 4 | 0 | 0 | 5 | 4 | 0.000 | 0.000 |
| Westbound Left | 0 | 0 | 50 | 406 | 2 | 2 | 52 | 408 | 0.000 | 0.000 |
| Westbound Through | 2 | 3200 | 4 | 26 | 0 | 1 | 4 | 27 | 0.018 | 0.136 |
| Westbound Right | 1 | 1600 | 71 | 339 | 4 | 1 | 75 | 340 | 0.047* | 0.213* |
| Northbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Clearance Interval | | | | | | | | | 0.000* | 0.000* |
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) | | | | | | | | | 0.57 | 0.55 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | | | | | | | | | A | A |

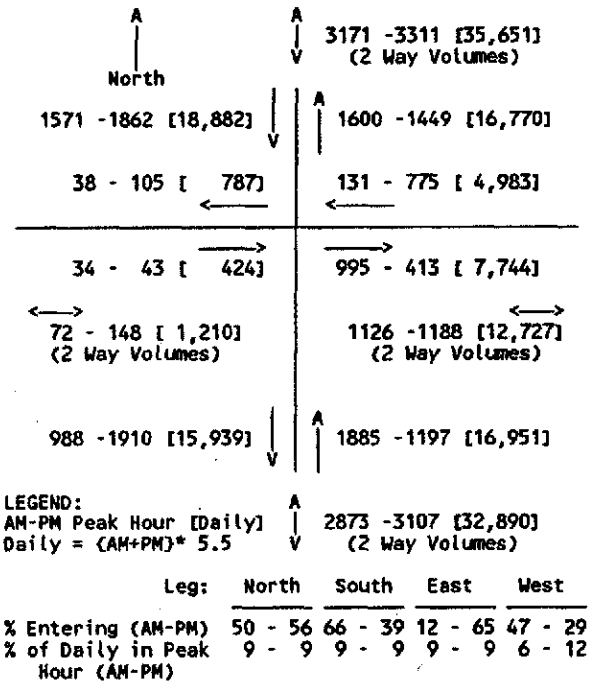
None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted.

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




LEGEND: AM-PM Peak Hour
[Estimated 2-Way Daily]

PLOT OF INTERSECTION LEG VOLUMES




LEGEND:
AM-PM Peak Hour [Daily]
Daily = (AM+PM)* 5.5

2873 -3107 [32,890]
(2 Way Volumes)

| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 50 - 56 | 66 - 39 | 12 - 65 | 47 - 29 |
| % of Daily in Peak Hour (AM-PM) | 9 - 9 | 9 - 9 | 9 - 9 | 6 - 12 |

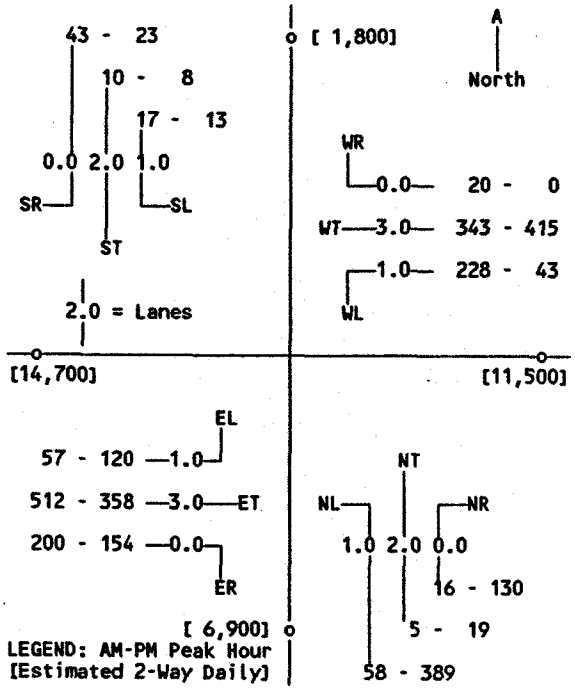
# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

INTERSECTION: SANTA CRUZ DRIVE (NS) and SAN JOAQUIN HILLS ROAD (EW) — COUNT DATE: 01-01-04
LAND USE: EXISTING + APPROVED PROJECTS — GEOMETRICS: Existing

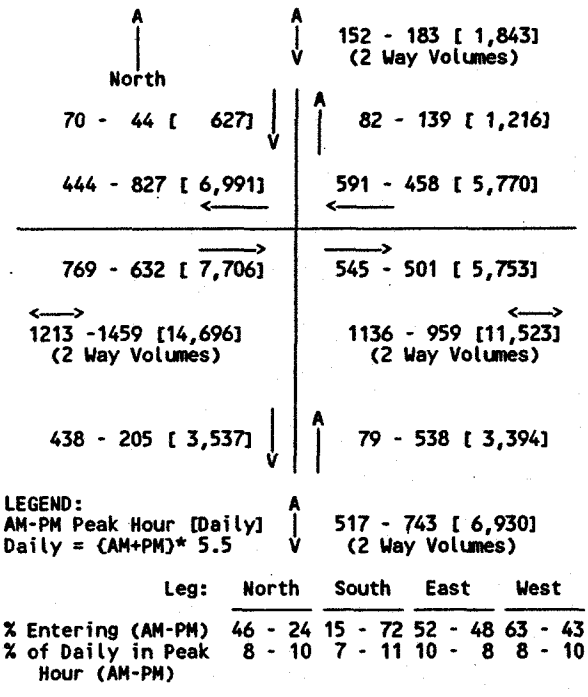
| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 1 | 1600 | 57 | 389 | 1 | 0 | 58 | 389 | 0.036* | 0.243* |
| Northbound Through | 2 | 3200 | 5 | 19 | 0 | 0 | 5 | 19 | 0.007 | 0.047 |
| Northbound Right | 0 | 0 | 15 | 130 | 1 | 0 | 16 | 130 | 0.000 | 0.000 |
| Southbound Left | 1 | 1600 | 17 | 12 | 0 | 1 | 17 | 13 | 0.011 | 0.008 |
| Southbound Through | 2 | 3200 | 9 | 8 | 1 | 0 | 10 | 8 | 0.017* | 0.010* |
| Southbound Right | 0 | 0 | 43 | 23 | 0 | 0 | 43 | 23 | 0.000 | 0.000 |
| Eastbound Left | 1 | 1600 | 57 | 120 | 0 | 0 | 57 | 120 | 0.036 | 0.075* |
| Eastbound Through | 3 | 4800 | 511 | 358 | 1 | 0 | 512 | 358 | 0.148* | 0.107 |
| Eastbound Right | 0 | 0 | 200 | 153 | 0 | 1 | 200 | 154 | 0.000 | 0.000 |
| Westbound Left | 1 | 1600 | 227 | 43 | 1 | 0 | 228 | 43 | 0.143* | 0.027 |
| Westbound Through | 3 | 4800 | 343 | 414 | 0 | 1 | 343 | 415 | 0.076 | 0.086* |
| Westbound Right | 0 | 0 | 20 | 0 | 0 | 0 | 20 | 0 | 0.000 | 0.000 |
| Northbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Clearance Interval | | | | | | | | | 0.000* | 0.000* |
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) ——→ | | | | | | | | | 0.34 | 0.41 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | | | | | | | | | A | A |

None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted.

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




PLOT OF INTERSECTION LEG VOLUMES




| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 46 - 24 | 15 - 72 | 52 - 48 | 63 - 43 |
| % of Daily in Peak Hour (AM-PM) | 8 - 10 | 7 - 11 | 10 - 8 | 8 - 10 |

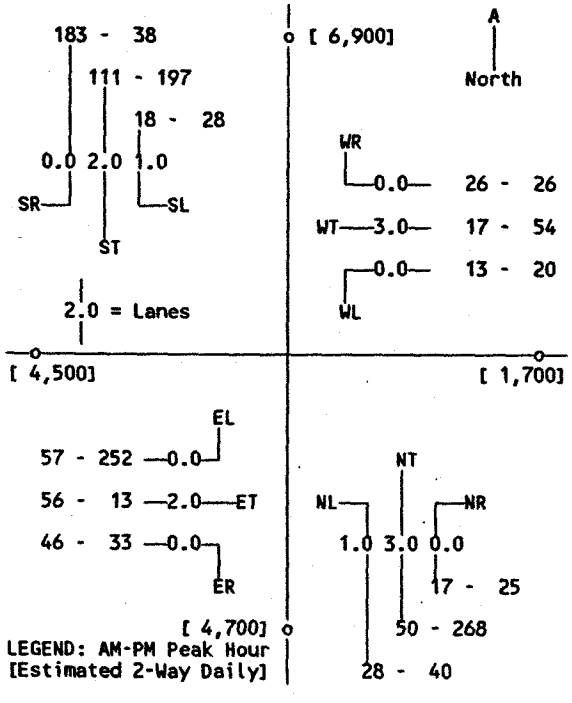
# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

INTERSECTION: SANTA CRUZ DRIVE (NS) and SAN CLEMENTE DRIVE (EW) — COUNT DATE: 01-01-04
LAND USE: EXISTING + APPROVED PROJECTS — GEOMETRICS: Existing

| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 1 | 1600 | 28 | 40 | 0 | 0 | 28 | 40 | 0.018* | 0.025* |
| Northbound Through | 3 | 4800 | 50 | 268 | 0 | 0 | 50 | 268 | 0.014 | 0.061 |
| Northbound Right | 0 | 0 | 17 | 25 | 0 | 0 | 17 | 25 | 0.000 | 0.000 |
| Southbound Left | 1 | 1600 | 18 | 28 | 0 | 0 | 18 | 28 | 0.011 | 0.018 |
| Southbound Through | 2 | 3200 | 111 | 197 | 0 | 0 | 111 | 197 | 0.092* | 0.073* |
| Southbound Right | 0 | 0 | 183 | 38 | 0 | 0 | 183 | 38 | 0.000 | 0.000 |
| Eastbound Left | 0 | 0 | 57 | 252 | 0 | 0 | 57 | 252 | 0.000 | 0.000 |
| Eastbound Through | 2 | 3200 | 56 | 13 | 0 | 0 | 56 | 13 | 0.050* | 0.093* |
| Eastbound Right | 0 | 0 | 46 | 33 | 0 | 0 | 46 | 33 | 0.000 | 0.000 |
| Westbound Left | 0 | 0 | 13 | 20 | 0 | 0 | 13 | 20 | 0.000* | 0.000* |
| Westbound Through | 3 | 4800 | 17 | 54 | 0 | 0 | 17 | 54 | 0.012 | 0.021 |
| Westbound Right | 0 | 0 | 26 | 26 | 0 | 0 | 26 | 26 | 0.000 | 0.000 |
| Northbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Clearance Interval | | | | | | | | | 0.000* | 0.000* |
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) | | | | | | | | | 0.16 | 0.19 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | | | | | | | | | A | A |

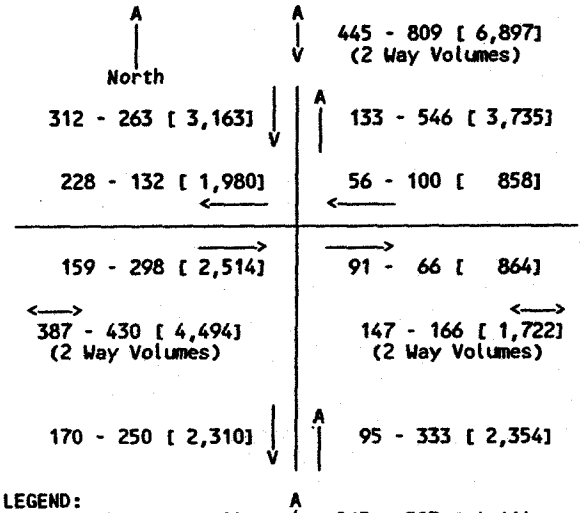
None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted.

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




LEGEND: AM-PM Peak Hour
[Estimated 2-Way Daily]

PLOT OF INTERSECTION LEG VOLUMES




LEGEND:
AM-PM Peak Hour [Daily] — 265 - 583 [ 4,664]
Daily = (AM+PM)* 5.5 — (2 Way Volumes)

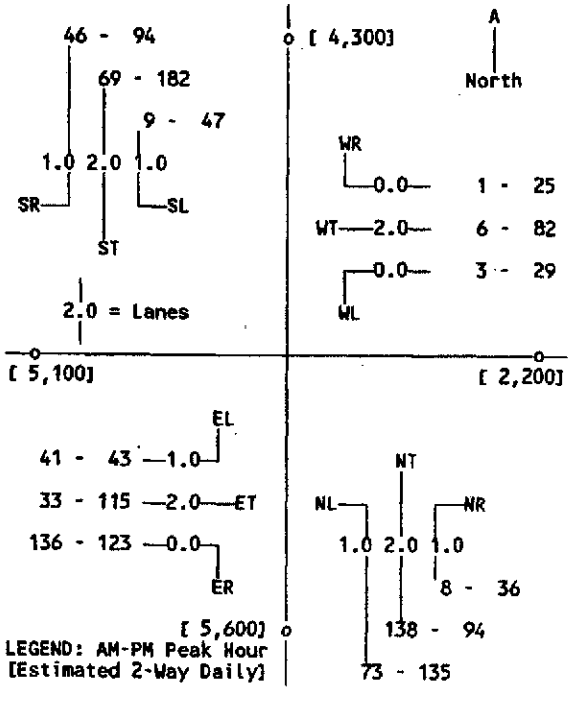
| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 70 - 33 | 36 - 57 | 38 - 60 | 41 - 69 |
| % of Daily in Peak Hour (AM-PM) | 6 - 12 | 6 - 13 | 9 - 10 | 9 - 10 |

# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

INTERSECTION: NEWPORT CENTER DRIVE (NS) and SANTA BARBARA DRIVE (EW) — COUNT DATE: 01-01-04
LAND USE: EXISTING + APPROVED PROJECTS — GEOMETRICS: Existing

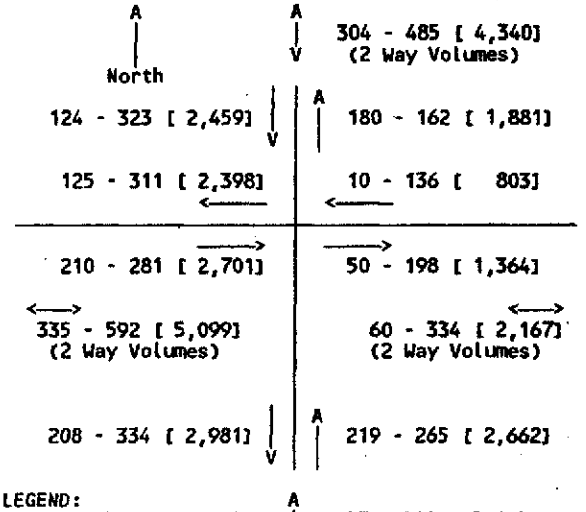
| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 1 | 1600 | 73 | 135 | 0 | 0 | 73 | 135 | 0.046* | 0.084* |
| Northbound Through | 2 | 3200 | 138 | 94 | 0 | 0 | 138 | 94 | 0.043 | 0.029 |
| Northbound Right | 1 | 1600 | 8 | 36 | 0 | 0 | 8 | 36 | 0.005 | 0.023 |
| Southbound Left | 1 | 1600 | 9 | 47 | 0 | 0 | 9 | 47 | 0.006 | 0.029 |
| Southbound Through | 2 | 3200 | 69 | 182 | 0 | 0 | 69 | 182 | 0.022* | 0.057* |
| Southbound Right | 1 | 1600 | 46 | 94 | 0 | 0 | 46 | 94 | 0.029 | 0.059 |
| Eastbound Left | 1 | 1600 | 41 | 43 | 0 | 0 | 41 | 43 | 0.026 | 0.027* |
| Eastbound Through | 2 | 3200 | 33 | 115 | 0 | 0 | 33 | 115 | 0.053* | 0.074 |
| Eastbound Right | 0 | 0 | 136 | 123 | 0 | 0 | 136 | 123 | 0.000 | 0.000 |
| Westbound Left | 0 | 0 | 3 | 29 | 0 | 0 | 3 | 29 | 0.000* | 0.000 |
| Westbound Through | 2 | 3200 | 6 | 82 | 0 | 0 | 6 | 82 | 0.003 | 0.043* |
| Westbound Right | 0 | 0 | 1 | 25 | 0 | 0 | 1 | 25 | 0.000 | 0.000 |
| Northbound Right Turn Adjustment | | | None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted. | | | | | | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Clearance Interval | | | | | | | | | 0.000* | 0.000* |
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) ——→ | | | | | | | | | 0.12 | 0.21 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | | | | | | | | | A | A |

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




LEGEND: AM-PM Peak Hour
[Estimated 2-Way Daily]

PLOT OF INTERSECTION LEG VOLUMES




LEGEND:
AM-PM Peak Hour [Daily]
Daily = (AM+PM)* 5.5

| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 41 - 67 | 51 - 44 | 17 - 41 | 63 - 47 |
| % of Daily in Peak Hour (AM-PM) | 7 - 11 | 8 - 11 | 3 - 15 | 7 - 12 |

Kunzman Associates

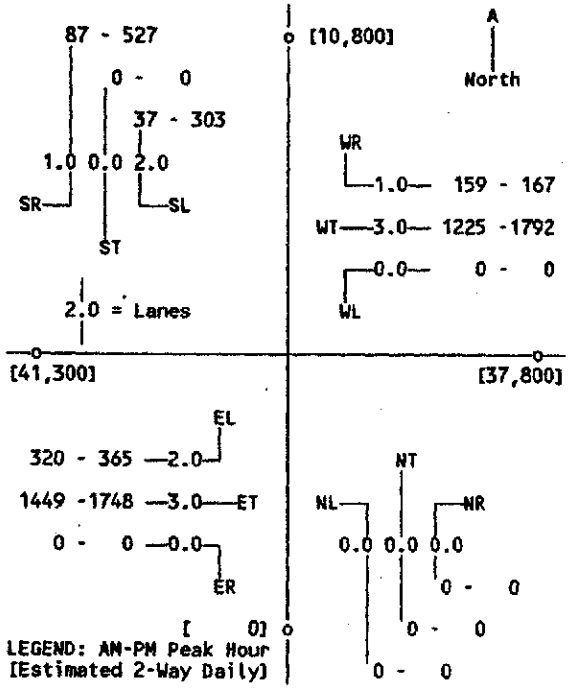
# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

INTERSECTION: NEWPORT CENTER DRIVE (NS) and COAST HIGHWAY (EW) — COUNT DATE: 01-01-04
LAND USE: EXISTING + APPROVED PROJECTS — GEOMETRICS: Existing

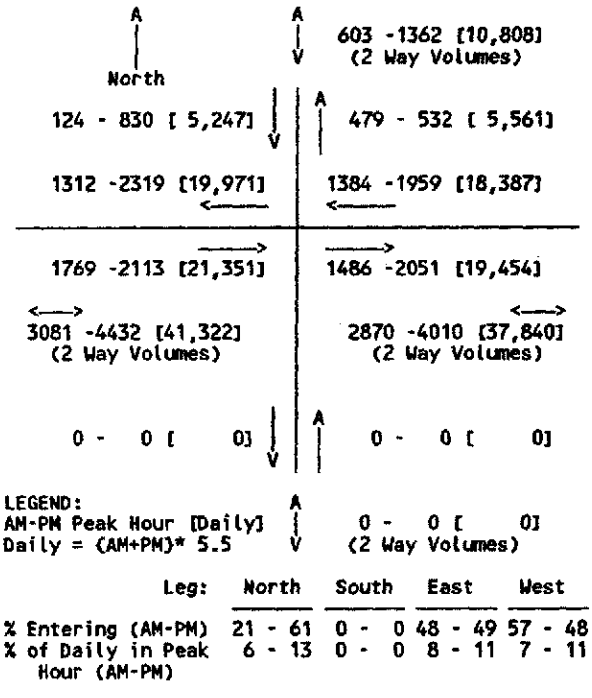
| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000 | 0.000 |
| Northbound Through | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000* | 0.000* |
| Northbound Right | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000 | 0.000 |
| Southbound Left | 2 | 3200 | 37 | 300 | 0 | 3 | 37 | 303 | 0.012* | 0.095* |
| Southbound Through | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000 | 0.000 |
| Southbound Right | Free 1 | 1600 | 78 | 496 | 9 | 31 | 87 | 527 | 0.054 | 0.329 |
| Eastbound Left | 2 | 3200 | 315 | 352 | 5 | 13 | 320 | 365 | 0.100* | 0.114* |
| Eastbound Through | 3 | 4800 | 1428 | 1714 | 21 | 34 | 1449 | 1748 | 0.302 | 0.364 |
| Eastbound Right | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000 | 0.000 |
| Westbound Left | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000 | 0.000 |
| Westbound Through | 3 | 4800 | 1194 | 1774 | 31 | 18 | 1225 | 1792 | 0.255* | 0.373* |
| Westbound Right | Free 1 | 1600 | 158 | 161 | 1 | 6 | 159 | 167 | 0.099 | 0.104 |
| Northbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Clearance Interval | | | | | | | | | 0.000* | 0.000* |
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) | | | | | | | | | 0.37 | 0.58 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | | | | | | | | | A | A |

None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted.

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




PLOT OF INTERSECTION LEG VOLUMES




| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 21 - 61 | 0 - 0 | 48 - 49 | 57 - 48 |
| % of Daily in Peak Hour (AM-PM) | 6 - 13 | 0 - 0 | 8 - 11 | 7 - 11 |

# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

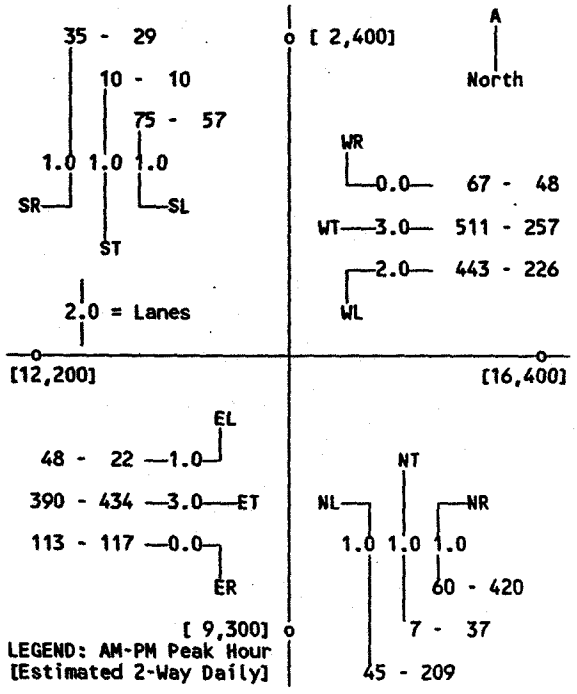
INTERSECTION: SANTA ROSA DRIVE/BIG CANYON DRIVE (NS) and SAN JOAQUIN HILLS ROA — COUNT DATE: 01-01-04
LAND USE: EXISTING + APPROVED PROJECTS — GEOMETRICS: Existing

| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 1 | 1600 | 36 | 203 | 9 | 6 | 45 | 209 | 0.028 | 0.131 |
| Northbound Through | 1 | 1600 | 7 | 37 | 0 | 0 | 7 | 37 | 0.004 | 0.023 |
| Northbound Right | 1 | 1600 | 59 | 401 | 1 | 19 | 60 | 420 | 0.038* | 0.262* |
| Southbound Left | 1 | 1600 | 75 | 57 | 0 | 0 | 75 | 57 | 0.047* | 0.036* |
| Southbound Through | 1 | 1600 | 10 | 10 | 0 | 0 | 10 | 10 | 0.006 | 0.006 |
| Southbound Right | 1 | 1600 | 35 | 29 | 0 | 0 | 35 | 29 | 0.022 | 0.018 |
| Eastbound Left | 1 | 1600 | 47 | 22 | 1 | 0 | 48 | 22 | 0.030 | 0.014 |
| Eastbound Through | 3 | 4800 | 389 | 433 | 1 | 1 | 390 | 434 | 0.105* | 0.115* |
| Eastbound Right | 0 | 0 | 107 | 109 | 6 | 8 | 113 | 117 | 0.000 | 0.000 |
| Westbound Left | 2 | 3200 | 443 | 214 | 0 | 12 | 443 | 226 | 0.138* | 0.071* |
| Westbound Through | 3 | 4800 | 510 | 256 | 1 | 1 | 511 | 257 | 0.120 | 0.064 |
| Westbound Right | 0 | 0 | 67 | 48 | 0 | 0 | 67 | 48 | 0.000 | 0.000 |
| Northbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Clearance Interval | | | | | | | | | 0.000* | 0.000* |

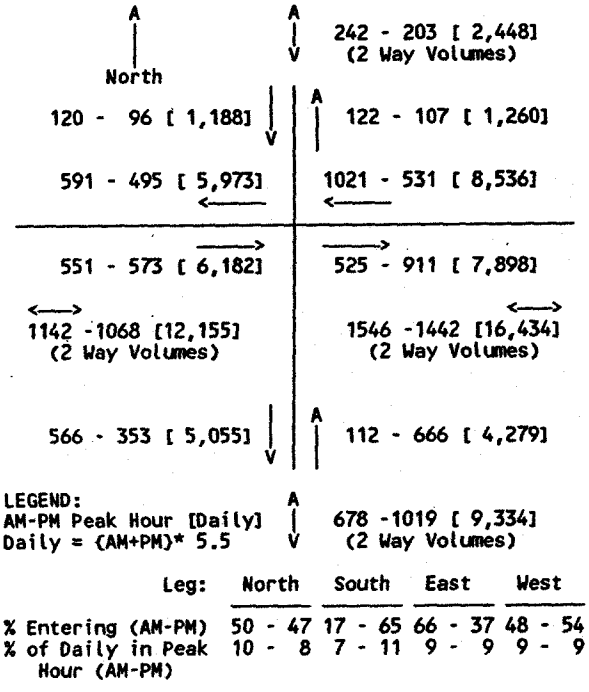
None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted.

| | | |
|---|---|---|
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) ——→ | 0.33 | 0.48 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | A | A |

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




PLOT OF INTERSECTION LEG VOLUMES




| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 50 - 47 | 17 - 65 | 66 - 37 | 48 - 54 |
| % of Daily in Peak Hour (AM-PM) | 10 - 8 | 7 - 11 | 9 - 9 | 9 - 9 |

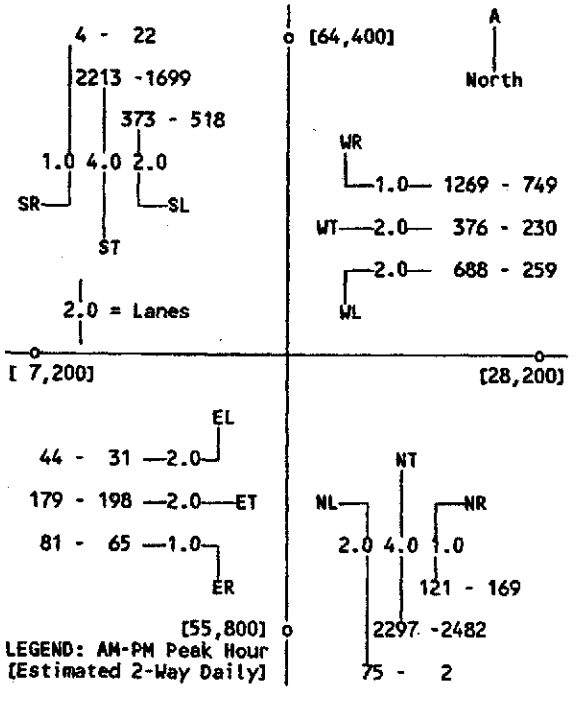
# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

INTERSECTION: MACARTHUR BOULEVARD (NS) and FORD ROAD (EW)
LAND USE: EXISTING + APPROVED PROJECTS

COUNT DATE: 01-01-04
GEOMETRICS: Existing

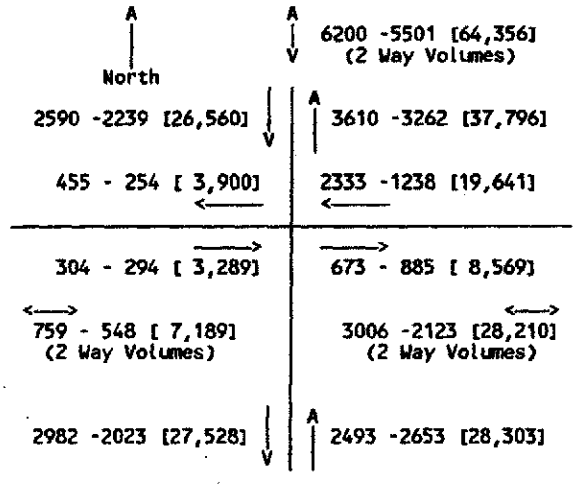
| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 2 | 3200 | 74 | 0 | 1 | 2 | 75 | 2 | 0.023 | 0.001 |
| Northbound Through | 4 | 6400 | 2296 | 2468 | 1 | 14 | 2297 | 2482 | 0.359* | 0.388* |
| Northbound Right | Free 1 | 1600 | 121 | 161 | 0 | 8 | 121 | 169 | 0.076 | 0.106 |
| Southbound Left | 2 | 3200 | 373 | 517 | 0 | 1 | 373 | 518 | 0.117* | 0.162* |
| Southbound Through | 4 | 6400 | 2210 | 1686 | 3 | 13 | 2213 | 1699 | 0.346 | 0.265 |
| Southbound Right | Free 1 | 1600 | 4 | 21 | 0 | 1 | 4 | 22 | 0.003 | 0.014 |
| Eastbound Left | 2 | 3200 | 43 | 31 | 1 | 0 | 44 | 31 | 0.014 | 0.010 |
| Eastbound Through | 2 | 3200 | 178 | 197 | 1 | 1 | 179 | 198 | 0.056* | 0.062* |
| Eastbound Right | 1 | 1600 | 79 | 64 | 2 | 1 | 81 | 65 | 0.051 | 0.041 |
| Westbound Left | 2 | 3200 | 687 | 257 | 1 | 2 | 688 | 259 | 0.215* | 0.081* |
| Westbound Through | 2 | 3200 | 376 | 229 | 0 | 1 | 376 | 230 | 0.118 | 0.072 |
| Westbound Right | Free 1 | 1600 | 1268 | 749 | 1 | 0 | 1269 | 749 | 0.793 | 0.468 |
| Northbound Right Turn Adjustment | None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted. | | | | | | | | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Clearance Interval | | | | | | | | | 0.000* | 0.000* |
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) ——→ | | | | | | | | | 0.75 | 0.69 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | | | | | | | | | C | B |

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




LEGEND: AM-PM Peak Hour
[Estimated 2-Way Daily]

PLOT OF INTERSECTION LEG VOLUMES



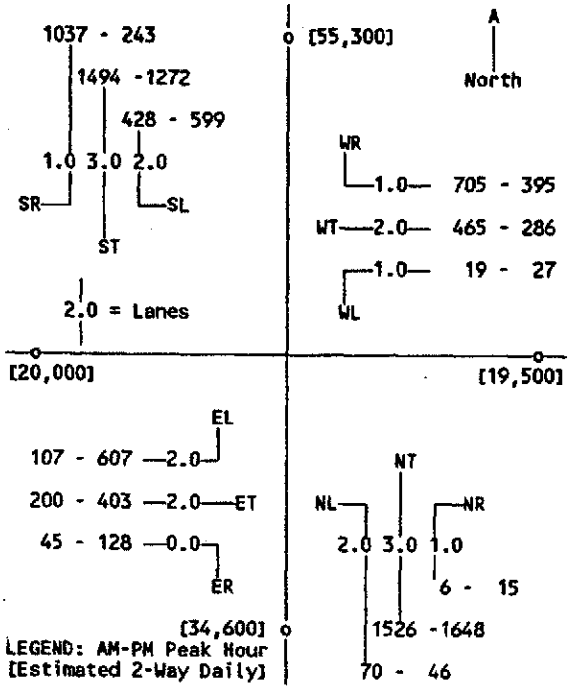

| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 42 - 41 | 46 - 57 | 78 - 58 | 40 - 54 |
| % of Daily in Peak Hour (AM-PM) | 10 - 9 | 10 - 8 | 11 - 8 | 11 - 8 |

# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

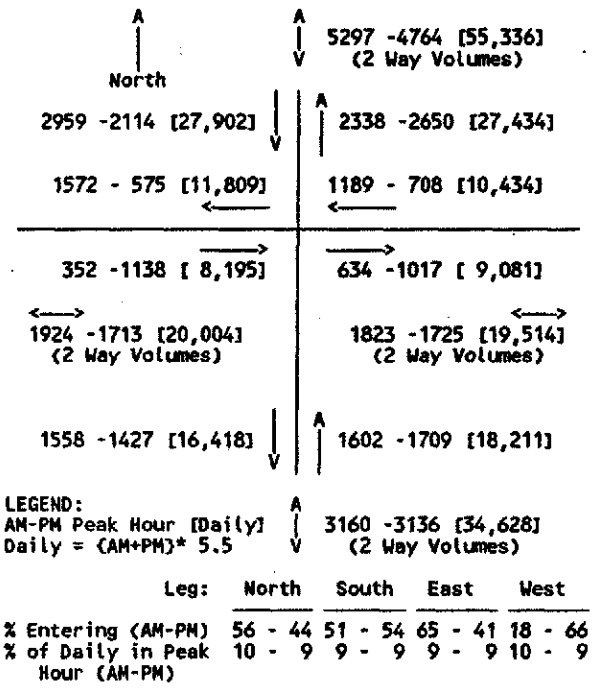
INTERSECTION: MACARTHUR BOULEVARD (NS) and SAN JOAQUIN HILLS ROAD (EW) — COUNT DATE: 01-01-04
LAND USE: EXISTING + APPROVED PROJECTS — GEOMETRICS: Existing

| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 2 | 3200 | 70 | 46 | 0 | 0 | 70 | 46 | 0.022 | 0.014 |
| Northbound Through | 3 | 4800 | 1526 | 1645 | 0 | 3 | 1526 | 1648 | 0.318* | 0.343* |
| Northbound Right | 1 | 1600 | 6 | 15 | 0 | 0 | 6 | 15 | 0.004 | 0.009 |
| Southbound Left | 2 | 3200 | 428 | 599 | 0 | 0 | 428 | 599 | 0.134* | 0.187* |
| Southbound Through | 3 | 4800 | 1491 | 1269 | 3 | 3 | 1494 | 1272 | 0.311 | 0.265 |
| Southbound Right | Free 1 | 1600 | 1036 | 231 | 1 | 12 | 1037 | 243 | 0.648 | 0.152 |
| Eastbound Left | 2 | 3200 | 107 | 588 | 0 | 19 | 107 | 607 | 0.033* | 0.190* |
| Eastbound Through | 2 | 3200 | 199 | 403 | 1 | 0 | 200 | 403 | 0.077 | 0.166 |
| Eastbound Right | 0 | 0 | 45 | 128 | 0 | 0 | 45 | 128 | 0.000 | 0.000 |
| Westbound Left | 1 | 1600 | 19 | 27 | 0 | 0 | 19 | 27 | 0.012 | 0.017 |
| Westbound Through | 2 | 3200 | 464 | 285 | 1 | 1 | 465 | 286 | 0.145* | 0.089* |
| Westbound Right | Free 1 | 1600 | 705 | 395 | 0 | 0 | 705 | 395 | 0.441 | 0.247 |
| Northbound Right Turn Adjustment | None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted. | | | | | | | | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Clearance Interval | | | | | | | | | 0.000* | 0.000* |
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) ——→ | | | | | | | | | 0.63 | 0.81 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | | | | | | | | | B | D |

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




PLOT OF INTERSECTION LEG VOLUMES




| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 56 - 44 | 51 - 54 | 65 - 41 | 18 - 66 |
| % of Daily in Peak Hour (AM-PM) | 10 - 9 | 9 - 9 | 9 - 9 | 10 - 9 |

## Existing + Approved Projects + Project

# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

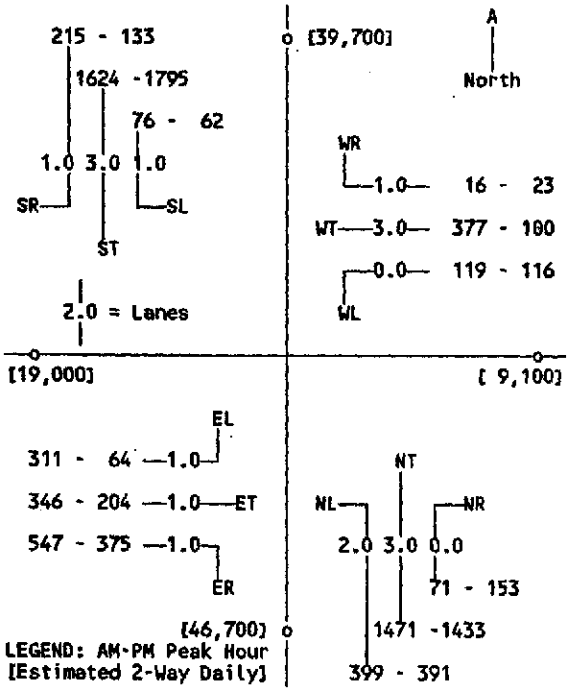
INTERSECTION: JAMBOREE ROAD (NS) and EASTBLUFF DRIVE/FORD ROAD (EW)
LAND USE: EXISTING + APPROVED PROJECTS + PROJECT

COUNT DATE: 01-01-04
GEOMETRICS: Existing

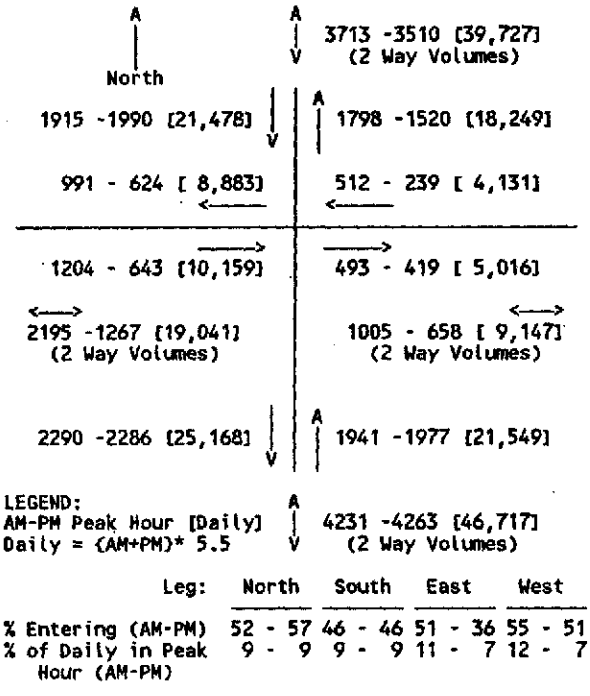
| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 2 | 3200 | 399 | 388 | 0 | 3 | 399 | 391 | 0.125* | 0.122* |
| Northbound Through | 3 | 4800 | 1388 | 1324 | 83 | 109 | 1471 | 1433 | 0.321 | 0.330 |
| Northbound Right | 0 | 0 | 67 | 146 | 4 | 7 | 71 | 153 | 0.000 | 0.000 |
| Southbound Left | 1 | 1600 | 76 | 61 | 0 | 1 | 76 | 62 | 0.048 | 0.039 |
| Southbound Through | 3 | 4800 | 1517 | 1694 | 107 | 101 | 1624 | 1795 | 0.338* | 0.374* |
| Southbound Right | 1 | 1600 | 215 | 133 | 0 | 0 | 215 | 133 | 0.134 | 0.083 |
| Eastbound Left | 1 | 1600 | 311 | 64 | 0 | 0 | 311 | 64 | 0.194 | 0.040 |
| Eastbound Through | 1 | 1600 | 346 | 204 | 0 | 0 | 346 | 204 | 0.216* | 0.128* |
| Eastbound Right | Free 1 | 1600 | 546 | 373 | 1 | 2 | 547 | 375 | 0.342 | 0.234 |
| Westbound Left | 0 | 0 | 116 | 110 | 3 | 6 | 119 | 116 | 0.000 | 0.000 |
| Westbound Through | 3 | 4800 | 377 | 100 | 0 | 0 | 377 | 100 | 0.103* | 0.045* |
| Westbound Right | 1 | 1600 | 15 | 23 | 1 | 0 | 16 | 23 | 0.010 | 0.014 |
| Northbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Clearance Interval | | | | | | | | | 0.000* | 0.000* |
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) | | | | | | | | | 0.78 | 0.67 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | | | | | | | | | C | B |

None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted.

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




PLOT OF INTERSECTION LEG VOLUMES




| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 52 - 57 | 46 - 46 | 51 - 36 | 55 - 51 |
| % of Daily in Peak Hour (AM-PM) | 9 - 9 | 9 - 9 | 11 - 7 | 12 - 7 |

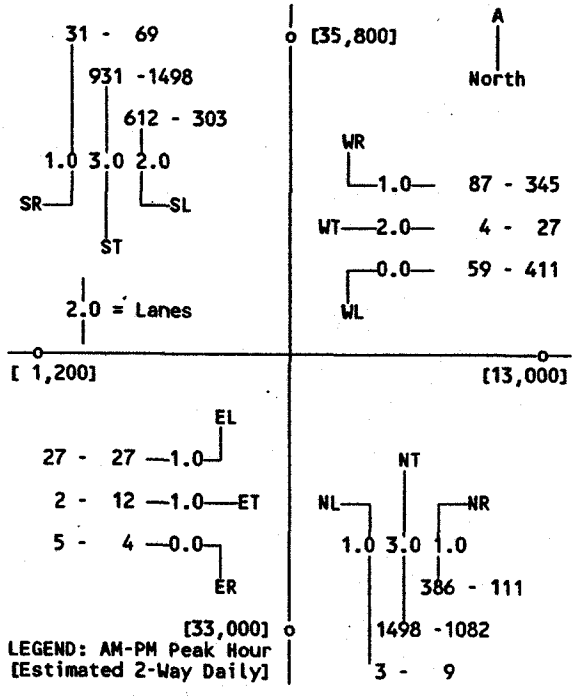
# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

INTERSECTION: JAMBOREE ROAD (NS) and SANTA BARBARA DRIVE (EW)
LAND USE: EXISTING + APPROVED PROJECTS + PROJECT

COUNT DATE: 01-01-04
GEOMETRICS: Existing

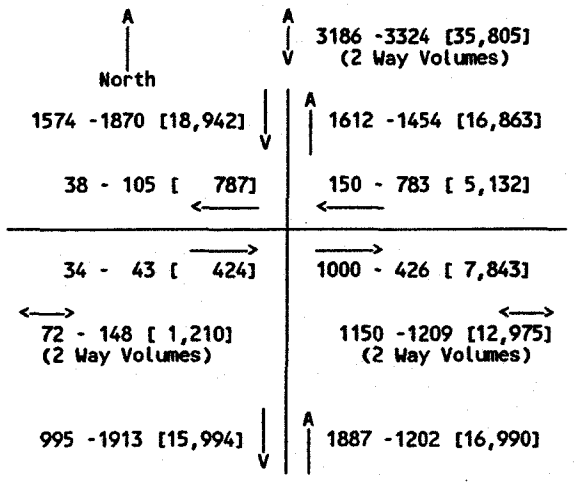
| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 1 | 1600 | 3 | 9 | 0 | 0 | 3 | 9 | 0.002 | 0.006 |
| Northbound Through | 3 | 4800 | 1426 | 990 | 72 | 92 | 1498 | 1082 | 0.312* | 0.225* |
| Northbound Right | 1 | 1600 | 381 | 104 | 5 | 7 | 386 | 111 | 0.241 | 0.069 |
| Southbound Left | 2 | 3200 | 608 | 291 | 4 | 12 | 612 | 303 | 0.191* | 0.095* |
| Southbound Through | 3 | 4800 | 819 | 1415 | 112 | 83 | 931 | 1498 | 0.194 | 0.312 |
| Southbound Right | 1 | 1600 | 30 | 63 | 1 | 6 | 31 | 69 | 0.019 | 0.043 |
| Eastbound Left | 1 | 1600 | 21 | 25 | 6 | 2 | 27 | 27 | 0.017* | 0.017* |
| Eastbound Through | 1 | 1600 | 2 | 11 | 0 | 1 | 2 | 12 | 0.004 | 0.010 |
| Eastbound Right | 0 | 0 | 5 | 4 | 0 | 0 | 5 | 4 | 0.000 | 0.000 |
| Westbound Left | 0 | 0 | 50 | 406 | 9 | 5 | 59 | 411 | 0.000 | 0.000 |
| Westbound Through | 2 | 3200 | 4 | 26 | 0 | 1 | 4 | 27 | 0.020 | 0.137 |
| Westbound Right | 1 | 1600 | 71 | 339 | 16 | 6 | 87 | 345 | 0.054* | 0.216* |
| Northbound Right Turn Adjustment | | | None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted. | | | | | | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Clearance Interval | | | | | | | | | 0.000* | 0.000* |
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) | | | | | | | | | 0.57 | 0.55 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | | | | | | | | | A | A |

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




LEGEND: AM-PM Peak Hour
[Estimated 2-Way Daily]

PLOT OF INTERSECTION LEG VOLUMES




LEGEND:
AM-PM Peak Hour [Daily]
Daily = (AM+PM)* 5.5

| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 49 - 56 | 65 - 39 | 13 - 65 | 47 - 29 |
| % of Daily in Peak Hour (AM-PM) | 9 - 9 | 9 - 9 | 9 - 9 | 6 - 12 |

Kunzman Associates

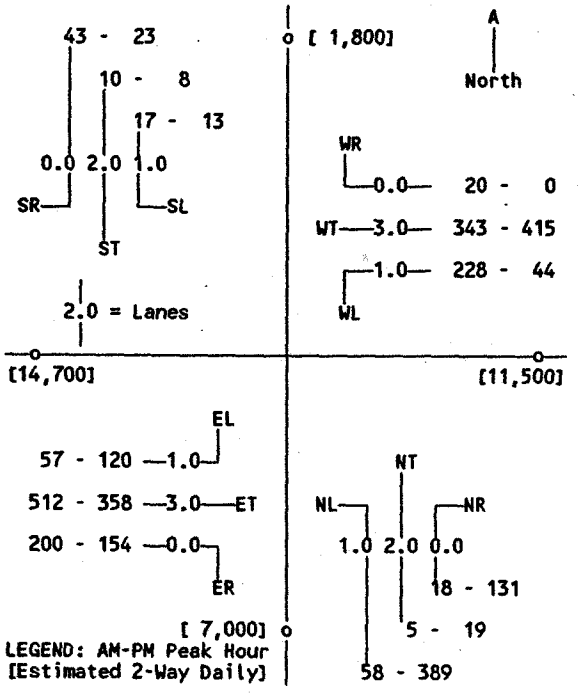
# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

INTERSECTION: SANTA CRUZ DRIVE (NS) and SAN JOAQUIN HILLS ROAD (EW) — COUNT DATE: 01-01-04
LAND USE: EXISTING + APPROVED PROJECTS + PROJECT — GEOMETRICS: Existing

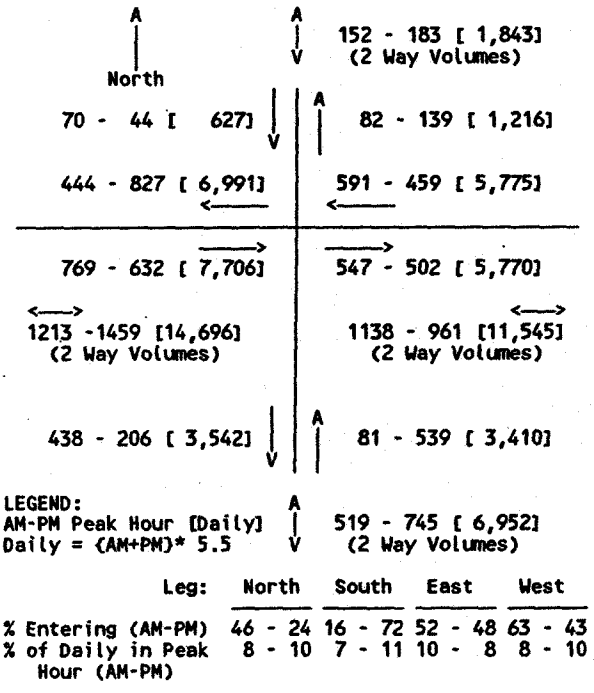
| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 1 | 1600 | 57 | 389 | 1 | 0 | 58 | 389 | 0.036* | 0.243* |
| Northbound Through | 2 | 3200 | 5 | 19 | 0 | 0 | 5 | 19 | 0.007 | 0.047 |
| Northbound Right | 0 | 0 | 15 | 130 | 3 | 1 | 18 | 131 | 0.000 | 0.000 |
| Southbound Left | 1 | 1600 | 17 | 12 | 0 | 1 | 17 | 13 | 0.011 | 0.008 |
| Southbound Through | 2 | 3200 | 9 | 8 | 1 | 0 | 10 | 8 | 0.017* | 0.010* |
| Southbound Right | 0 | 0 | 43 | 23 | 0 | 0 | 43 | 23 | 0.000 | 0.000 |
| Eastbound Left | 1 | 1600 | 57 | 120 | 0 | 0 | 57 | 120 | 0.036 | 0.075* |
| Eastbound Through | 3 | 4800 | 511 | 358 | 1 | 0 | 512 | 358 | 0.148* | 0.107 |
| Eastbound Right | 0 | 0 | 200 | 153 | 0 | 1 | 200 | 154 | 0.000 | 0.000 |
| Westbound Left | 1 | 1600 | 227 | 43 | 1 | 1 | 228 | 44 | 0.143* | 0.028 |
| Westbound Through | 3 | 4800 | 343 | 414 | 0 | 1 | 343 | 415 | 0.076 | 0.086* |
| Westbound Right | 0 | 0 | 20 | 0 | 0 | 0 | 20 | 0 | 0.000 | 0.000 |
| Northbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Clearance Interval | | | | | | | | | 0.000* | 0.000* |
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) ——→ | | | | | | | | | 0.34 | 0.41 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | | | | | | | | | A | A |

None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted.

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




PLOT OF INTERSECTION LEG VOLUMES




| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 46 - 24 | 16 - 72 | 52 - 48 | 63 - 43 |
| % of Daily in Peak Hour (AM-PM) | 8 - 10 | 7 - 11 | 10 - 8 | 8 - 10 |

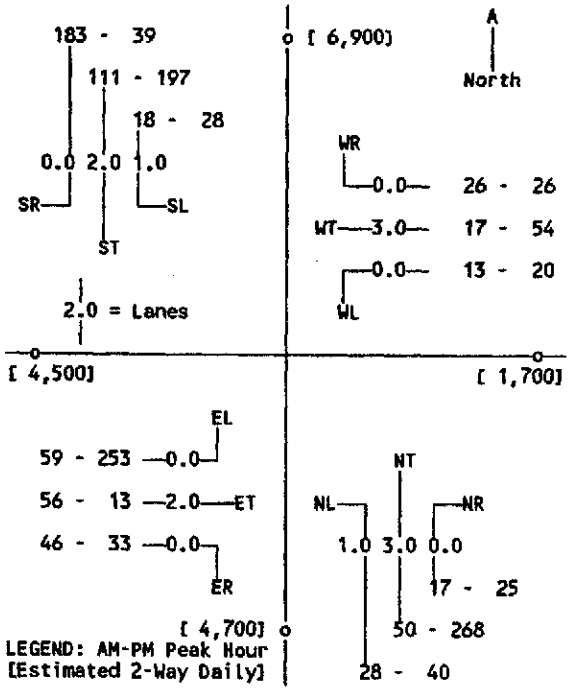
# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

INTERSECTION: SANTA CRUZ DRIVE (NS) and SAN CLEMENTE DRIVE (EW) — COUNT DATE: 01-01-04
LAND USE: EXISTING + APPROVED PROJECTS + PROJECT — GEOMETRICS: Existing

| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 1 | 1600 | 28 | 40 | 0 | 0 | 28 | 40 | 0.018* | 0.025* |
| Northbound Through | 3 | 4800 | 50 | 268 | 0 | 0 | 50 | 268 | 0.014 | 0.061 |
| Northbound Right | 0 | 0 | 17 | 25 | 0 | 0 | 17 | 25 | 0.000 | 0.000 |
| Southbound Left | 1 | 1600 | 18 | 28 | 0 | 0 | 18 | 28 | 0.011 | 0.018 |
| Southbound Through | 2 | 3200 | 111 | 197 | 0 | 0 | 111 | 197 | 0.092* | 0.074* |
| Southbound Right | 0 | 0 | 183 | 38 | 0 | 1 | 183 | 39 | 0.000 | 0.000 |
| Eastbound Left | 0 | 0 | 57 | 252 | 2 | 1 | 59 | 253 | 0.000 | 0.000 |
| Eastbound Through | 2 | 3200 | 56 | 13 | 0 | 0 | 56 | 13 | 0.050* | 0.093* |
| Eastbound Right | 0 | 0 | 46 | 33 | 0 | 0 | 46 | 33 | 0.000 | 0.000 |
| Westbound Left | 0 | 0 | 13 | 20 | 0 | 0 | 13 | 20 | 0.000* | 0.000* |
| Westbound Through | 3 | 4800 | 17 | 54 | 0 | 0 | 17 | 54 | 0.012 | 0.021 |
| Westbound Right | 0 | 0 | 26 | 26 | 0 | 0 | 26 | 26 | 0.000 | 0.000 |
| Northbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Clearance Interval | | | | | | | | | 0.000* | 0.000* |
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) | | | | | | | | | 0.16 | 0.19 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | | | | | | | | | A | A |

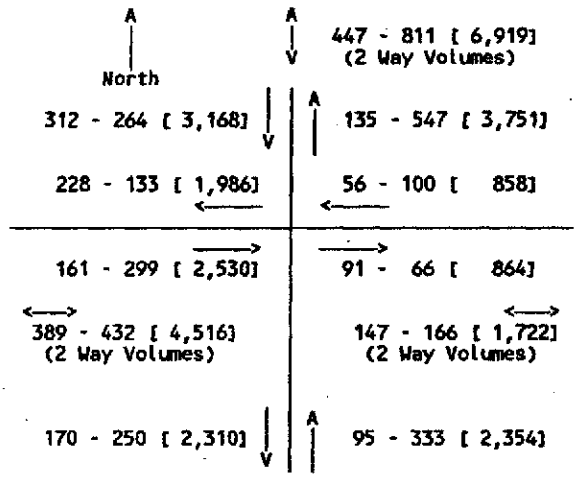
None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted.

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




LEGEND: AM-PM Peak Hour
[Estimated 2-Way Daily]

PLOT OF INTERSECTION LEG VOLUMES



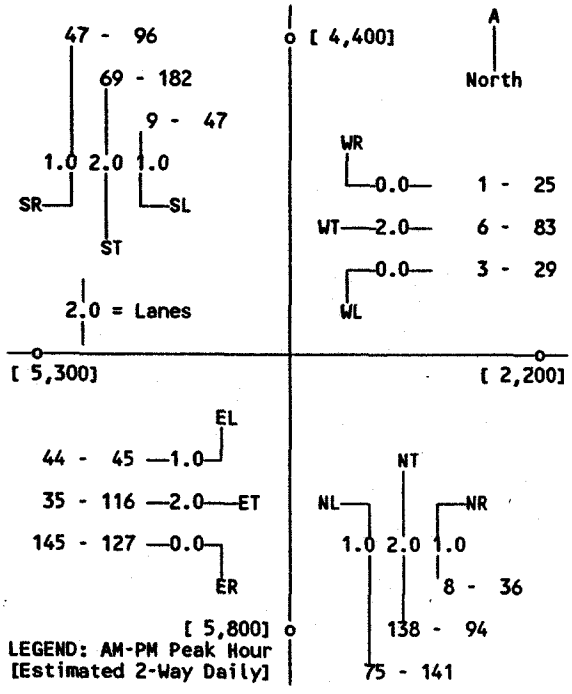

| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 70 - 33 | 36 - 57 | 38 - 60 | 41 - 69 |
| % of Daily in Peak Hour (AM-PM) | 6 - 12 | 6 - 13 | 9 - 10 | 9 - 10 |

# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

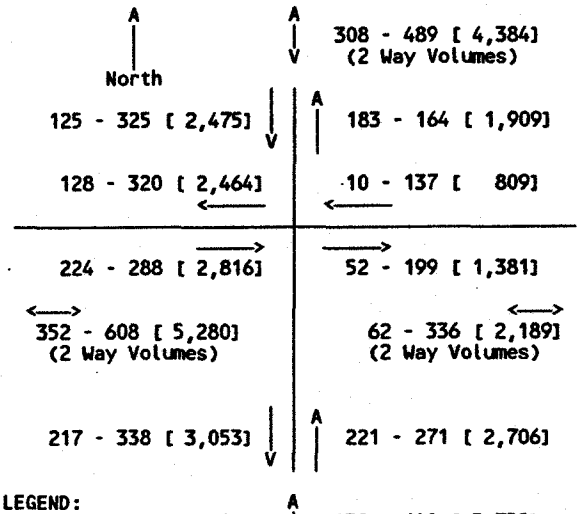
INTERSECTION: NEWPORT CENTER DRIVE (NS) and SANTA BARBARA DRIVE (EW) — COUNT DATE: 01-01-04
LAND USE: EXISTING + APPROVED PROJECTS + PROJECT — GEOMETRICS: Existing

| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 1 | 1600 | 73 | 135 | 2 | 6 | 75 | 141 | 0.047* | 0.088* |
| Northbound Through | 2 | 3200 | 138 | 94 | 0 | 0 | 138 | 94 | 0.043 | 0.029 |
| Northbound Right | 1 | 1600 | 8 | 36 | 0 | 0 | 8 | 36 | 0.005 | 0.023 |
| Southbound Left | 1 | 1600 | 9 | 47 | 0 | 0 | 9 | 47 | 0.006 | 0.029 |
| Southbound Through | 2 | 3200 | 69 | 182 | 0 | 0 | 69 | 182 | 0.022* | 0.057* |
| Southbound Right | 1 | 1600 | 46 | 94 | 1 | 2 | 47 | 96 | 0.029 | 0.060 |
| Eastbound Left | 1 | 1600 | 41 | 43 | 3 | 2 | 44 | 45 | 0.028 | 0.028 |
| Eastbound Through | 2 | 3200 | 33 | 115 | 2 | 1 | 35 | 116 | 0.056* | 0.076* |
| Eastbound Right | 0 | 0 | 136 | 123 | 9 | 4 | 145 | 127 | 0.000 | 0.000 |
| Westbound Left | 0 | 0 | 3 | 29 | 0 | 0 | 3 | 29 | 0.000* | 0.000* |
| Westbound Through | 2 | 3200 | 6 | 82 | 0 | 1 | 6 | 83 | 0.003 | 0.043 |
| Westbound Right | 0 | 0 | 1 | 25 | 0 | 0 | 1 | 25 | 0.000 | 0.000 |
| Northbound Right Turn Adjustment | | | None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted. | | | | | | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Clearance Interval | | | | | | | | | 0.000* | 0.000* |
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) ——→ | | | | | | | | | 0.13 | 0.22 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | | | | | | | | | A | A |

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




PLOT OF INTERSECTION LEG VOLUMES




| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 41 - 66 | 50 - 44 | 16 - 41 | 64 - 47 |
| % of Daily in Peak Hour (AM-PM) | 7 - 11 | 8 - 11 | 3 - 15 | 7 - 12 |

# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

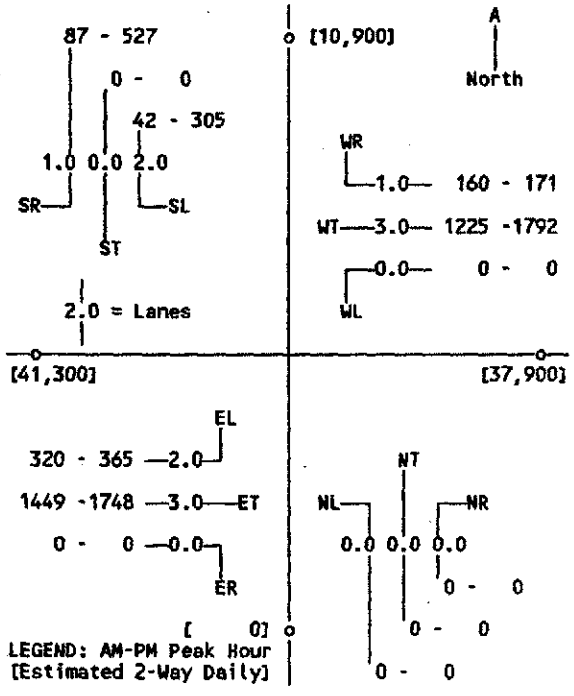
INTERSECTION: NEWPORT CENTER DRIVE (NS) and COAST HIGHWAY (EW)
LAND USE: EXISTING + APPROVED PROJECTS + PROJECT

COUNT DATE: 01-01-04
GEOMETRICS: Existing

| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000 | 0.000 |
| Northbound Through | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000* | 0.000* |
| Northbound Right | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000 | 0.000 |
| Southbound Left | 2 | 3200 | 37 | 300 | 5 | 5 | 42 | 305 | 0.013* | 0.095* |
| Southbound Through | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000 | 0.000 |
| Southbound Right | Free 1 | 1600 | 78 | 496 | 9 | 31 | 87 | 527 | 0.054 | 0.329 |
| Eastbound Left | 2 | 3200 | 315 | 352 | 5 | 13 | 320 | 365 | 0.100* | 0.114* |
| Eastbound Through | 3 | 4800 | 1428 | 1714 | 21 | 34 | 1449 | 1748 | 0.302 | 0.364 |
| Eastbound Right | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000 | 0.000 |
| Westbound Left | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000 | 0.000 |
| Westbound Through | 3 | 4800 | 1194 | 1774 | 31 | 18 | 1225 | 1792 | 0.255* | 0.373* |
| Westbound Right | Free 1 | 1600 | 158 | 161 | 2 | 10 | 160 | 171 | 0.100 | 0.107 |
| Northbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Clearance Interval | | | | | | | | | 0.000* | 0.000* |
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) | | | | | | | | | 0.37 | 0.58 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | | | | | | | | | A | A |

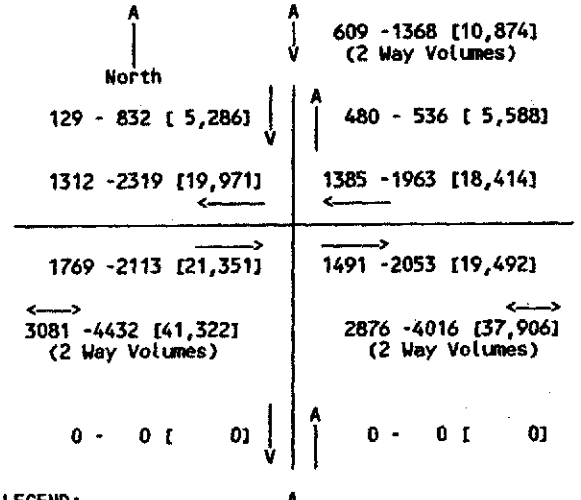
None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted.

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




LEGEND: AM-PM Peak Hour
[Estimated 2-Way Daily]

PLOT OF INTERSECTION LEG VOLUMES




LEGEND:
AM-PM Peak Hour [Daily]
Daily = (AM+PM)* 5.5

A
0 - 0 [ 0]
(2 Way Volumes)

| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 21 - 61 | 0 - 0 | 48 - 49 | 57 - 48 |
| % of Daily in Peak Hour (AM-PM) | 6 - 13 | 0 - 0 | 8 - 11 | 7 - 11 |

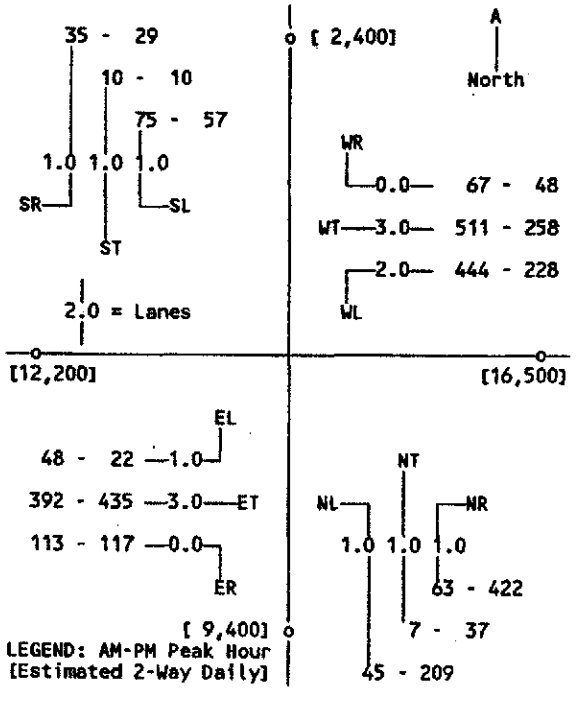
# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

INTERSECTION: SANTA ROSA DRIVE/BIG CANYON DRIVE (NS) and SAN JOAQUIN HILLS ROA — COUNT DATE: 01-01-04
LAND USE: EXISTING + APPROVED PROJECTS + PROJECT — GEOMETRICS: Existing

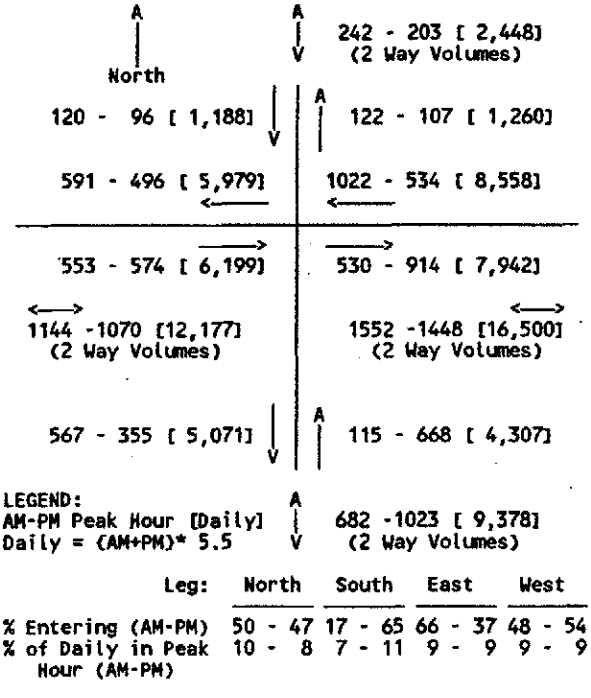
| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 1 | 1600 | 36 | 203 | 9 | 6 | 45 | 209 | 0.028 | 0.131 |
| Northbound Through | 1 | 1600 | 7 | 37 | 0 | 0 | 7 | 37 | 0.004 | 0.023 |
| Northbound Right | 1 | 1600 | 59 | 401 | 4 | 21 | 63 | 422 | 0.039* | 0.264* |
| Southbound Left | 1 | 1600 | 75 | 57 | 0 | 0 | 75 | 57 | 0.047* | 0.036* |
| Southbound Through | 1 | 1600 | 10 | 10 | 0 | 0 | 10 | 10 | 0.006 | 0.006 |
| Southbound Right | 1 | 1600 | 35 | 29 | 0 | 0 | 35 | 29 | 0.022 | 0.018 |
| Eastbound Left | 1 | 1600 | 47 | 22 | 1 | 0 | 48 | 22 | 0.030 | 0.014 |
| Eastbound Through | 3 | 4800 | 389 | 433 | 3 | 2 | 392 | 435 | 0.105* | 0.115* |
| Eastbound Right | 0 | 0 | 107 | 109 | 6 | 8 | 113 | 117 | 0.000 | 0.000 |
| Westbound Left | 2 | 3200 | 443 | 214 | 1 | 14 | 444 | 228 | 0.139* | 0.071* |
| Westbound Through | 3 | 4800 | 510 | 256 | 1 | 2 | 511 | 258 | 0.120 | 0.064 |
| Westbound Right | 0 | 0 | 67 | 48 | 0 | 0 | 67 | 48 | 0.000 | 0.000 |
| Northbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Clearance Interval | | | | | | | | | 0.000* | 0.000* |
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) | | | | | | | | | 0.33 | 0.49 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | | | | | | | | | A | A |

None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted.

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




PLOT OF INTERSECTION LEG VOLUMES




| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 50 - 47 | 17 - 65 | 66 - 37 | 48 - 54 |
| % of Daily in Peak Hour (AM-PM) | 10 - 8 | 7 - 11 | 9 - 9 | 9 - 9 |

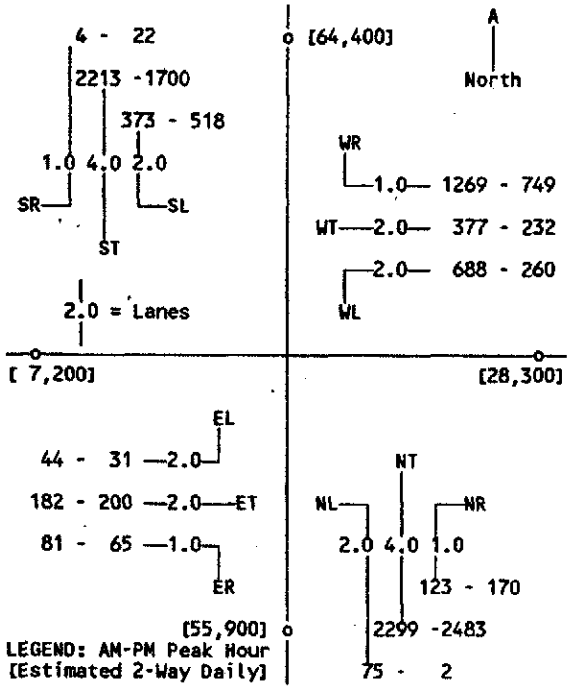
# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

INTERSECTION: MACARTHUR BOULEVARD (NS) and FORD ROAD (EW)
LAND USE: EXISTING + APPROVED PROJECTS + PROJECT

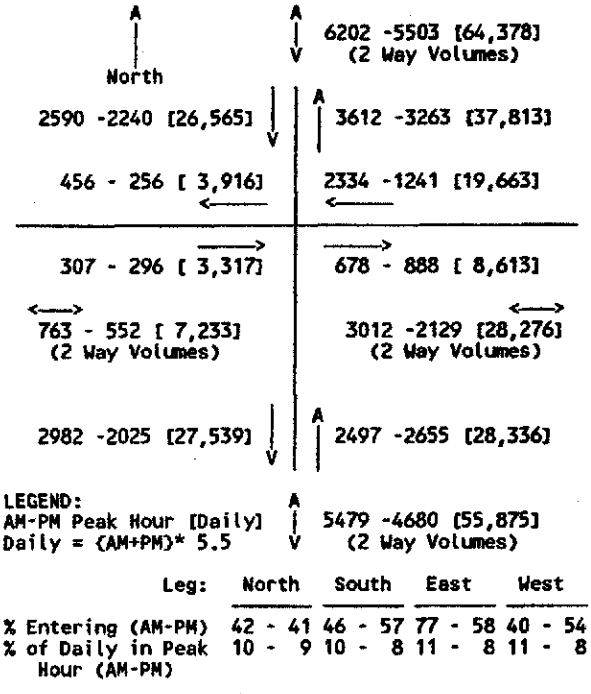
COUNT DATE: 01-01-04
GEOMETRICS: Existing

| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 2 | 3200 | 74 | 0 | 1 | 2 | 75 | 2 | 0.023 | 0.001 |
| Northbound Through | 4 | 6400 | 2296 | 2468 | 3 | 15 | 2299 | 2483 | 0.359* | 0.388* |
| Northbound Right | Free 1 | 1600 | 121 | 161 | 2 | 9 | 123 | 170 | 0.077 | 0.106 |
| Southbound Left | 2 | 3200 | 373 | 517 | 0 | 1 | 373 | 518 | 0.117* | 0.162* |
| Southbound Through | 4 | 6400 | 2210 | 1686 | 3 | 14 | 2213 | 1700 | 0.346 | 0.266 |
| Southbound Right | Free 1 | 1600 | 4 | 21 | 0 | 1 | 4 | 22 | 0.003 | 0.014 |
| Eastbound Left | 2 | 3200 | 43 | 31 | 1 | 0 | 44 | 31 | 0.014 | 0.010 |
| Eastbound Through | 2 | 3200 | 178 | 197 | 4 | 3 | 182 | 200 | 0.057* | 0.063* |
| Eastbound Right | 1 | 1600 | 79 | 64 | 2 | 1 | 81 | 65 | 0.051 | 0.041 |
| Westbound Left | 2 | 3200 | 687 | 257 | 1 | 3 | 688 | 260 | 0.215* | 0.081* |
| Westbound Through | 2 | 3200 | 376 | 229 | 1 | 3 | 377 | 232 | 0.118 | 0.073 |
| Westbound Right | Free 1 | 1600 | 1268 | 749 | 1 | 0 | 1269 | 749 | 0.793 | 0.468 |
| Northbound Right Turn Adjustment | None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted. | | | | | | | | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Clearance Interval | | | | | | | | | 0.000* | 0.000* |
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) ——→ | | | | | | | | | 0.75 | 0.69 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | | | | | | | | | C | B |

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




PLOT OF INTERSECTION LEG VOLUMES



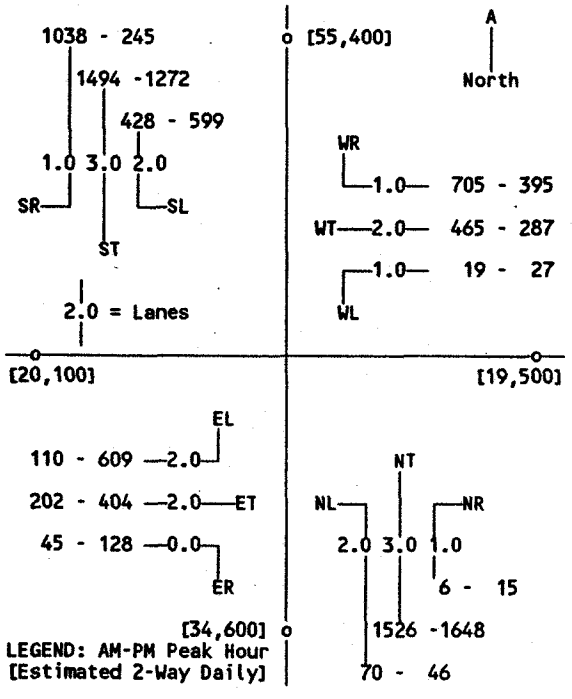

| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 42 - 41 | 46 - 57 | 77 - 58 | 40 - 54 |
| % of Daily in Peak Hour (AM-PM) | 10 - 9 | 10 - 8 | 11 - 8 | 11 - 8 |

# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

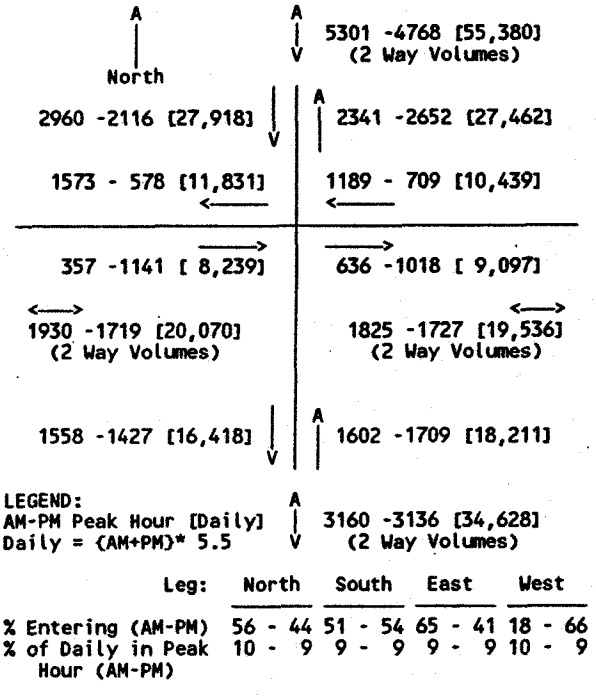
INTERSECTION: MACARTHUR BOULEVARD (NS) and SAN JOAQUIN HILLS ROAD (EW) — COUNT DATE: 01-01-04
LAND USE: EXISTING + APPROVED PROJECTS + PROJECT — GEOMETRICS: Existing

| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 2 | 3200 | 70 | 46 | 0 | 0 | 70 | 46 | 0.022 | 0.014 |
| Northbound Through | 3 | 4800 | 1526 | 1645 | 0 | 3 | 1526 | 1648 | 0.318* | 0.343* |
| Northbound Right | 1 | 1600 | 6 | 15 | 0 | 0 | 6 | 15 | 0.004 | 0.009 |
| Southbound Left | 2 | 3200 | 428 | 599 | 0 | 0 | 428 | 599 | 0.134* | 0.187* |
| Southbound Through | 3 | 4800 | 1491 | 1269 | 3 | 3 | 1494 | 1272 | 0.311 | 0.265 |
| Southbound Right | Free 1 | 1600 | 1036 | 231 | 2 | 14 | 1038 | 245 | 0.649 | 0.153 |
| Eastbound Left | 2 | 3200 | 107 | 588 | 3 | 21 | 110 | 609 | 0.034* | 0.190* |
| Eastbound Through | 2 | 3200 | 199 | 403 | 3 | 1 | 202 | 404 | 0.077 | 0.166 |
| Eastbound Right | 0 | 0 | 45 | 128 | 0 | 0 | 45 | 128 | 0.000 | 0.000 |
| Westbound Left | 1 | 1600 | 19 | 27 | 0 | 0 | 19 | 27 | 0.012 | 0.017 |
| Westbound Through | 2 | 3200 | 464 | 285 | 1 | 2 | 465 | 287 | 0.145* | 0.090* |
| Westbound Right | Free 1 | 1600 | 705 | 395 | 0 | 0 | 705 | 395 | 0.441 | 0.247 |
| Northbound Right Turn Adjustment | None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted. | | | | | | | | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Clearance Interval | | | | | | | | | 0.000* | 0.000* |
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) ——→ | | | | | | | | | 0.63 | 0.81 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | | | | | | | | | B | D |

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




PLOT OF INTERSECTION LEG VOLUMES




| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 56 - 44 | 51 - 54 | 65 - 41 | 18 - 66 |
| % of Daily in Peak Hour (AM-PM) | 10 - 9 | 9 - 9 | 9 - 9 | 10 - 9 |

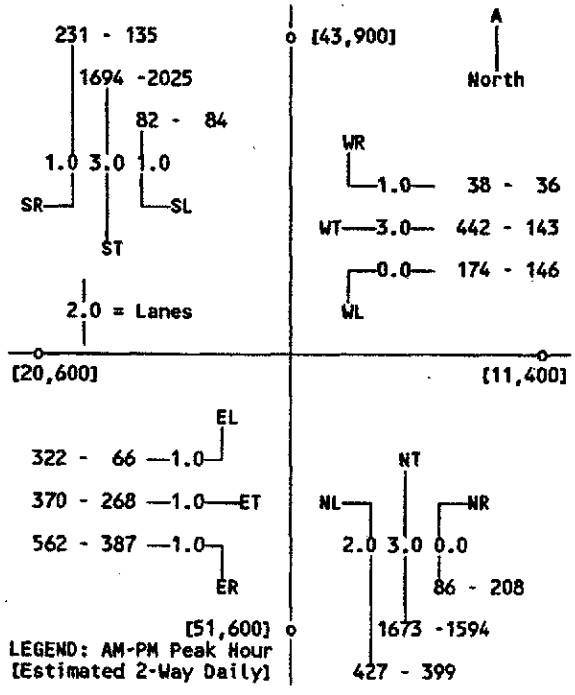
**Existing + Approved Projects**
**+ Cumulative Projects**

# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

INTERSECTION: JAMBOREE ROAD (NS) and EASTBLUFF DRIVE/FORD ROAD (EW) — COUNT DATE: 01-01-04
LAND USE: EXISTING + APPROVED PROJECTS + CUMULATIVE PROJECTS — GEOMETRICS: Existing

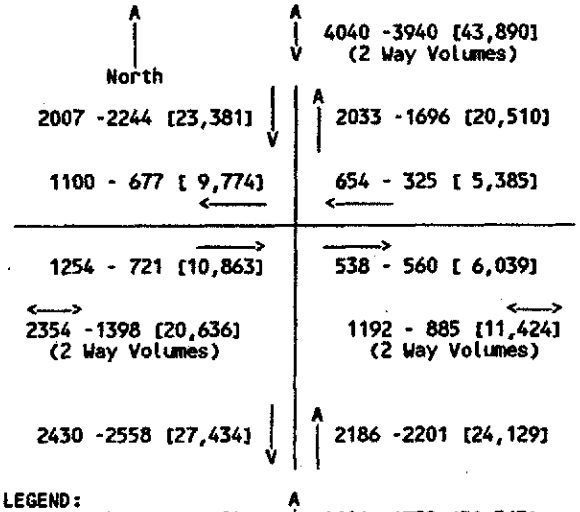
| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 2 | 3200 | 399 | 388 | 28 | 11 | 427 | 399 | 0.133* | 0.125* |
| Northbound Through | 3 | 4800 | 1388 | 1324 | 285 | 270 | 1673 | 1594 | 0.366 | 0.375 |
| Northbound Right | 0 | 0 | 67 | 146 | 19 | 62 | 86 | 208 | 0.000 | 0.000 |
| Southbound Left | 1 | 1600 | 76 | 61 | 6 | 23 | 82 | 84 | 0.051 | 0.053 |
| Southbound Through | 3 | 4800 | 1517 | 1694 | 177 | 331 | 1694 | 2025 | 0.353* | 0.422* |
| Southbound Right | 1 | 1600 | 215 | 133 | 16 | 2 | 231 | 135 | 0.144 | 0.084 |
| Eastbound Left | 1 | 1600 | 311 | 64 | 11 | 2 | 322 | 66 | 0.201 | 0.041 |
| Eastbound Through | 1 | 1600 | 346 | 204 | 24 | 64 | 370 | 268 | 0.231* | 0.168* |
| Eastbound Right | Free 1 | 1600 | 546 | 373 | 16 | 14 | 562 | 387 | 0.351 | 0.242 |
| Westbound Left | 0 | 0 | 116 | 110 | 58 | 36 | 174 | 146 | 0.000 | 0.000 |
| Westbound Through | 3 | 4800 | 377 | 100 | 65 | 43 | 442 | 143 | 0.128* | 0.060* |
| Westbound Right | 1 | 1600 | 15 | 23 | 23 | 13 | 38 | 36 | 0.024 | 0.023 |
| Northbound Right Turn Adjustment | | | None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted. | | | | | | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Clearance Interval | | | | | | | | | 0.000* | 0.000* |
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) ⟶ | | | | | | | | | 0.85 | 0.78 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | | | | | | | | | D | C |

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




LEGEND: AM-PM Peak Hour
[Estimated 2-Way Daily]

PLOT OF INTERSECTION LEG VOLUMES




LEGEND:
AM-PM Peak Hour [Daily]
Daily = (AM+PM)* 5.5
4616 -4759 [51,563]
(2 Way Volumes)

| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 50 - 57 | 47 - 46 | 55 - 37 | 53 - 52 |
| % of Daily in Peak Hour (AM-PM) | 9 - 9 | 9 - 9 | 10 - 8 | 11 - 7 |

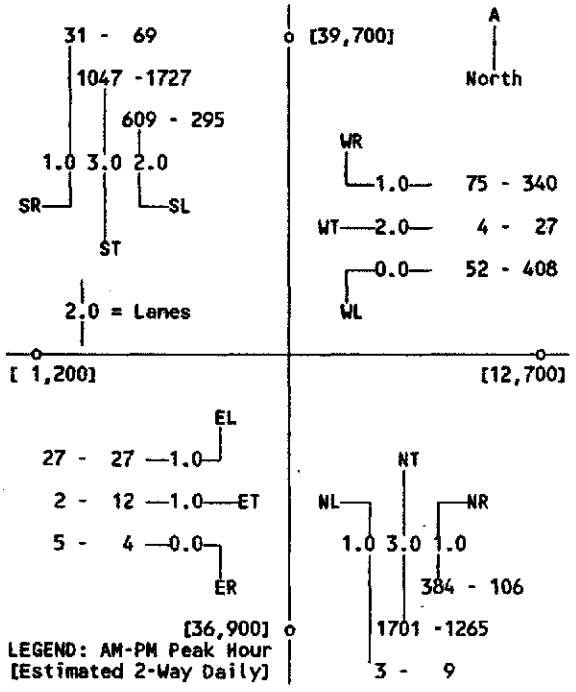
# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

INTERSECTION: JAMBOREE ROAD (NS) and SANTA BARBARA DRIVE (EW)
LAND USE: EXISTING + APPROVED PROJECTS + CUMULATIVE PROJECTS

COUNT DATE: 01-01-04
GEOMETRICS: Existing

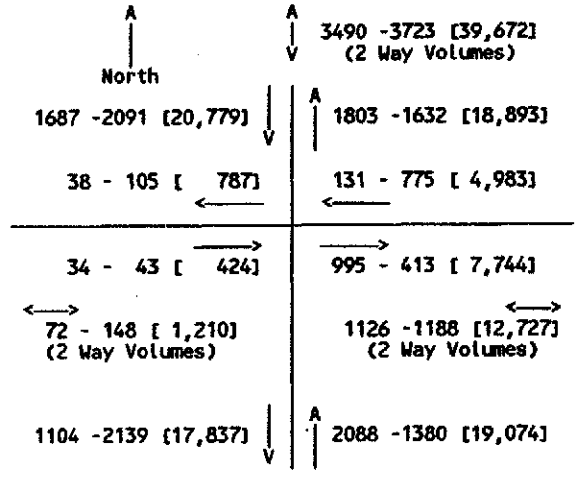
| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 1 | 1600 | 3 | 9 | 0 | 0 | 3 | 9 | 0.002 | 0.006* |
| Northbound Through | 3 | 4800 | 1426 | 990 | 275 | 275 | 1701 | 1265 | 0.354* | 0.264 |
| Northbound Right | 1 | 1600 | 381 | 104 | 3 | 2 | 384 | 106 | 0.240 | 0.066 |
| Southbound Left | 2 | 3200 | 608 | 291 | 1 | 4 | 609 | 295 | 0.190* | 0.092 |
| Southbound Through | 3 | 4800 | 819 | 1415 | 228 | 312 | 1047 | 1727 | 0.218 | 0.360* |
| Southbound Right | 1 | 1600 | 30 | 63 | 1 | 6 | 31 | 69 | 0.019 | 0.043 |
| Eastbound Left | 1 | 1600 | 21 | 25 | 6 | 2 | 27 | 27 | 0.017* | 0.017* |
| Eastbound Through | 1 | 1600 | 2 | 11 | 0 | 1 | 2 | 12 | 0.004 | 0.010 |
| Eastbound Right | 0 | 0 | 5 | 4 | 0 | 0 | 5 | 4 | 0.000 | 0.000 |
| Westbound Left | 0 | 0 | 50 | 406 | 2 | 2 | 52 | 408 | 0.000 | 0.000 |
| Westbound Through | 2 | 3200 | 4 | 26 | 0 | 1 | 4 | 27 | 0.018 | 0.136 |
| Westbound Right | 1 | 1600 | 71 | 339 | 4 | 1 | 75 | 340 | 0.047* | 0.213* |
| Northbound Right Turn Adjustment | | | None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted. | | | | | | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Clearance Interval | | | | | | | | | 0.000* | 0.000* |
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) ——→ | | | | | | | | | 0.61 | 0.60 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | | | | | | | | | B | A |

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




LEGEND: AM-PM Peak Hour
[Estimated 2-Way Daily]

PLOT OF INTERSECTION LEG VOLUMES




LEGEND:
AM-PM Peak Hour [Daily]
Daily = (AM+PM)* 5.5

| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 48 - 56 | 65 - 39 | 12 - 65 | 47 - 29 |
| % of Daily in Peak Hour (AM-PM) | 9 - 9 | 9 - 10 | 9 - 9 | 6 - 12 |

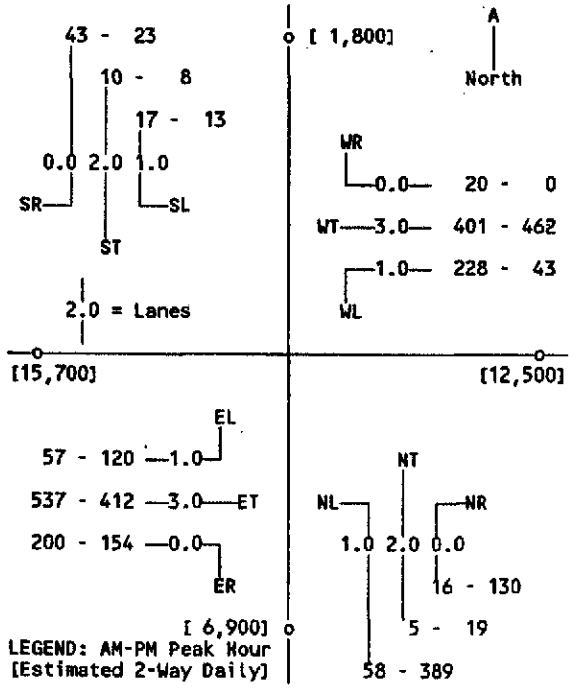
# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

INTERSECTION: SANTA CRUZ DRIVE (NS) and SAN JOAQUIN HILLS ROAD (EW) — COUNT DATE: 01-01-04
LAND USE: EXISTING + APPROVED PROJECTS + CUMULATIVE PROJECTS — GEOMETRICS: Existing

| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 1 | 1600 | 57 | 389 | 1 | 0 | 58 | 389 | 0.036* | 0.243* |
| Northbound Through | 2 | 3200 | 5 | 19 | 0 | 0 | 5 | 19 | 0.007 | 0.047 |
| Northbound Right | 0 | 0 | 15 | 130 | 1 | 0 | 16 | 130 | 0.000 | 0.000 |
| Southbound Left | 1 | 1600 | 17 | 12 | 0 | 1 | 17 | 13 | 0.011 | 0.008 |
| Southbound Through | 2 | 3200 | 9 | 8 | 1 | 0 | 10 | 8 | 0.017* | 0.010* |
| Southbound Right | 0 | 0 | 43 | 23 | 0 | 0 | 43 | 23 | 0.000 | 0.000 |
| Eastbound Left | 1 | 1600 | 57 | 120 | 0 | 0 | 57 | 120 | 0.036 | 0.075* |
| Eastbound Through | 3 | 4800 | 511 | 358 | 26 | 54 | 537 | 412 | 0.154* | 0.118 |
| Eastbound Right | 0 | 0 | 200 | 153 | 0 | 1 | 200 | 154 | 0.000 | 0.000 |
| Westbound Left | 1 | 1600 | 227 | 43 | 1 | 0 | 228 | 43 | 0.143* | 0.027 |
| Westbound Through | 3 | 4800 | 343 | 414 | 58 | 48 | 401 | 462 | 0.088 | 0.096* |
| Westbound Right | 0 | 0 | 20 | 0 | 0 | 0 | 20 | 0 | 0.000 | 0.000 |
| Northbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Clearance Interval | | | | | | | | | 0.000* | 0.000* |
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) ——→ | | | | | | | | | 0.35 | 0.42 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | | | | | | | | | A | A |

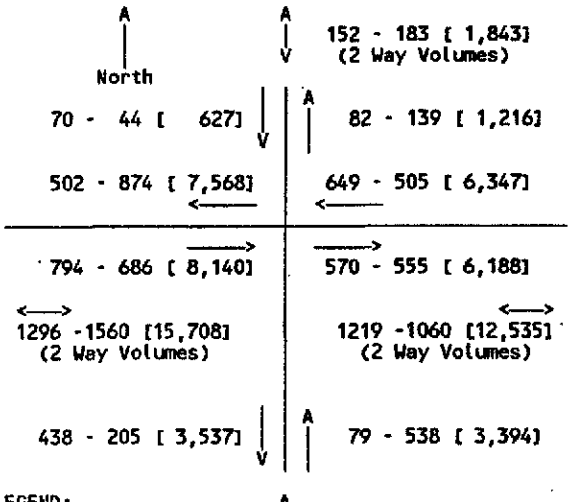
None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted.

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




LEGEND: AM-PM Peak Hour
[Estimated 2-Way Daily]

PLOT OF INTERSECTION LEG VOLUMES




| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 46 - 24 | 15 - 72 | 53 - 48 | 61 - 44 |
| % of Daily in Peak Hour (AM-PM) | 8 - 10 | 7 - 11 | 10 - 8 | 8 - 10 |

# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

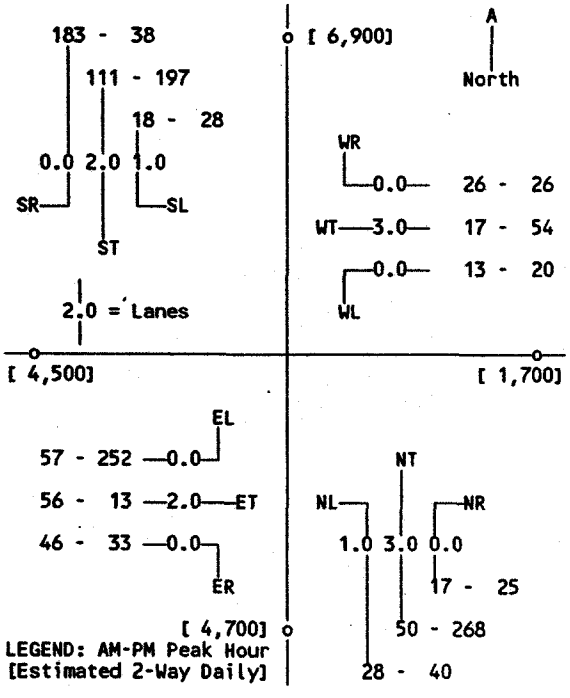
INTERSECTION: SANTA CRUZ DRIVE (NS) and SAN CLEMENTE DRIVE (EW)
LAND USE: EXISTING + APPROVED PROJECTS + CUMULATIVE PROJECTS

COUNT DATE: 01-01-04
GEOMETRICS: Existing

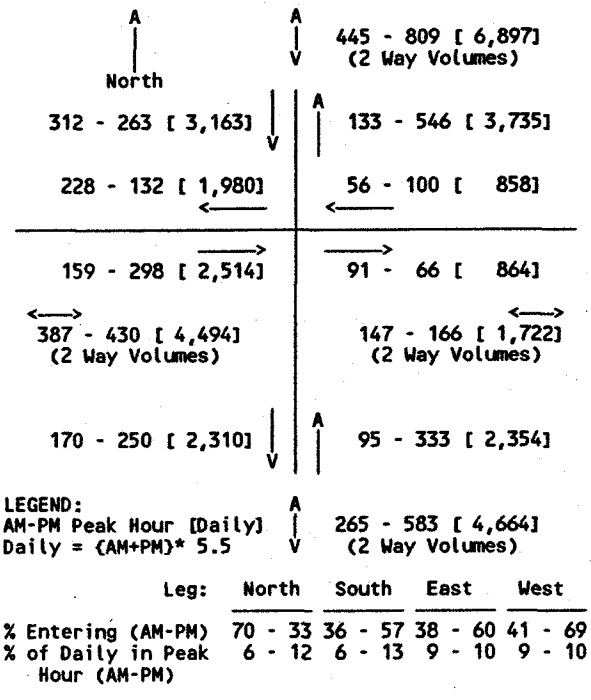
| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 1 | 1600 | 28 | 40 | 0 | 0 | 28 | 40 | 0.018* | 0.025* |
| Northbound Through | 3 | 4800 | 50 | 268 | 0 | 0 | 50 | 268 | 0.014 | 0.061 |
| Northbound Right | 0 | 0 | 17 | 25 | 0 | 0 | 17 | 25 | 0.000 | 0.000 |
| Southbound Left | 1 | 1600 | 18 | 28 | 0 | 0 | 18 | 28 | 0.011 | 0.018 |
| Southbound Through | 2 | 3200 | 111 | 197 | 0 | 0 | 111 | 197 | 0.092* | 0.073* |
| Southbound Right | 0 | 0 | 183 | 38 | 0 | 0 | 183 | 38 | 0.000 | 0.000 |
| Eastbound Left | 0 | 0 | 57 | 252 | 0 | 0 | 57 | 252 | 0.000 | 0.000 |
| Eastbound Through | 2 | 3200 | 56 | 13 | 0 | 0 | 56 | 13 | 0.050* | 0.093* |
| Eastbound Right | 0 | 0 | 46 | 33 | 0 | 0 | 46 | 33 | 0.000 | 0.000 |
| Westbound Left | 0 | 0 | 13 | 20 | 0 | 0 | 13 | 20 | 0.000* | 0.000* |
| Westbound Through | 3 | 4800 | 17 | 54 | 0 | 0 | 17 | 54 | 0.012 | 0.021 |
| Westbound Right | 0 | 0 | 26 | 26 | 0 | 0 | 26 | 26 | 0.000 | 0.000 |
| Northbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Clearance Interval | | | | | | | | | 0.000* | 0.000* |
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) | | | | | | | | | 0.16 | 0.19 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | | | | | | | | | A | A |

None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted.

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




PLOT OF INTERSECTION LEG VOLUMES




| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 70 - 33 | 36 - 57 | 38 - 60 | 41 - 69 |
| % of Daily in Peak Hour (AM-PM) | 6 - 12 | 6 - 13 | 9 - 10 | 9 - 10 |

# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

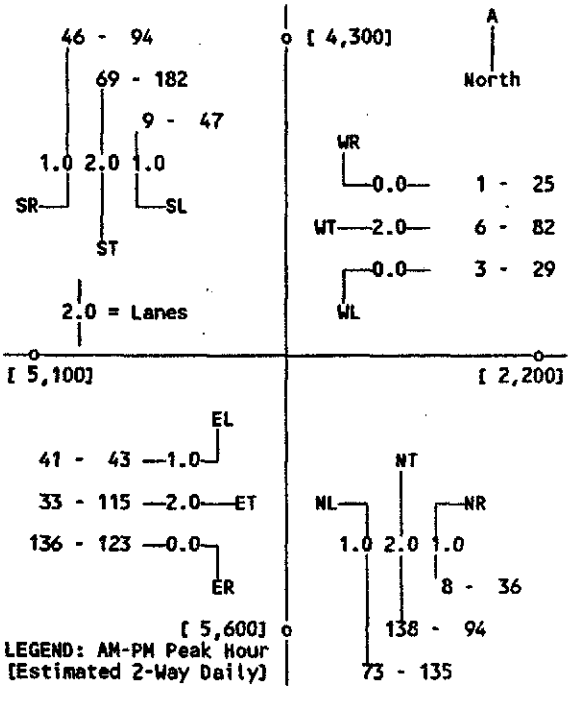
INTERSECTION: NEWPORT CENTER DRIVE (NS) and SANTA BARBARA DRIVE (EW)
LAND USE: EXISTING + APPROVED PROJECTS + CUMULATIVE PROJECTS

COUNT DATE: 01-01-04
GEOMETRICS: Existing

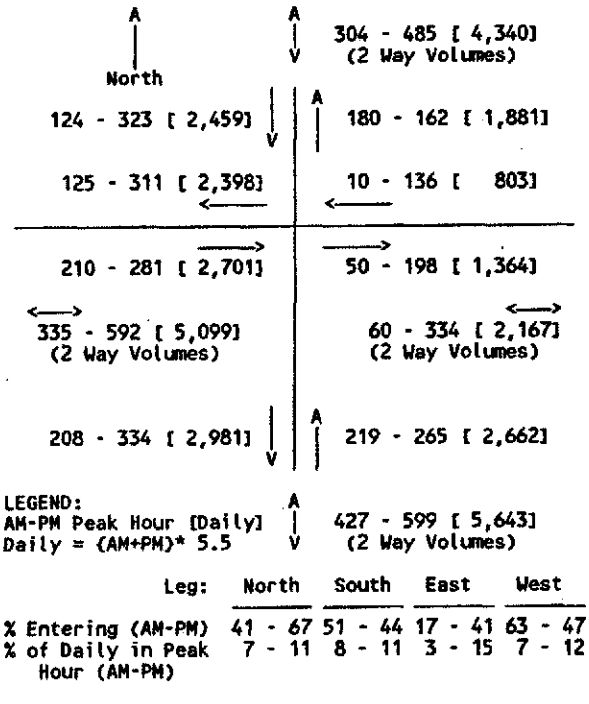
| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 1 | 1600 | 73 | 135 | 0 | 0 | 73 | 135 | 0.046* | 0.084* |
| Northbound Through | 2 | 3200 | 138 | 94 | 0 | 0 | 138 | 94 | 0.043 | 0.029 |
| Northbound Right | 1 | 1600 | 8 | 36 | 0 | 0 | 8 | 36 | 0.005 | 0.023 |
| Southbound Left | 1 | 1600 | 9 | 47 | 0 | 0 | 9 | 47 | 0.006 | 0.029 |
| Southbound Through | 2 | 3200 | 69 | 182 | 0 | 0 | 69 | 182 | 0.022* | 0.057* |
| Southbound Right | 1 | 1600 | 46 | 94 | 0 | 0 | 46 | 94 | 0.029 | 0.059 |
| Eastbound Left | 1 | 1600 | 41 | 43 | 0 | 0 | 41 | 43 | 0.026 | 0.027* |
| Eastbound Through | 2 | 3200 | 33 | 115 | 0 | 0 | 33 | 115 | 0.053* | 0.074 |
| Eastbound Right | 0 | 0 | 136 | 123 | 0 | 0 | 136 | 123 | 0.000 | 0.000 |
| Westbound Left | 0 | 0 | 3 | 29 | 0 | 0 | 3 | 29 | 0.000* | 0.000 |
| Westbound Through | 2 | 3200 | 6 | 82 | 0 | 0 | 6 | 82 | 0.003 | 0.043* |
| Westbound Right | 0 | 0 | 1 | 25 | 0 | 0 | 1 | 25 | 0.000 | 0.000 |
| Northbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Clearance Interval | | | | | | | | | 0.000* | 0.000* |
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) ——→ | | | | | | | | | 0.12 | 0.21 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | | | | | | | | | A | A |

None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted.

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




PLOT OF INTERSECTION LEG VOLUMES




| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 41 - 67 | 51 - 44 | 17 - 41 | 63 - 47 |
| % of Daily in Peak Hour (AM-PM) | 7 - 11 | 8 - 11 | 3 - 15 | 7 - 12 |

# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

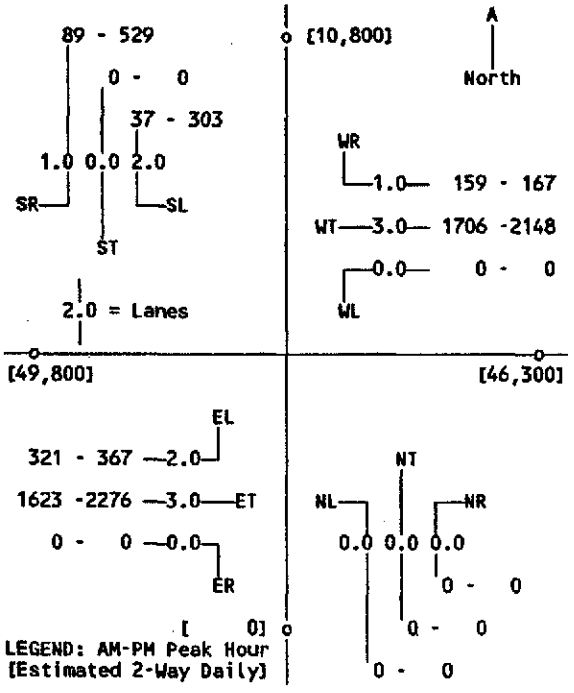
INTERSECTION: NEWPORT CENTER DRIVE (NS) and COAST HIGHWAY (EW)
LAND USE: EXISTING + APPROVED PROJECTS + CUMULATIVE PROJECTS

COUNT DATE: 01-01-04
GEOMETRICS: Existing

| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000 | 0.000 |
| Northbound Through | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000* | 0.000* |
| Northbound Right | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000 | 0.000 |
| Southbound Left | 2 | 3200 | 37 | 300 | 0 | 3 | 37 | 303 | 0.012* | 0.095* |
| Southbound Through | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000 | 0.000 |
| Southbound Right | Free 1 | 1600 | 78 | 496 | 11 | 33 | 89 | 529 | 0.056 | 0.331 |
| Eastbound Left | 2 | 3200 | 315 | 352 | 6 | 15 | 321 | 367 | 0.100* | 0.115* |
| Eastbound Through | 3 | 4800 | 1428 | 1714 | 195 | 562 | 1623 | 2276 | 0.338 | 0.474 |
| Eastbound Right | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000 | 0.000 |
| Westbound Left | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000 | 0.000 |
| Westbound Through | 3 | 4800 | 1194 | 1774 | 512 | 374 | 1706 | 2148 | 0.355* | 0.448* |
| Westbound Right | Free 1 | 1600 | 158 | 161 | 1 | 6 | 159 | 167 | 0.099 | 0.104 |
| Northbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Clearance Interval | | | | | | | | | 0.000* | 0.000* |
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) ⟶ | | | | | | | | | 0.47 | 0.66 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | | | | | | | | | A | B |

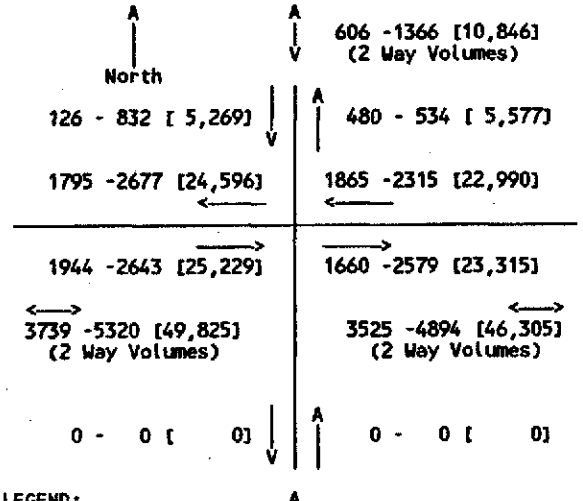
None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted.

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




LEGEND: AM-PM Peak Hour
[Estimated 2-Way Daily]

PLOT OF INTERSECTION LEG VOLUMES




LEGEND:
AM-PM Peak Hour [Daily]
Daily = (AM+PM)* 5.5

| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 21 - 61 | 0 - 0 | 53 - 47 | 52 - 50 |
| % of Daily in Peak Hour (AM-PM) | 6 - 13 | 0 - 0 | 8 - 11 | 8 - 11 |

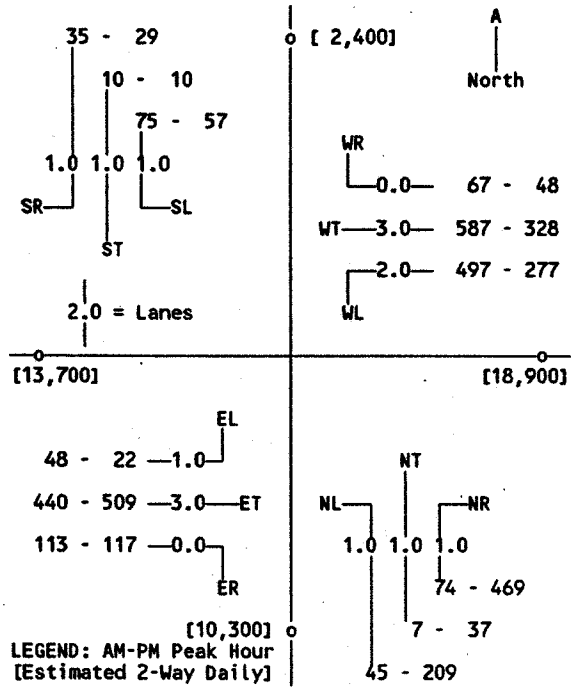
Kunzman Associates

# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

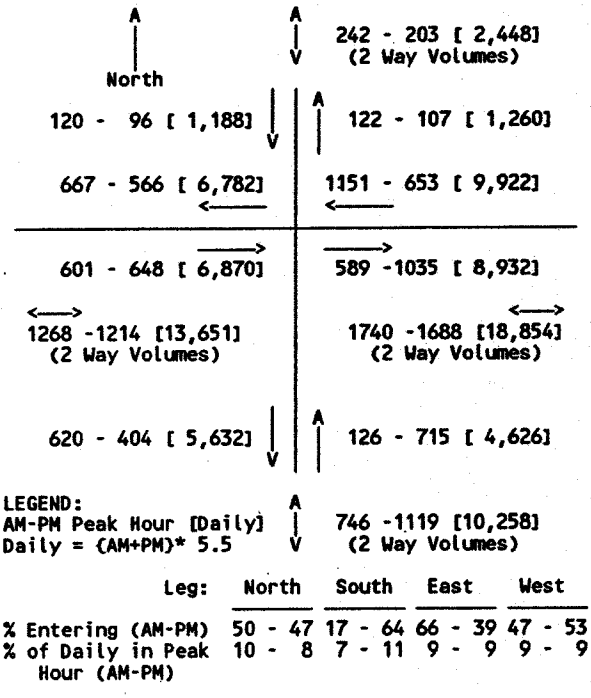
INTERSECTION: SANTA ROSA DRIVE/BIG CANYON DRIVE (NS) and SAN JOAQUIN HILLS ROA — COUNT DATE: 01-01-04
LAND USE: EXISTING + APPROVED PROJECTS + CUMULATIVE PROJECTS — GEOMETRICS: Existing

| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 1 | 1600 | 36 | 203 | 9 | 6 | 45 | 209 | 0.028 | 0.131 |
| Northbound Through | 1 | 1600 | 7 | 37 | 0 | 0 | 7 | 37 | 0.004 | 0.023 |
| Northbound Right | 1 | 1600 | 59 | 401 | 15 | 68 | 74 | 469 | 0.046* | 0.293* |
| Southbound Left | 1 | 1600 | 75 | 57 | 0 | 0 | 75 | 57 | 0.047* | 0.036* |
| Southbound Through | 1 | 1600 | 10 | 10 | 0 | 0 | 10 | 10 | 0.006 | 0.006 |
| Southbound Right | 1 | 1600 | 35 | 29 | 0 | 0 | 35 | 29 | 0.022 | 0.018 |
| Eastbound Left | 1 | 1600 | 47 | 22 | 1 | 0 | 48 | 22 | 0.030 | 0.014 |
| Eastbound Through | 3 | 4800 | 389 | 433 | 51 | 76 | 440 | 509 | 0.115* | 0.130* |
| Eastbound Right | 0 | 0 | 107 | 109 | 6 | 8 | 113 | 117 | 0.000 | 0.000 |
| Westbound Left | 2 | 3200 | 443 | 214 | 54 | 63 | 497 | 277 | 0.155* | 0.087* |
| Westbound Through | 3 | 4800 | 510 | 256 | 77 | 72 | 587 | 328 | 0.136 | 0.078 |
| Westbound Right | 0 | 0 | 67 | 48 | 0 | 0 | 67 | 48 | 0.000 | 0.000 |
| Northbound Right Turn Adjustment | None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted. | | | | | | | | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Clearance Interval | | | | | | | | | 0.000* | 0.000* |
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) ——→ | | | | | | | | | 0.36 | 0.55 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | | | | | | | | | A | A |

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




PLOT OF INTERSECTION LEG VOLUMES




| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 50 - 47 | 17 - 64 | 66 - 39 | 47 - 53 |
| % of Daily in Peak Hour (AM-PM) | 10 - 8 | 7 - 11 | 9 - 9 | 9 - 9 |

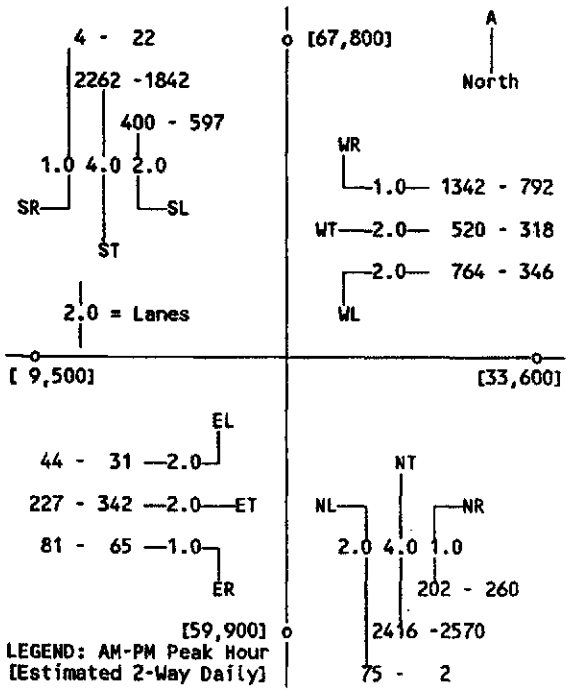
# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

INTERSECTION: MACARTHUR BOULEVARD (NS) and FORD ROAD (EW)
LAND USE: EXISTING + APPROVED PROJECTS + CUMULATIVE PROJECTS

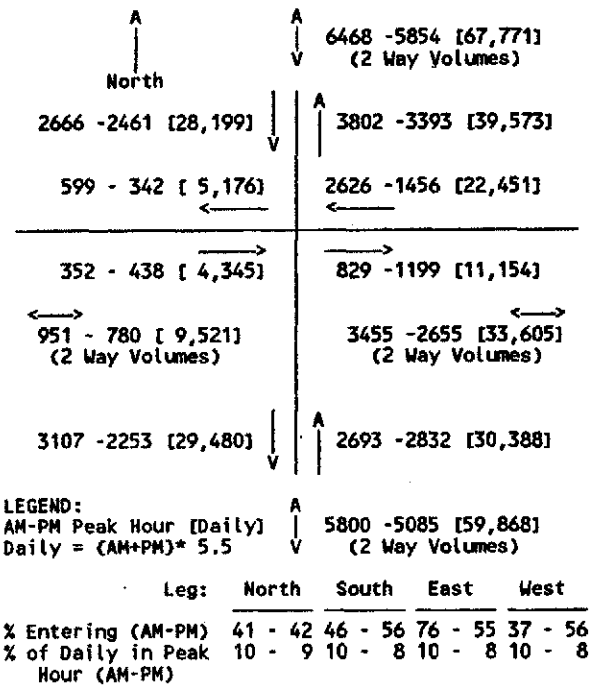
COUNT DATE: 01-01-04
GEOMETRICS: Existing

| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 2 | 3200 | 74 | 0 | 1 | 2 | 75 | 2 | 0.023 | 0.001 |
| Northbound Through | 4 | 6400 | 2296 | 2468 | 120 | 102 | 2416 | 2570 | 0.378* | 0.402* |
| Northbound Right | Free 1 | 1600 | 121 | 161 | 81 | 99 | 202 | 260 | 0.126 | 0.163 |
| Southbound Left | 2 | 3200 | 373 | 517 | 27 | 80 | 400 | 597 | 0.125* | 0.187* |
| Southbound Through | 4 | 6400 | 2210 | 1686 | 52 | 156 | 2262 | 1842 | 0.353 | 0.288 |
| Southbound Right | Free 1 | 1600 | 4 | 21 | 0 | 1 | 4 | 22 | 0.003 | 0.014 |
| Eastbound Left | 2 | 3200 | 43 | 31 | 1 | 0 | 44 | 31 | 0.014 | 0.010 |
| Eastbound Through | 2 | 3200 | 178 | 197 | 49 | 145 | 227 | 342 | 0.071* | 0.107* |
| Eastbound Right | 1 | 1600 | 79 | 64 | 2 | 1 | 81 | 65 | 0.051 | 0.041 |
| Westbound Left | 2 | 3200 | 687 | 257 | 77 | 89 | 764 | 346 | 0.239* | 0.108* |
| Westbound Through | 2 | 3200 | 376 | 229 | 144 | 89 | 520 | 318 | 0.163 | 0.099 |
| Westbound Right | Free 1 | 1600 | 1268 | 749 | 74 | 43 | 1342 | 792 | 0.839 | 0.495 |
| Northbound Right Turn Adjustment | None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted. | | | | | | | | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Clearance Interval | | | | | | | | | 0.000* | 0.000* |
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) ——→ | | | | | | | | | 0.81 | 0.80 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | | | | | | | | | D | C |

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




PLOT OF INTERSECTION LEG VOLUMES




| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 41 - 42 | 46 - 56 | 76 - 55 | 37 - 56 |
| % of Daily in Peak Hour (AM-PM) | 10 - 9 | 10 - 8 | 10 - 8 | 10 - 8 |

# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

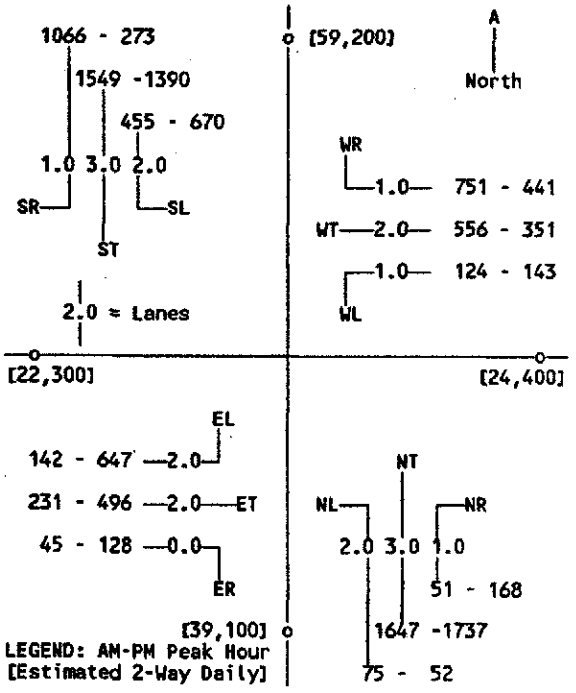
INTERSECTION: MACARTHUR BOULEVARD (NS) and SAN JOAQUIN HILLS ROAD (EW) — COUNT DATE: 01-01-04
LAND USE: EXISTING + APPROVED PROJECTS + CUMULATIVE PROJECTS — GEOMETRICS: Existing

| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 2 | 3200 | 70 | 46 | 5 | 6 | 75 | 52 | 0.023 | 0.016 |
| Northbound Through | 3 | 4800 | 1526 | 1645 | 121 | 92 | 1647 | 1737 | 0.343* | 0.362* |
| Northbound Right | 1 | 1600 | 6 | 15 | 45 | 153 | 51 | 168 | 0.032 | 0.105 |
| Southbound Left | 2 | 3200 | 428 | 599 | 27 | 71 | 455 | 670 | 0.142* | 0.209* |
| Southbound Through | 3 | 4800 | 1491 | 1269 | 58 | 121 | 1549 | 1390 | 0.323 | 0.290 |
| Southbound Right | Free 1 | 1600 | 1036 | 231 | 30 | 42 | 1066 | 273 | 0.666 | 0.171 |
| Eastbound Left | 2 | 3200 | 107 | 588 | 35 | 59 | 142 | 647 | 0.044* | 0.202* |
| Eastbound Through | 2 | 3200 | 199 | 403 | 32 | 93 | 231 | 496 | 0.086 | 0.195 |
| Eastbound Right | 0 | 0 | 45 | 128 | 0 | 0 | 45 | 128 | 0.000 | 0.000 |
| Westbound Left | 1 | 1600 | 19 | 27 | 105 | 116 | 124 | 143 | 0.078 | 0.089 |
| Westbound Through | 2 | 3200 | 464 | 285 | 92 | 66 | 556 | 351 | 0.174* | 0.110* |
| Westbound Right | Free 1 | 1600 | 705 | 395 | 46 | 46 | 751 | 441 | 0.469 | 0.276 |
| Northbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Clearance Interval | | | | | | | | | 0.000* | 0.000* |

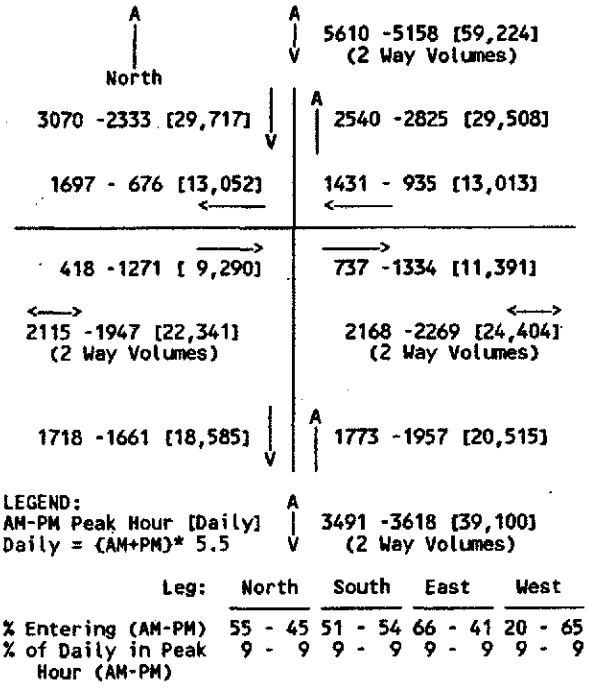
None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted.

INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) ——→ 0.70 0.88
LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) B D

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




PLOT OF INTERSECTION LEG VOLUMES




| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 55 - 45 | 51 - 54 | 66 - 41 | 20 - 65 |
| % of Daily in Peak Hour (AM-PM) | 9 - 9 | 9 - 9 | 9 - 9 | 9 - 9 |

**Existing + Approved Projects**
**+ Cumulative Projects + Project**

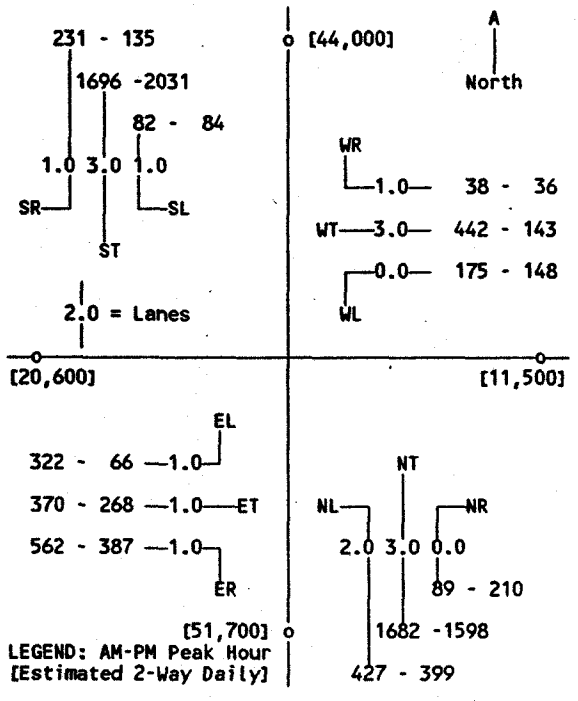
# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

INTERSECTION: JAMBOREE ROAD (NS) and EASTBLUFF DRIVE/FORD ROAD (EW)
LAND USE: EXISTING + APPROVED PROJECTS + CUMULATIVE PROJECTS + PROJECT

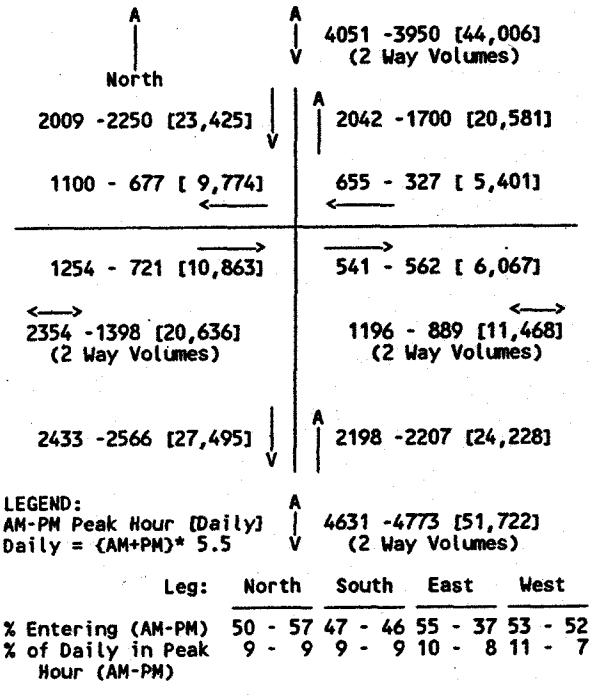
COUNT DATE: 01-01-04
GEOMETRICS: Existing

| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 2 | 3200 | 399 | 388 | 28 | 11 | 427 | 399 | 0.133* | 0.125* |
| Northbound Through | 3 | 4800 | 1388 | 1324 | 294 | 274 | 1682 | 1598 | 0.369 | 0.377 |
| Northbound Right | 0 | 0 | 67 | 146 | 22 | 64 | 89 | 210 | 0.000 | 0.000 |
| Southbound Left | 1 | 1600 | 76 | 61 | 6 | 23 | 82 | 84 | 0.051 | 0.053 |
| Southbound Through | 3 | 4800 | 1517 | 1694 | 179 | 337 | 1696 | 2031 | 0.353* | 0.423* |
| Southbound Right | 1 | 1600 | 215 | 133 | 16 | 2 | 231 | 135 | 0.144 | 0.084 |
| Eastbound Left | 1 | 1600 | 311 | 64 | 11 | 2 | 322 | 66 | 0.201 | 0.041 |
| Eastbound Through | 1 | 1600 | 346 | 204 | 24 | 64 | 370 | 268 | 0.231* | 0.168* |
| Eastbound Right | Free 1 | 1600 | 546 | 373 | 16 | 14 | 562 | 387 | 0.351 | 0.242 |
| Westbound Left | 0 | 0 | 116 | 110 | 59 | 38 | 175 | 148 | 0.000 | 0.000 |
| Westbound Through | 3 | 4800 | 377 | 100 | 65 | 43 | 442 | 143 | 0.129* | 0.061* |
| Westbound Right | 1 | 1600 | 15 | 23 | 23 | 13 | 38 | 36 | 0.024 | 0.023 |
| Northbound Right Turn Adjustment | None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted. | | | | | | | | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Clearance Interval | | | | | | | | | 0.000* | 0.000* |
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) ⟶ | | | | | | | | | 0.85 | 0.78 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | | | | | | | | | D | C |

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




PLOT OF INTERSECTION LEG VOLUMES




| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 50 - 57 | 47 - 46 | 55 - 37 | 53 - 52 |
| % of Daily in Peak Hour (AM-PM) | 9 - 9 | 9 - 9 | 10 - 8 | 11 - 7 |

# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

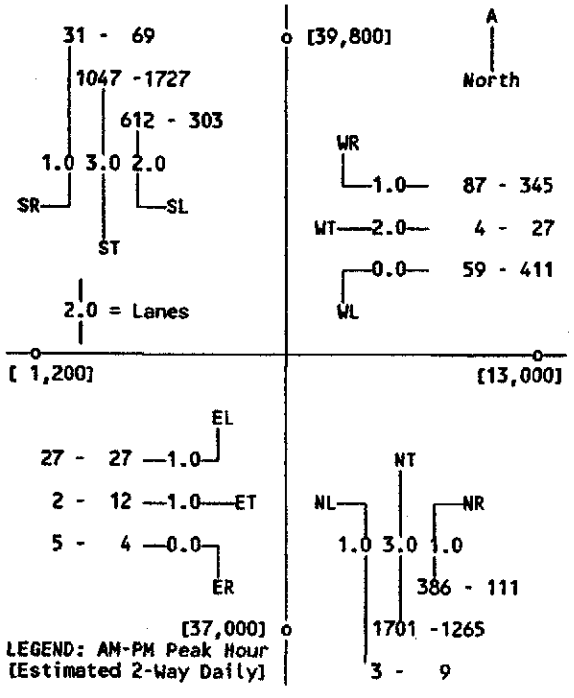
INTERSECTION: JAMBOREE ROAD (NS) and SANTA BARBARA DRIVE (EW) — COUNT DATE: 01-01-04
LAND USE: EXISTING + APPROVED PROJECTS + CUMULATIVE PROJECTS + PROJECT — GEOMETRICS: Existing

| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 1 | 1600 | 3 | 9 | 0 | 0 | 3 | 9 | 0.002 | 0.006* |
| Northbound Through | 3 | 4800 | 1426 | 990 | 275 | 275 | 1701 | 1265 | 0.354* | 0.264 |
| Northbound Right | 1 | 1600 | 381 | 104 | 5 | 7 | 386 | 111 | 0.241 | 0.069 |
| Southbound Left | 2 | 3200 | 608 | 291 | 4 | 12 | 612 | 303 | 0.191* | 0.095 |
| Southbound Through | 3 | 4800 | 819 | 1415 | 228 | 312 | 1047 | 1727 | 0.218 | 0.360* |
| Southbound Right | 1 | 1600 | 30 | 63 | 1 | 6 | 31 | 69 | 0.019 | 0.043 |
| Eastbound Left | 1 | 1600 | 21 | 25 | 6 | 2 | 27 | 27 | 0.017* | 0.017* |
| Eastbound Through | 1 | 1600 | 2 | 11 | 0 | 1 | 2 | 12 | 0.004 | 0.010 |
| Eastbound Right | 0 | 0 | 5 | 4 | 0 | 0 | 5 | 4 | 0.000 | 0.000 |
| Westbound Left | 0 | 0 | 50 | 406 | 9 | 5 | 59 | 411 | 0.000 | 0.000 |
| Westbound Through | 2 | 3200 | 4 | 26 | 0 | 1 | 4 | 27 | 0.020 | 0.137 |
| Westbound Right | 1 | 1600 | 71 | 339 | 16 | 6 | 87 | 345 | 0.054* | 0.216* |

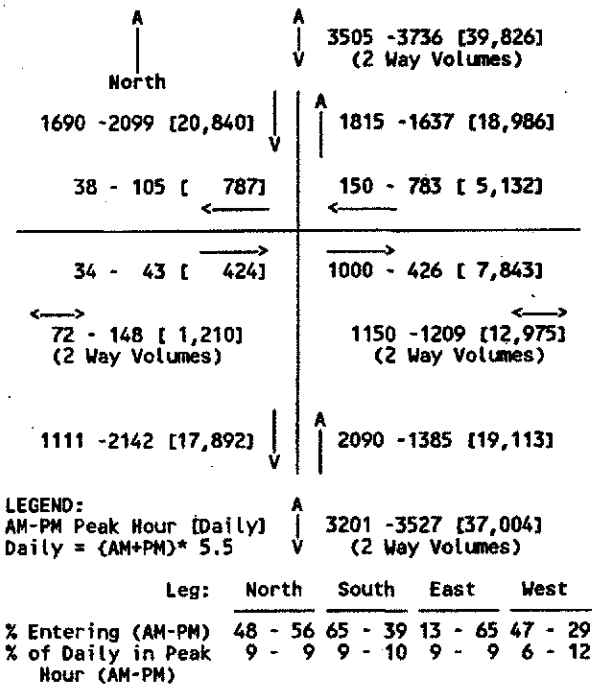
| | | | |
|---|---|---|---|
| Northbound Right Turn Adjustment | None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted. | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | 0.000* | 0.000* |
| Clearance Interval | | 0.000* | 0.000* |

| | | |
|---|---|---|
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) ——> | 0.62 | 0.60 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | B | A |

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




PLOT OF INTERSECTION LEG VOLUMES




| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 48 - 56 | 65 - 39 | 13 - 65 | 47 - 29 |
| % of Daily in Peak Hour (AM-PM) | 9 - 9 | 9 - 10 | 9 - 9 | 6 - 12 |

Kunzman Associates

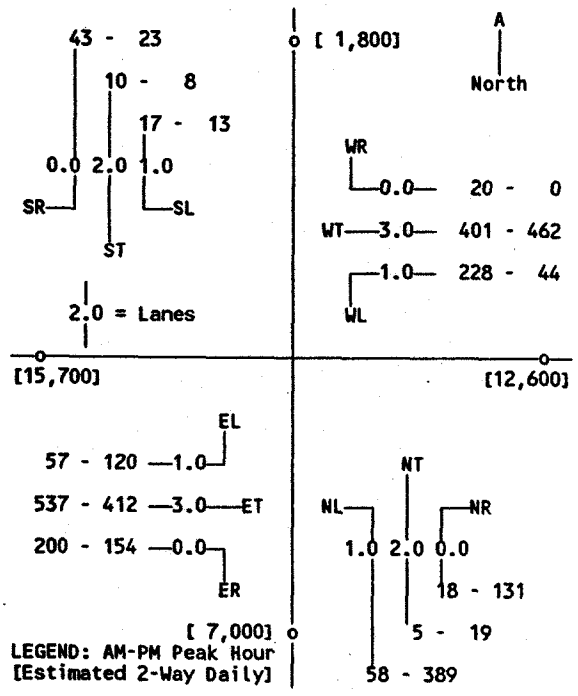
# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

INTERSECTION: SANTA CRUZ DRIVE (NS) and SAN JOAQUIN HILLS ROAD (EW) — COUNT DATE: 01-01-04
LAND USE: EXISTING + APPROVED PROJECTS + CUMULATIVE PROJECTS + PROJECT — GEOMETRICS: Existing

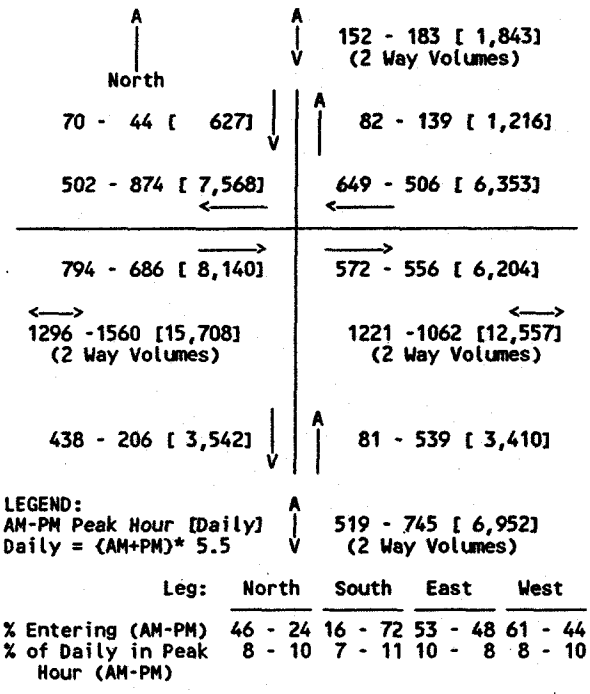
| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 1 | 1600 | 57 | 389 | 1 | 0 | 58 | 389 | 0.036* | 0.243* |
| Northbound Through | 2 | 3200 | 5 | 19 | 0 | 0 | 5 | 19 | 0.007 | 0.047 |
| Northbound Right | 0 | 0 | 15 | 130 | 3 | 1 | 18 | 131 | 0.000 | 0.000 |
| Southbound Left | 1 | 1600 | 17 | 12 | 0 | 1 | 17 | 13 | 0.011 | 0.008 |
| Southbound Through | 2 | 3200 | 9 | 8 | 1 | 0 | 10 | 8 | 0.017* | 0.010* |
| Southbound Right | 0 | 0 | 43 | 23 | 0 | 0 | 43 | 23 | 0.000 | 0.000 |
| Eastbound Left | 1 | 1600 | 57 | 120 | 0 | 0 | 57 | 120 | 0.036 | 0.075* |
| Eastbound Through | 3 | 4800 | 511 | 358 | 26 | 54 | 537 | 412 | 0.154* | 0.118 |
| Eastbound Right | 0 | 0 | 200 | 153 | 0 | 1 | 200 | 154 | 0.000 | 0.000 |
| Westbound Left | 1 | 1600 | 227 | 43 | 1 | 1 | 228 | 44 | 0.143* | 0.028 |
| Westbound Through | 3 | 4800 | 343 | 414 | 58 | 48 | 401 | 462 | 0.088 | 0.096* |
| Westbound Right | 0 | 0 | 20 | 0 | 0 | 0 | 20 | 0 | 0.000 | 0.000 |
| Northbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Clearance Interval | | | | | | | | | 0.000* | 0.000* |
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) | | | | | | | | | 0.35 | 0.42 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | | | | | | | | | A | A |

None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted.

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




PLOT OF INTERSECTION LEG VOLUMES




| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 46 - 24 | 16 - 72 | 53 - 48 | 61 - 44 |
| % of Daily in Peak Hour (AM-PM) | 8 - 10 | 7 - 11 | 10 - 8 | 8 - 10 |

Kunzman Associates

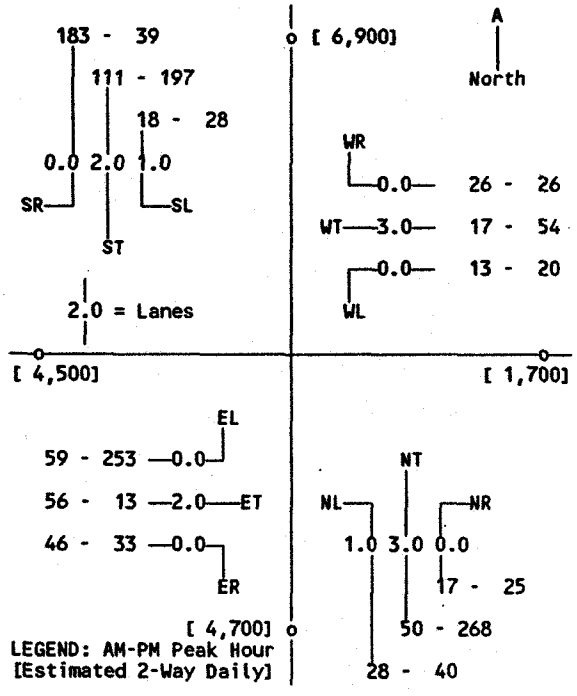
# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

INTERSECTION: SANTA CRUZ DRIVE (NS) and SAN CLEMENTE DRIVE (EW) — COUNT DATE: 01-01-04
LAND USE: EXISTING + APPROVED PROJECTS + CUMULATIVE PROJECTS + PROJECT — GEOMETRICS: Existing

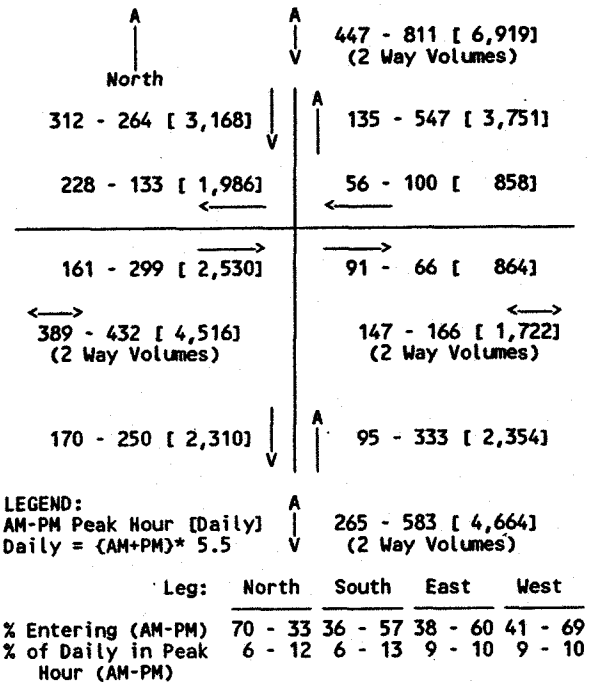
| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 1 | 1600 | 28 | 40 | 0 | 0 | 28 | 40 | 0.018* | 0.025* |
| Northbound Through | 3 | 4800 | 50 | 268 | 0 | 0 | 50 | 268 | 0.014 | 0.061 |
| Northbound Right | 0 | 0 | 17 | 25 | 0 | 0 | 17 | 25 | 0.000 | 0.000 |
| Southbound Left | 1 | 1600 | 18 | 28 | 0 | 0 | 18 | 28 | 0.011 | 0.018 |
| Southbound Through | 2 | 3200 | 111 | 197 | 0 | 0 | 111 | 197 | 0.092* | 0.074* |
| Southbound Right | 0 | 0 | 183 | 38 | 0 | 1 | 183 | 39 | 0.000 | 0.000 |
| Eastbound Left | 0 | 0 | 57 | 252 | 2 | 1 | 59 | 253 | 0.000 | 0.000 |
| Eastbound Through | 2 | 3200 | 56 | 13 | 0 | 0 | 56 | 13 | 0.050* | 0.093* |
| Eastbound Right | 0 | 0 | 46 | 33 | 0 | 0 | 46 | 33 | 0.000 | 0.000 |
| Westbound Left | 0 | 0 | 13 | 20 | 0 | 0 | 13 | 20 | 0.000* | 0.000* |
| Westbound Through | 3 | 4800 | 17 | 54 | 0 | 0 | 17 | 54 | 0.012 | 0.021 |
| Westbound Right | 0 | 0 | 26 | 26 | 0 | 0 | 26 | 26 | 0.000 | 0.000 |
| Northbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Clearance Interval | | | | | | | | | 0.000* | 0.000* |
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) → | | | | | | | | | 0.16 | 0.19 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | | | | | | | | | A | A |

None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted.

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




PLOT OF INTERSECTION LEG VOLUMES




| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 70 - 33 | 36 - 57 | 38 - 60 | 41 - 69 |
| % of Daily in Peak Hour (AM-PM) | 6 - 12 | 6 - 13 | 9 - 10 | 9 - 10 |

Kunzman Associates

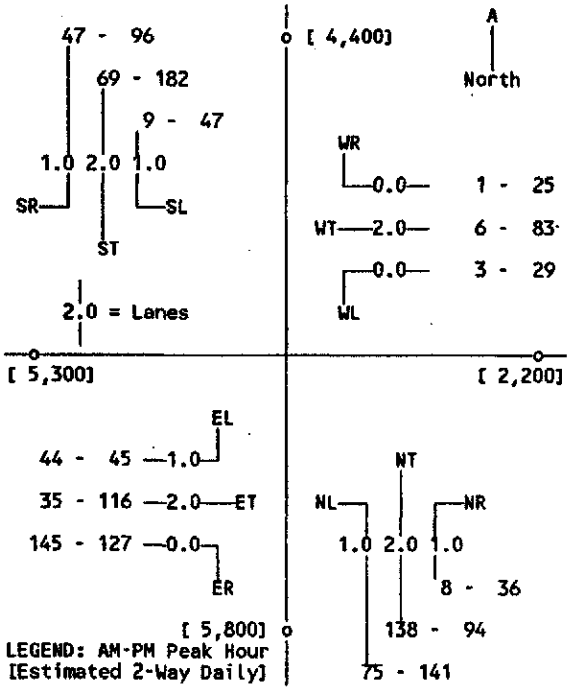
# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

INTERSECTION: NEWPORT CENTER DRIVE (NS) and SANTA BARBARA DRIVE (EW) — COUNT DATE: 01-01-04
LAND USE: EXISTING + APPROVED PROJECTS + CUMULATIVE PROJECTS + PROJECT — GEOMETRICS: Existing

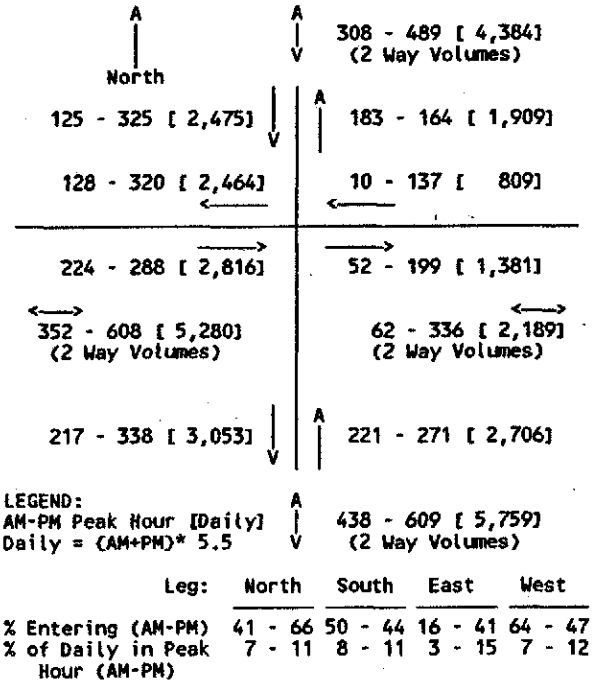
| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 1 | 1600 | 73 | 135 | 2 | 6 | 75 | 141 | 0.047* | 0.088* |
| Northbound Through | 2 | 3200 | 138 | 94 | 0 | 0 | 138 | 94 | 0.043 | 0.029 |
| Northbound Right | 1 | 1600 | 8 | 36 | 0 | 0 | 8 | 36 | 0.005 | 0.023 |
| Southbound Left | 1 | 1600 | 9 | 47 | 0 | 0 | 9 | 47 | 0.006 | 0.029 |
| Southbound Through | 2 | 3200 | 69 | 182 | 0 | 0 | 69 | 182 | 0.022* | 0.057* |
| Southbound Right | 1 | 1600 | 46 | 94 | 1 | 2 | 47 | 96 | 0.029 | 0.060 |
| Eastbound Left | 1 | 1600 | 41 | 43 | 3 | 2 | 44 | 45 | 0.028 | 0.028 |
| Eastbound Through | 2 | 3200 | 33 | 115 | 2 | 1 | 35 | 116 | 0.056* | 0.076* |
| Eastbound Right | 0 | 0 | 136 | 123 | 9 | 4 | 145 | 127 | 0.000 | 0.000 |
| Westbound Left | 0 | 0 | 3 | 29 | 0 | 0 | 3 | 29 | 0.000* | 0.000* |
| Westbound Through | 2 | 3200 | 6 | 82 | 0 | 1 | 6 | 83 | 0.003 | 0.043 |
| Westbound Right | 0 | 0 | 1 | 25 | 0 | 0 | 1 | 25 | 0.000 | 0.000 |
| Northbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Clearance Interval | | | | | | | | | 0.000* | 0.000* |
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) | | | | | | | | | 0.13 | 0.22 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | | | | | | | | | A | A |

None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted.

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




PLOT OF INTERSECTION LEG VOLUMES




| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 41 - 66 | 50 - 44 | 16 - 41 | 64 - 47 |
| % of Daily in Peak Hour (AM-PM) | 7 - 11 | 8 - 11 | 3 - 15 | 7 - 12 |

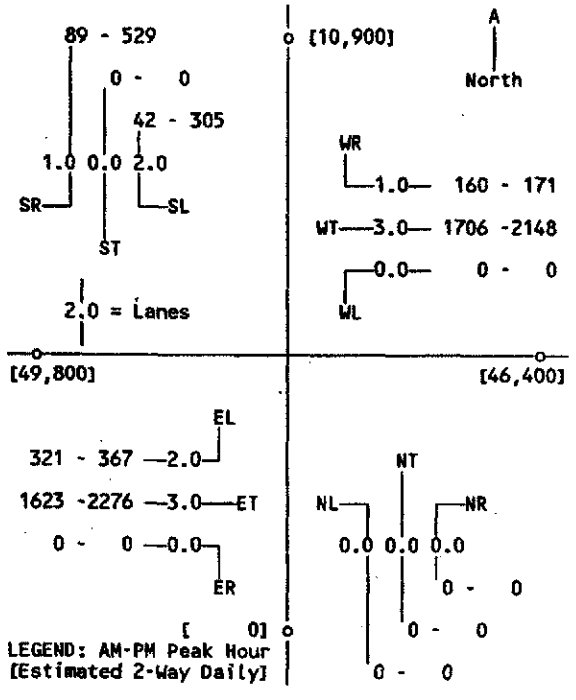
# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

INTERSECTION: NEWPORT CENTER DRIVE (NS) and COAST HIGHWAY (EW) — COUNT DATE: 01-01-04
LAND USE: EXISTING + APPROVED PROJECTS + CUMULATIVE PROJECTS + PROJECT — GEOMETRICS: Existing

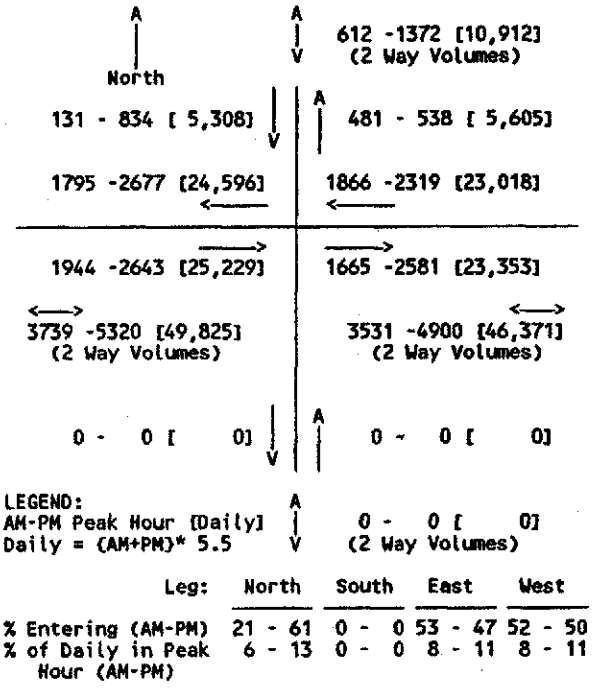
| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000 | 0.000 |
| Northbound Through | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000* | 0.000* |
| Northbound Right | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000 | 0.000 |
| Southbound Left | 2 | 3200 | 37 | 300 | 5 | 5 | 42 | 305 | 0.013* | 0.095* |
| Southbound Through | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000 | 0.000 |
| Southbound Right | Free 1 | 1600 | 78 | 496 | 11 | 33 | 89 | 529 | 0.056 | 0.331 |
| Eastbound Left | 2 | 3200 | 315 | 352 | 6 | 15 | 321 | 367 | 0.100* | 0.115* |
| Eastbound Through | 3 | 4800 | 1428 | 1714 | 195 | 562 | 1623 | 2276 | 0.338 | 0.474 |
| Eastbound Right | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000 | 0.000 |
| Westbound Left | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000 | 0.000 |
| Westbound Through | 3 | 4800 | 1194 | 1774 | 512 | 374 | 1706 | 2148 | 0.355* | 0.448* |
| Westbound Right | Free 1 | 1600 | 158 | 161 | 2 | 10 | 160 | 171 | 0.100 | 0.107 |
| Northbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Clearance Interval | | | | | | | | | 0.000* | 0.000* |
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) | | | | | | | | | 0.47 | 0.66 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | | | | | | | | | A | B |

None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted.

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




PLOT OF INTERSECTION LEG VOLUMES




| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 21 - 61 | 0 - 0 | 53 - 47 | 52 - 50 |
| % of Daily in Peak Hour (AM-PM) | 6 - 13 | 0 - 0 | 8 - 11 | 8 - 11 |

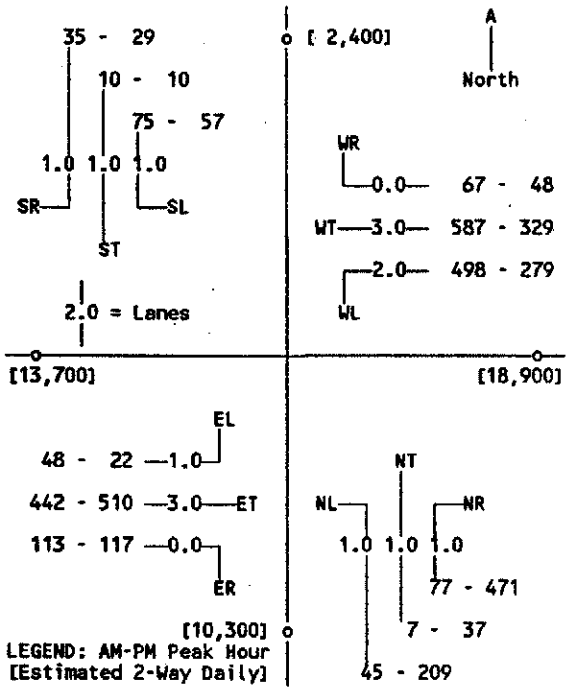
# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

INTERSECTION: SANTA ROSA DRIVE/BIG CANYON DRIVE (NS) and SAN JOAQUIN HILLS ROA — COUNT DATE: 01-01-04
LAND USE: EXISTING + APPROVED PROJECTS + CUMULATIVE PROJECTS + PROJECT — GEOMETRICS: Existing

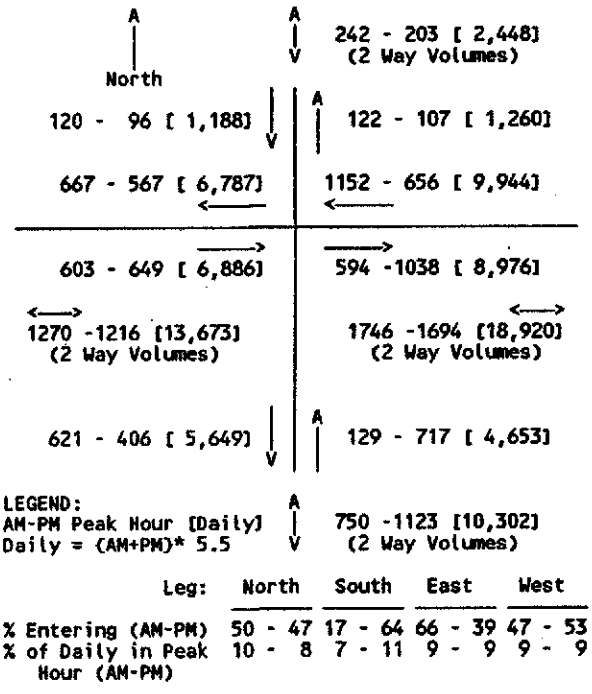
| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 1 | 1600 | 36 | 203 | 9 | 6 | 45 | 209 | 0.028 | 0.131 |
| Northbound Through | 1 | 1600 | 7 | 37 | 0 | 0 | 7 | 37 | 0.004 | 0.023 |
| Northbound Right | 1 | 1600 | 59 | 401 | 18 | 70 | 77 | 471 | 0.048* | 0.294* |
| Southbound Left | 1 | 1600 | 75 | 57 | 0 | 0 | 75 | 57 | 0.047* | 0.036* |
| Southbound Through | 1 | 1600 | 10 | 10 | 0 | 0 | 10 | 10 | 0.006 | 0.006 |
| Southbound Right | 1 | 1600 | 35 | 29 | 0 | 0 | 35 | 29 | 0.022 | 0.018 |
| Eastbound Left | 1 | 1600 | 47 | 22 | 1 | 0 | 48 | 22 | 0.030 | 0.014 |
| Eastbound Through | 3 | 4800 | 389 | 433 | 53 | 77 | 442 | 510 | 0.116* | 0.131* |
| Eastbound Right | 0 | 0 | 107 | 109 | 6 | 8 | 113 | 117 | 0.000 | 0.000 |
| Westbound Left | 2 | 3200 | 443 | 214 | 55 | 65 | 498 | 279 | 0.156* | 0.087* |
| Westbound Through | 3 | 4800 | 510 | 256 | 77 | 73 | 587 | 329 | 0.136 | 0.079 |
| Westbound Right | 0 | 0 | 67 | 48 | 0 | 0 | 67 | 48 | 0.000 | 0.000 |
| Northbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Clearance Interval | | | | | | | | | 0.000* | 0.000* |
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) ——→ | | | | | | | | | 0.37 | 0.55 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | | | | | | | | | A | A |

None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted.

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




PLOT OF INTERSECTION LEG VOLUMES




| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 50 - 47 | 17 - 64 | 66 - 39 | 47 - 53 |
| % of Daily in Peak Hour (AM-PM) | 10 - 8 | 7 - 11 | 9 - 9 | 9 - 9 |

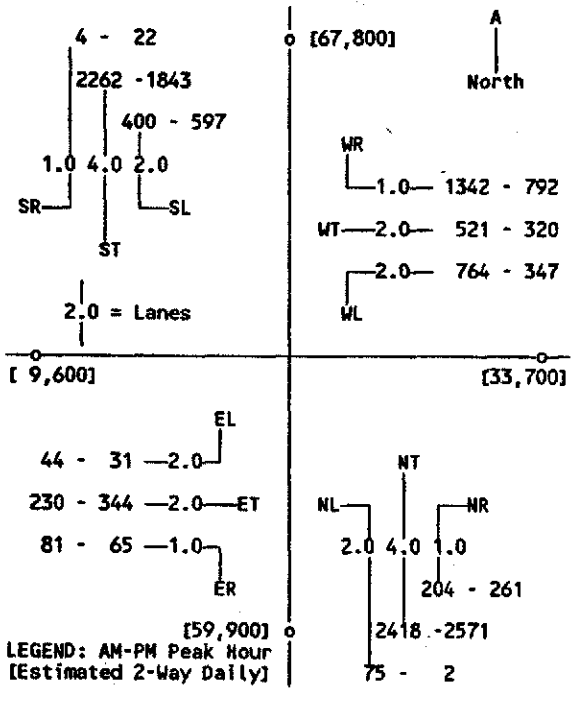
# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

INTERSECTION: MACARTHUR BOULEVARD (NS) and FORD ROAD (EW)
LAND USE: EXISTING + APPROVED PROJECTS + CUMULATIVE PROJECTS + PROJECT

COUNT DATE: 01-01-04
GEOMETRICS: Existing

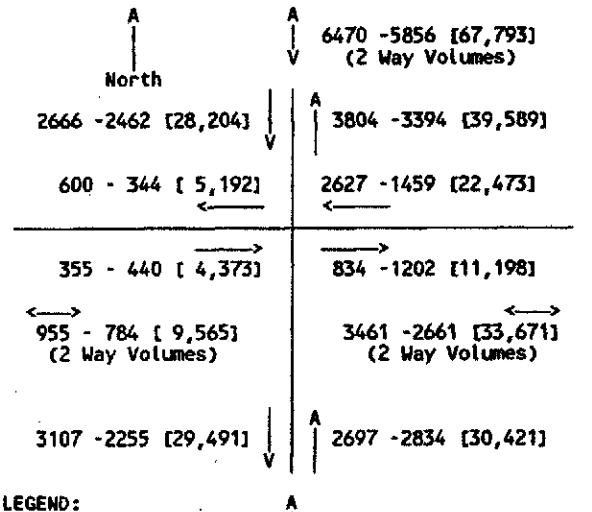
| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 2 | 3200 | 74 | 0 | 1 | 2 | 75 | 2 | 0.023 | 0.001 |
| Northbound Through | 4 | 6400 | 2296 | 2468 | 122 | 103 | 2418 | 2571 | 0.378* | 0.402* |
| Northbound Right | Free 1 | 1600 | 121 | 161 | 83 | 100 | 204 | 261 | 0.128 | 0.163 |
| Southbound Left | 2 | 3200 | 373 | 517 | 27 | 80 | 400 | 597 | 0.125* | 0.187* |
| Southbound Through | 4 | 6400 | 2210 | 1686 | 52 | 157 | 2262 | 1843 | 0.353 | 0.288 |
| Southbound Right | Free 1 | 1600 | 4 | 21 | 0 | 1 | 4 | 22 | 0.003 | 0.014 |
| Eastbound Left | 2 | 3200 | 43 | 31 | 1 | 0 | 44 | 31 | 0.014 | 0.010 |
| Eastbound Through | 2 | 3200 | 178 | 197 | 52 | 147 | 230 | 344 | 0.072* | 0.108* |
| Eastbound Right | 1 | 1600 | 79 | 64 | 2 | 1 | 81 | 65 | 0.051 | 0.041 |
| Westbound Left | 2 | 3200 | 687 | 257 | 77 | 90 | 764 | 347 | 0.239* | 0.108* |
| Westbound Through | 2 | 3200 | 376 | 229 | 145 | 91 | 521 | 320 | 0.163 | 0.100 |
| Westbound Right | Free 1 | 1600 | 1268 | 749 | 74 | 43 | 1342 | 792 | 0.839 | 0.495 |
| Northbound Right Turn Adjustment | None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted. | | | | | | | | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Clearance Interval | | | | | | | | | 0.000* | 0.000* |
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) | | | | | | | | | 0.81 | 0.81 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | | | | | | | | | D | D |

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




LEGEND: AM-PM Peak Hour
[Estimated 2-Way Daily]

PLOT OF INTERSECTION LEG VOLUMES




LEGEND:
AM-PM Peak Hour [Daily]
Daily = (AM+PM)* 5.5

A
5804 -5089 [59,912]
(2 Way Volumes)

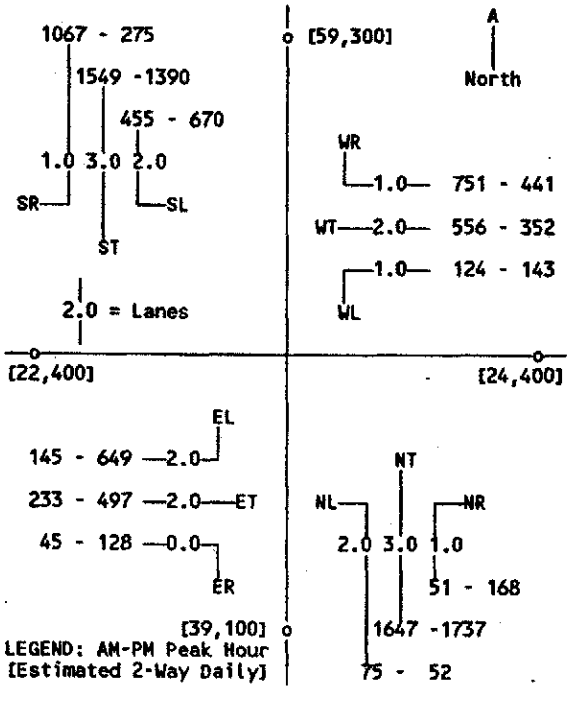
| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 41 - 42 | 46 - 56 | 76 - 55 | 37 - 56 |
| % of Daily in Peak Hour (AM-PM) | 10 - 9 | 10 - 8 | 10 - 8 | 10 - 8 |

# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

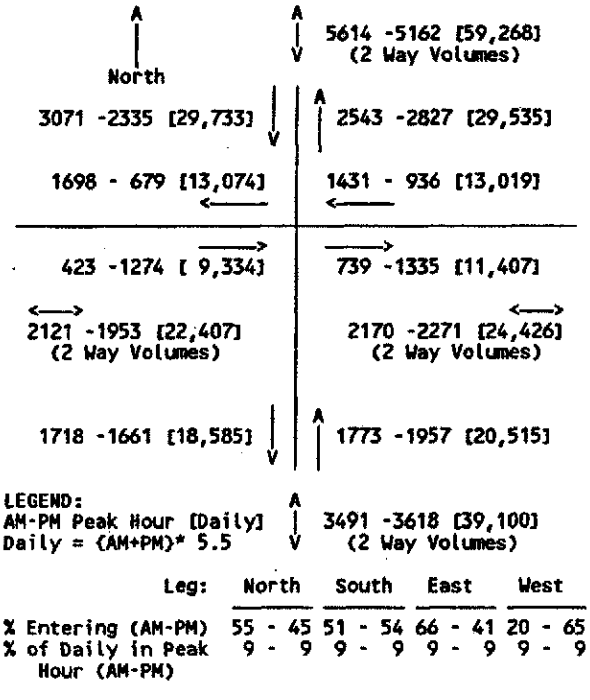
INTERSECTION: MACARTHUR BOULEVARD (NS) and SAN JOAQUIN HILLS ROAD (EW) — COUNT DATE: 01-01-04
LAND USE: EXISTING + APPROVED PROJECTS + CUMULATIVE PROJECTS + PROJECT — GEOMETRICS: Existing

| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 2 | 3200 | 70 | 46 | 5 | 6 | 75 | 52 | 0.023 | 0.016 |
| Northbound Through | 3 | 4800 | 1526 | 1645 | 121 | 92 | 1647 | 1737 | 0.343* | 0.362* |
| Northbound Right | 1 | 1600 | 6 | 15 | 45 | 153 | 51 | 168 | 0.032 | 0.105 |
| Southbound Left | 2 | 3200 | 428 | 599 | 27 | 71 | 455 | 670 | 0.142* | 0.209* |
| Southbound Through | 3 | 4800 | 1491 | 1269 | 58 | 121 | 1549 | 1390 | 0.323 | 0.290 |
| Southbound Right | Free 1 | 1600 | 1036 | 231 | 31 | 44 | 1067 | 275 | 0.667 | 0.172 |
| Eastbound Left | 2 | 3200 | 107 | 588 | 38 | 61 | 145 | 649 | 0.045* | 0.203* |
| Eastbound Through | 2 | 3200 | 199 | 403 | 34 | 94 | 233 | 497 | 0.087 | 0.195 |
| Eastbound Right | 0 | 0 | 45 | 128 | 0 | 0 | 45 | 128 | 0.000 | 0.000 |
| Westbound Left | 1 | 1600 | 19 | 27 | 105 | 116 | 124 | 143 | 0.078 | 0.089 |
| Westbound Through | 2 | 3200 | 464 | 285 | 92 | 67 | 556 | 352 | 0.174* | 0.110* |
| Westbound Right | Free 1 | 1600 | 705 | 395 | 46 | 46 | 751 | 441 | 0.469 | 0.276 |
| Northbound Right Turn Adjustment | None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted. | | | | | | | | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Clearance Interval | | | | | | | | | 0.000* | 0.000* |
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) ——→ | | | | | | | | | 0.70 | 0.88 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | | | | | | | | | B | D |

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




PLOT OF INTERSECTION LEG VOLUMES




| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 55 - 45 | 51 - 54 | 66 - 41 | 20 - 65 |
| % of Daily in Peak Hour (AM-PM) | 9 - 9 | 9 - 9 | 9 - 9 | 9 - 9 |

# General Plan Buildout Without Project

# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

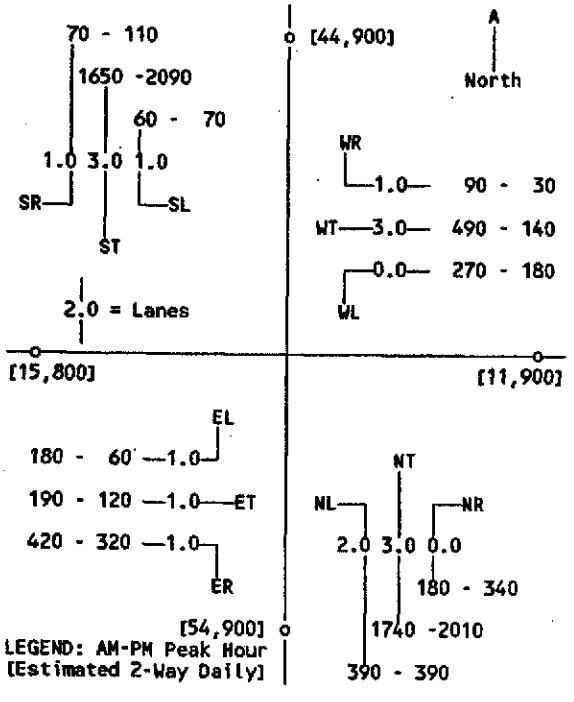
INTERSECTION: JAMBOREE ROAD (NS) and EASTBLUFF DRIVE/FORD ROAD (EW)
LAND USE: GENERAL PLAN BUILDOUT WITHOUT PROJECT

COUNT DATE: 01-01-04
GEOMETRICS: Existing

| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 2 | 3200 | 390 | 390 | 0 | 0 | 390 | 390 | 0.122* | 0.122* |
| Northbound Through | 3 | 4800 | 1740 | 2010 | 0 | 0 | 1740 | 2010 | 0.400 | 0.490 |
| Northbound Right | 0 | 0 | 180 | 340 | 0 | 0 | 180 | 340 | 0.000 | 0.000 |
| Southbound Left | 1 | 1600 | 60 | 70 | 0 | 0 | 60 | 70 | 0.038 | 0.044 |
| Southbound Through | 3 | 4800 | 1650 | 2090 | 0 | 0 | 1650 | 2090 | 0.344* | 0.435* |
| Southbound Right | 1 | 1600 | 70 | 110 | 0 | 0 | 70 | 110 | 0.044 | 0.069 |
| Eastbound Left | 1 | 1600 | 180 | 60 | 0 | 0 | 180 | 60 | 0.113 | 0.038 |
| Eastbound Through | 1 | 1600 | 190 | 120 | 0 | 0 | 190 | 120 | 0.119* | 0.075* |
| Eastbound Right | Free 1 | 1600 | 420 | 320 | 0 | 0 | 420 | 320 | 0.262 | 0.200 |
| Westbound Left | 0 | 0 | 270 | 180 | 0 | 0 | 270 | 180 | 0.000 | 0.000 |
| Westbound Through | 3 | 4800 | 490 | 140 | 0 | 0 | 490 | 140 | 0.158* | 0.067* |
| Westbound Right | 1 | 1600 | 90 | 30 | 0 | 0 | 90 | 30 | 0.056 | 0.019 |
| Northbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Clearance Interval | | | | | | | | | 0.000* | 0.000* |
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) | | | | | | | | | 0.74 | 0.70 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | | | | | | | | | C | B |

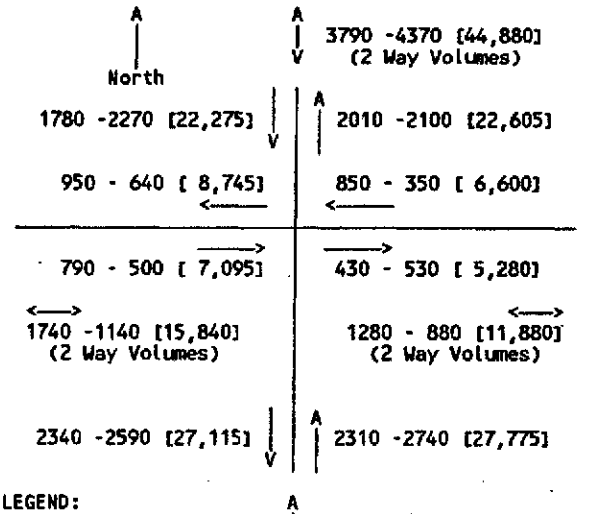
None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted.

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




LEGEND: AM-PM Peak Hour
[Estimated 2-Way Daily]

PLOT OF INTERSECTION LEG VOLUMES




LEGEND:
AM-PM Peak Hour [Daily]
Daily = (AM+PM)* 5.5

A
V
4650 -5330 [54,890]
(2 Way Volumes)

| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 47 - 52 | 50 - 51 | 66 - 40 | 45 - 44 |
| % of Daily in Peak Hour (AM-PM) | 8 - 10 | 8 - 10 | 11 - 7 | 11 - 7 |

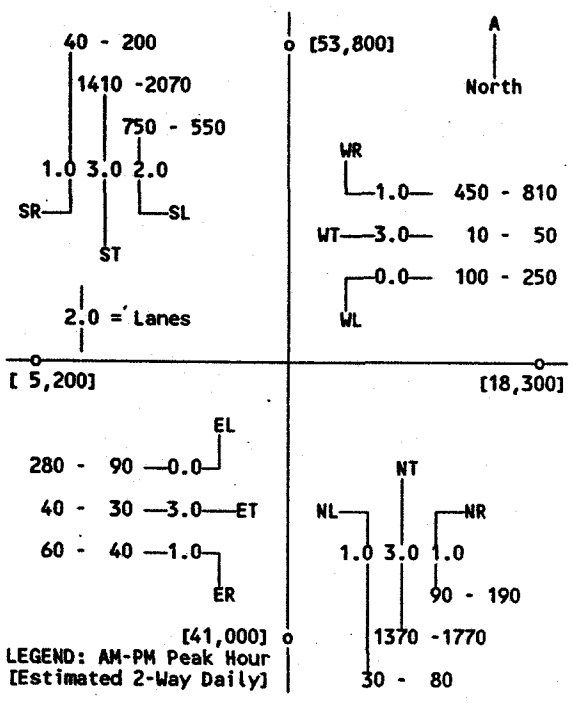
# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

INTERSECTION: JAMBOREE ROAD (NS) and SAN JOAQUIN HILLS ROAD (EW) — COUNT DATE: 01-01-04
LAND USE: GENERAL PLAN BUILDOUT WITHOUT PROJECT — GEOMETRICS: Existing

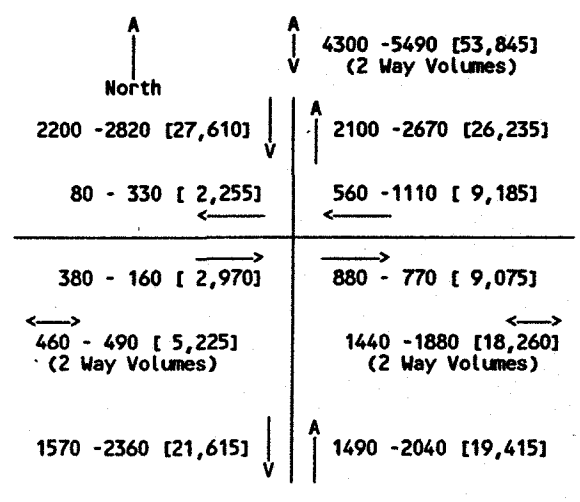
| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 1 | 1600 | 30 | 80 | 0 | 0 | 30 | 80 | 0.019 | 0.050 |
| Northbound Through | 3 | 4800 | 1370 | 1770 | 0 | 0 | 1370 | 1770 | 0.285* | 0.369* |
| Northbound Right | Free 1 | 1600 | 90 | 190 | 0 | 0 | 90 | 190 | 0.056 | 0.119 |
| Southbound Left | 2 | 3200 | 750 | 550 | 0 | 0 | 750 | 550 | 0.234* | 0.172* |
| Southbound Through | 3 | 4800 | 1410 | 2070 | 0 | 0 | 1410 | 2070 | 0.294 | 0.431 |
| Southbound Right | Free 1 | 1600 | 40 | 200 | 0 | 0 | 40 | 200 | 0.025 | 0.125 |
| Eastbound Left | 0 | 0 | 280 | 90 | 0 | 0 | 280 | 90 | 0.000 | 0.000 |
| Eastbound Through | 3 | 4800 | 40 | 30 | 0 | 0 | 40 | 30 | 0.067* | 0.025* |
| Eastbound Right | Free 1 | 1600 | 60 | 40 | 0 | 0 | 60 | 40 | 0.038 | 0.025 |
| Westbound Left | 0 | 0 | 100 | 250 | 0 | 0 | 100 | 250 | 0.000 | 0.000 |
| Westbound Through | 3 | 4800 | 10 | 50 | 0 | 0 | 10 | 50 | 0.023* | 0.063* |
| Westbound Right | 1 | 1600 | 450 | 810 | 0 | 0 | 450 | 810 | 0.281 | 0.506 |
| Northbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Clearance Interval | | | | | | | | | 0.000* | 0.000* |
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) | | | | | | | | | 0.61 | 0.63 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | | | | | | | | | B | B |

None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted.

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




PLOT OF INTERSECTION LEG VOLUMES




| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 51 - 51 | 49 - 46 | 39 - 59 | 83 - 33 |
| % of Daily in Peak Hour (AM-PM) | 8 - 10 | 7 - 11 | 8 - 10 | 9 - 9 |

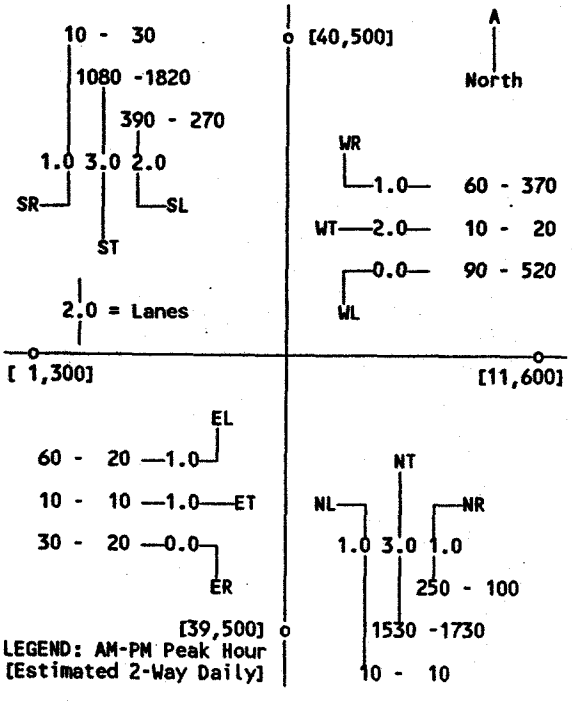
# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

INTERSECTION: JAMBOREE ROAD (NS) and SANTA BARBARA DRIVE (EW) — COUNT DATE: 01-01-04
LAND USE: GENERAL PLAN BUILDOUT WITHOUT PROJECT — GEOMETRICS: Existing

| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 1 | 1600 | 10 | 10 | 0 | 0 | 10 | 10 | 0.006 | 0.006 |
| Northbound Through | 3 | 4800 | 1530 | 1730 | 0 | 0 | 1530 | 1730 | 0.319* | 0.360* |
| Northbound Right | 1 | 1600 | 250 | 100 | 0 | 0 | 250 | 100 | 0.156 | 0.063 |
| Southbound Left | 2 | 3200 | 390 | 270 | 0 | 0 | 390 | 270 | 0.122* | 0.084* |
| Southbound Through | 3 | 4800 | 1080 | 1820 | 0 | 0 | 1080 | 1820 | 0.225 | 0.379 |
| Southbound Right | 1 | 1600 | 10 | 30 | 0 | 0 | 10 | 30 | 0.006 | 0.019 |
| Eastbound Left | 1 | 1600 | 60 | 20 | 0 | 0 | 60 | 20 | 0.038* | 0.013 |
| Eastbound Through | 1 | 1600 | 10 | 10 | 0 | 0 | 10 | 10 | 0.025 | 0.019* |
| Eastbound Right | 0 | 0 | 30 | 20 | 0 | 0 | 30 | 20 | 0.000 | 0.000 |
| Westbound Left | 0 | 0 | 90 | 520 | 0 | 0 | 90 | 520 | 0.000 | 0.000 |
| Westbound Through | 2 | 3200 | 10 | 20 | 0 | 0 | 10 | 20 | 0.031* | 0.169* |
| Westbound Right | 1 | 1600 | 60 | 370 | 0 | 0 | 60 | 370 | 0.038 | 0.231 |
| Northbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | 0.007* | 0.062* |
| Clearance Interval | | | | | | | | | 0.000* | 0.000* |
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) | | | | | | | | | 0.52 | 0.69 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | | | | | | | | | A | B |

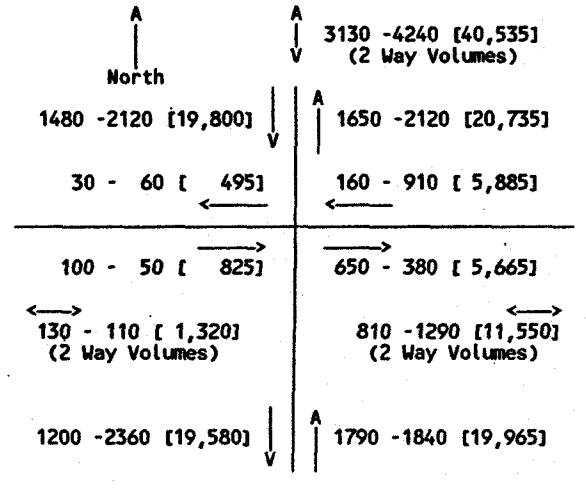
None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted.

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




LEGEND: AM-PM Peak Hour
[Estimated 2-Way Daily]

PLOT OF INTERSECTION LEG VOLUMES




LEGEND:
AM-PM Peak Hour [Daily]
Daily = (AM+PM)* 5.5

2990 -4200 [39,545]
(2 Way Volumes)

| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 47 - 50 | 60 - 44 | 20 - 71 | 77 - 45 |
| % of Daily in Peak Hour (AM-PM) | 8 - 10 | 8 - 11 | 7 - 11 | 10 - 8 |

# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

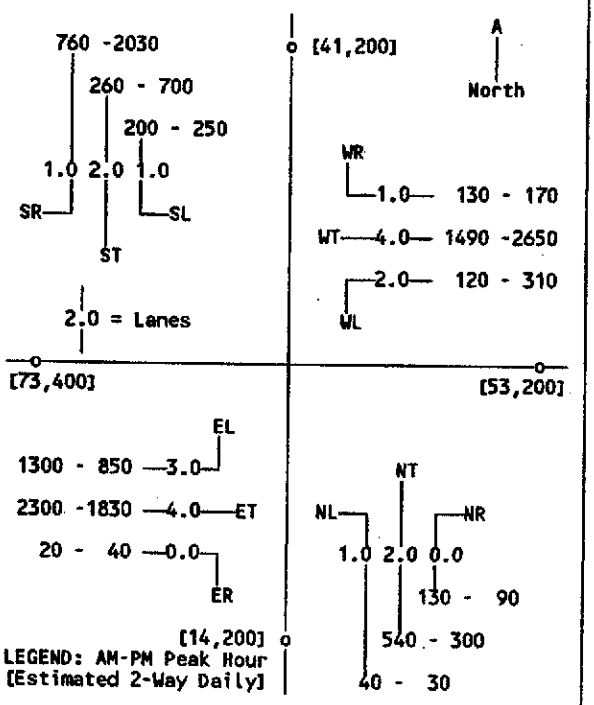
INTERSECTION: JAMBOREE ROAD (NS) and COAST HIGHWAY (EW)
LAND USE: GENERAL PLAN BUILDOUT WITHOUT PROJECT

COUNT DATE: 01-01-04
GEOMETRICS: Existing

| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 1 | 1600 | 40 | 30 | 0 | 0 | 40 | 30 | 0.025 | 0.019 |
| Northbound Through | 2 | 3200 | 540 | 300 | 0 | 0 | 540 | 300 | 0.209* | 0.122* |
| Northbound Right | 0 | 0 | 130 | 90 | 0 | 0 | 130 | 90 | 0.000 | 0.000 |
| Southbound Left | 1 | 1600 | 200 | 250 | 0 | 0 | 200 | 250 | 0.125* | 0.156* |
| Southbound Through | 2 | 3200 | 260 | 700 | 0 | 0 | 260 | 700 | 0.081 | 0.219 |
| Southbound Right | Free 1 | 1600 | 760 | 2030 | 0 | 0 | 760 | 2030 | 0.475 | 1.269 |
| Eastbound Left | 3 | 4800 | 1300 | 850 | 0 | 0 | 1300 | 850 | 0.271* | 0.177* |
| Eastbound Through | 4 | 6400 | 2300 | 1830 | 0 | 0 | 2300 | 1830 | 0.363 | 0.292 |
| Eastbound Right | 0 | 0 | 20 | 40 | 0 | 0 | 20 | 40 | 0.000 | 0.000 |
| Westbound Left | 2 | 3200 | 120 | 310 | 0 | 0 | 120 | 310 | 0.038 | 0.097 |
| Westbound Through | 4 | 6400 | 1490 | 2650 | 0 | 0 | 1490 | 2650 | 0.233* | 0.414* |
| Westbound Right | Free 1 | 1600 | 130 | 170 | 0 | 0 | 130 | 170 | 0.081 | 0.106 |
| Northbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Clearance Interval | | | | | | | | | 0.000* | 0.000* |
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) | | | | | | | | | 0.84 | 0.87 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | | | | | | | | | D | D |

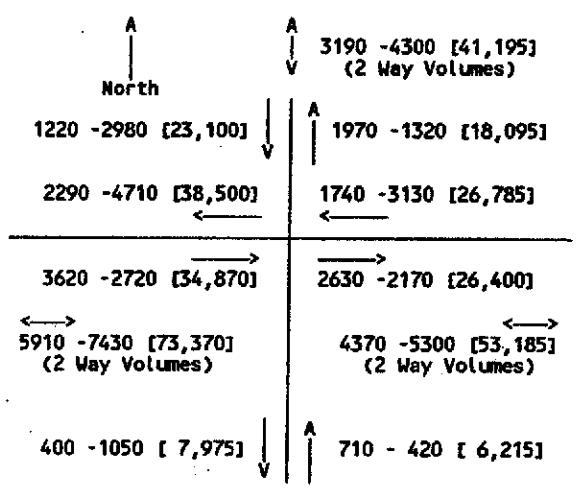
None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted.

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




LEGEND: AM-PM Peak Hour
[Estimated 2-Way Daily]

PLOT OF INTERSECTION LEG VOLUMES




LEGEND:
AM-PM Peak Hour [Daily]
Daily = (AM+PM)* 5.5

| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 38 - 69 | 64 - 29 | 40 - 59 | 61 - 37 |
| % of Daily in Peak Hour (AM-PM) | 8 - 10 | 8 - 10 | 8 - 10 | 8 - 10 |

# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

INTERSECTION: SANTA CRUZ DRIVE (NS) and SAN JOAQUIN HILLS ROAD (EW)
LAND USE: GENERAL PLAN BUILDOUT WITHOUT PROJECT

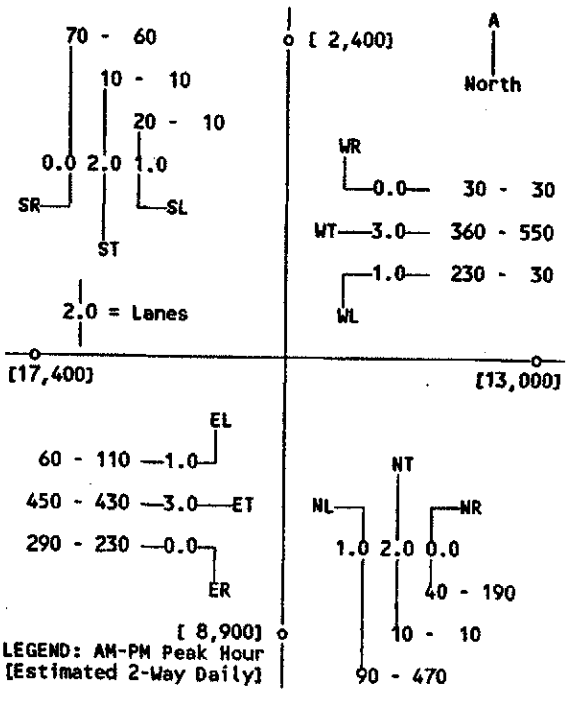
COUNT DATE: 01-01-04
GEOMETRICS: Existing

| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 1 | 1600 | 90 | 470 | 0 | 0 | 90 | 470 | 0.056* | 0.294* |
| Northbound Through | 2 | 3200 | 10 | 10 | 0 | 0 | 10 | 10 | 0.016 | 0.063 |
| Northbound Right | 0 | 0 | 40 | 190 | 0 | 0 | 40 | 190 | 0.000 | 0.000 |
| Southbound Left | 1 | 1600 | 20 | 10 | 0 | 0 | 20 | 10 | 0.013 | 0.006 |
| Southbound Through | 2 | 3200 | 10 | 10 | 0 | 0 | 10 | 10 | 0.025* | 0.022* |
| Southbound Right | 0 | 0 | 70 | 60 | 0 | 0 | 70 | 60 | 0.000 | 0.000 |
| Eastbound Left | 1 | 1600 | 60 | 110 | 0 | 0 | 60 | 110 | 0.038 | 0.069* |
| Eastbound Through | 3 | 4800 | 450 | 430 | 0 | 0 | 450 | 430 | 0.154* | 0.138 |
| Eastbound Right | 0 | 0 | 290 | 230 | 0 | 0 | 290 | 230 | 0.000 | 0.000 |
| Westbound Left | 1 | 1600 | 230 | 30 | 0 | 0 | 230 | 30 | 0.144* | 0.019 |
| Westbound Through | 3 | 4800 | 360 | 550 | 0 | 0 | 360 | 550 | 0.081 | 0.121* |
| Westbound Right | 0 | 0 | 30 | 30 | 0 | 0 | 30 | 30 | 0.000 | 0.000 |

| | | | |
|---|---|---|---|
| Northbound Right Turn Adjustment | None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted. | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | 0.000* | 0.000* |
| Clearance Interval | | 0.000* | 0.000* |

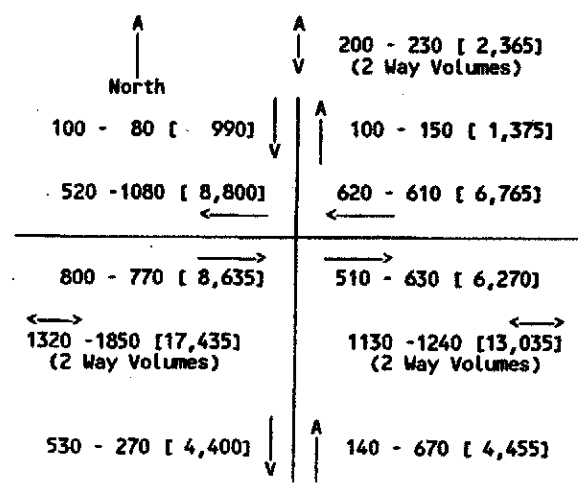
INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) ——————> 0.38 0.51
LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) A A

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




LEGEND: AM-PM Peak Hour
[Estimated 2-Way Daily]

PLOT OF INTERSECTION LEG VOLUMES




LEGEND:
AM-PM Peak Hour [Daily]
Daily = (AM+PM)* 5.5

A
V
670 - 940 [ 8,855]
(2 Way Volumes)

| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 50 - 35 | 21 - 71 | 55 - 49 | 61 - 42 |
| % of Daily in Peak Hour (AM-PM) | 8 - 10 | 8 - 11 | 9 - 10 | 8 - 11 |

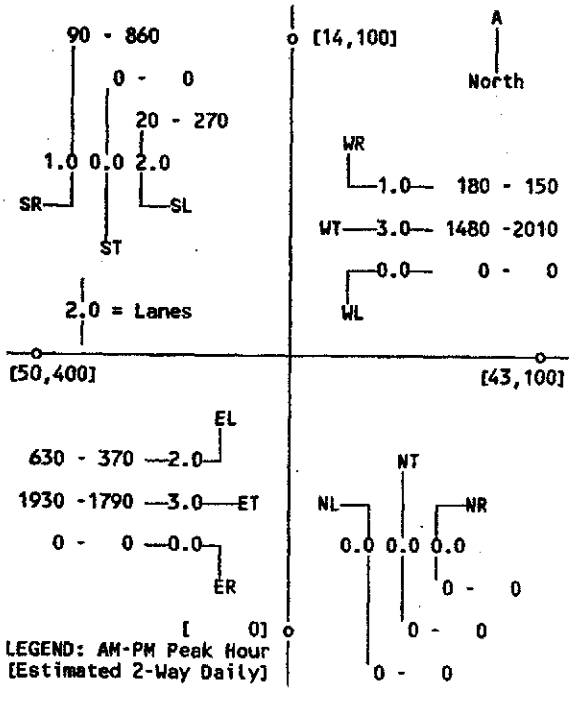
# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

INTERSECTION: NEWPORT CENTER DRIVE (NS) and COAST HIGHWAY (EW) — COUNT DATE: 01-01-04
LAND USE: GENERAL PLAN BUILDOUT WITHOUT PROJECT — GEOMETRICS: Existing

| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000 | 0.000 |
| Northbound Through | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000* | 0.000* |
| Northbound Right | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000 | 0.000 |
| Southbound Left | 2 | 3200 | 20 | 270 | 0 | 0 | 20 | 270 | 0.006* | 0.084* |
| Southbound Through | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000 | 0.000 |
| Southbound Right | Free 1 | 1600 | 90 | 860 | 0 | 0 | 90 | 860 | 0.056 | 0.538 |
| Eastbound Left | 2 | 3200 | 630 | 370 | 0 | 0 | 630 | 370 | 0.197* | 0.116* |
| Eastbound Through | 3 | 4800 | 1930 | 1790 | 0 | 0 | 1930 | 1790 | 0.402 | 0.373 |
| Eastbound Right | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000 | 0.000 |
| Westbound Left | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000 | 0.000 |
| Westbound Through | 3 | 4800 | 1480 | 2010 | 0 | 0 | 1480 | 2010 | 0.308* | 0.419* |
| Westbound Right | Free 1 | 1600 | 180 | 150 | 0 | 0 | 180 | 150 | 0.113 | 0.094 |
| Northbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Clearance Interval | | | | | | | | | 0.000* | 0.000* |
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) | | | | | | | | | 0.51 | 0.62 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | | | | | | | | | A | B |

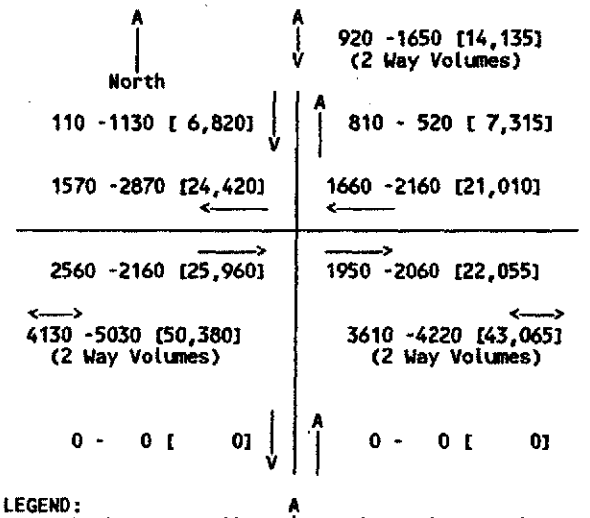
None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted.

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




LEGEND: AM-PM Peak Hour
[Estimated 2-Way Daily]

PLOT OF INTERSECTION LEG VOLUMES




LEGEND:
AM-PM Peak Hour [Daily]
Daily = (AM+PM)* 5.5
0 - 0 [ 0]
(2 Way Volumes)

| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 12 - 68 | 0 - 0 | 46 - 51 | 62 - 43 |
| % of Daily in Peak Hour (AM-PM) | 7 - 12 | 0 - 0 | 8 - 10 | 8 - 10 |

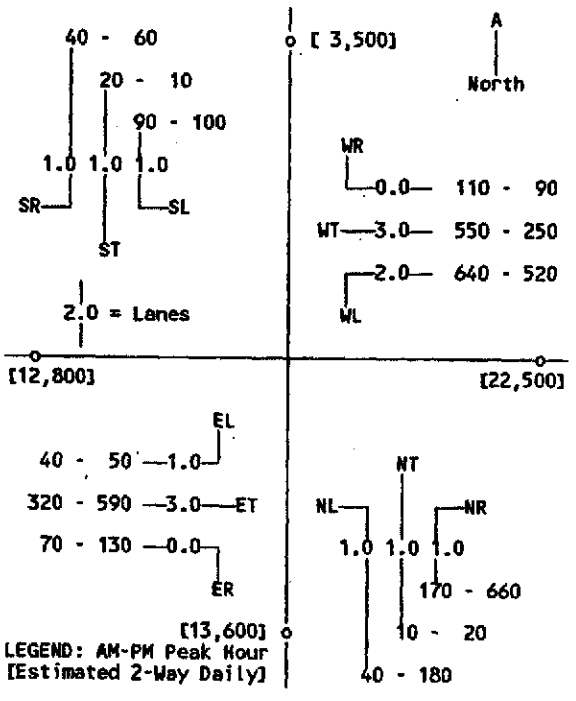
# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

INTERSECTION: SANTA ROSA DRIVE/BIG CANYON DRIVE (NS) and SAN JOAQUIN HILLS ROA — COUNT DATE: 01-01-04
LAND USE: GENERAL PLAN BUILDOUT WITHOUT PROJECT — GEOMETRICS: Existing

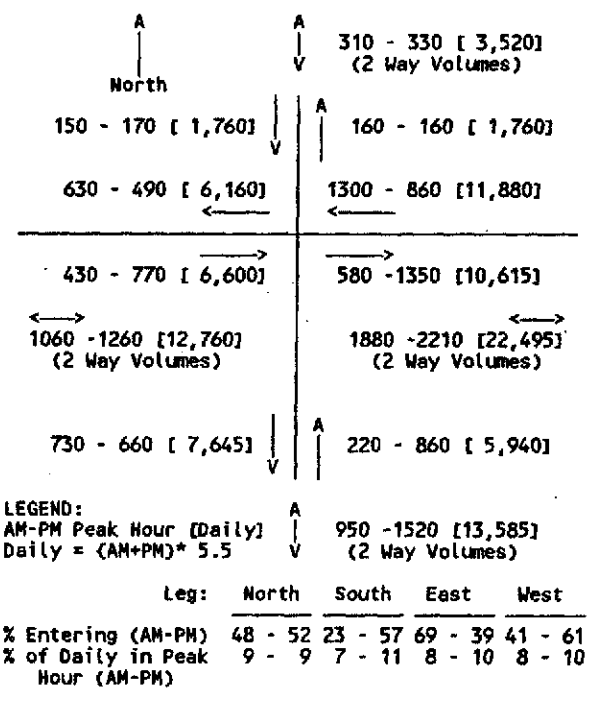
| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 1 | 1600 | 40 | 180 | 0 | 0 | 40 | 180 | 0.025 | 0.113* |
| Northbound Through | 1 | 1600 | 10 | 20 | 0 | 0 | 10 | 20 | 0.006* | 0.013 |
| Northbound Right | 1 | 1600 | 170 | 660 | 0 | 0 | 170 | 660 | 0.106 | 0.413 |
| Southbound Left | 1 | 1600 | 90 | 100 | 0 | 0 | 90 | 100 | 0.056* | 0.063 |
| Southbound Through | 1 | 1600 | 20 | 10 | 0 | 0 | 20 | 10 | 0.013 | 0.006* |
| Southbound Right | 1 | 1600 | 40 | 60 | 0 | 0 | 40 | 60 | 0.025 | 0.038 |
| Eastbound Left | 1 | 1600 | 40 | 50 | 0 | 0 | 40 | 50 | 0.025 | 0.031 |
| Eastbound Through | 3 | 4800 | 320 | 590 | 0 | 0 | 320 | 590 | 0.081* | 0.150* |
| Eastbound Right | 0 | 0 | 70 | 130 | 0 | 0 | 70 | 130 | 0.000 | 0.000 |
| Westbound Left | 2 | 3200 | 640 | 520 | 0 | 0 | 640 | 520 | 0.200* | 0.163* |
| Westbound Through | 3 | 4800 | 550 | 250 | 0 | 0 | 550 | 250 | 0.138 | 0.071 |
| Westbound Right | 0 | 0 | 110 | 90 | 0 | 0 | 110 | 90 | 0.000 | 0.000 |
| Northbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.226* |
| Southbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Clearance Interval | | | | | | | | | 0.000* | 0.000* |
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) → | | | | | | | | | 0.34 | 0.66 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | | | | | | | | | A | B |

None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted.

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




PLOT OF INTERSECTION LEG VOLUMES




| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 48 - 52 | 23 - 57 | 69 - 39 | 41 - 61 |
| % of Daily in Peak Hour (AM-PM) | 9 - 9 | 7 - 11 | 8 - 10 | 8 - 10 |

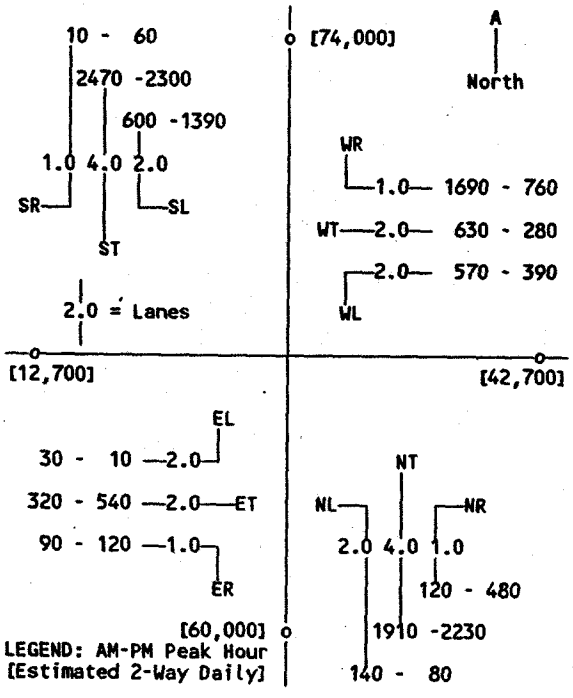
# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

INTERSECTION: MACARTHUR BOULEVARD (NS) and FORD ROAD (EW)
LAND USE: GENERAL PLAN BUILDOUT WITHOUT PROJECT

COUNT DATE: 01-01-04
GEOMETRICS: Existing

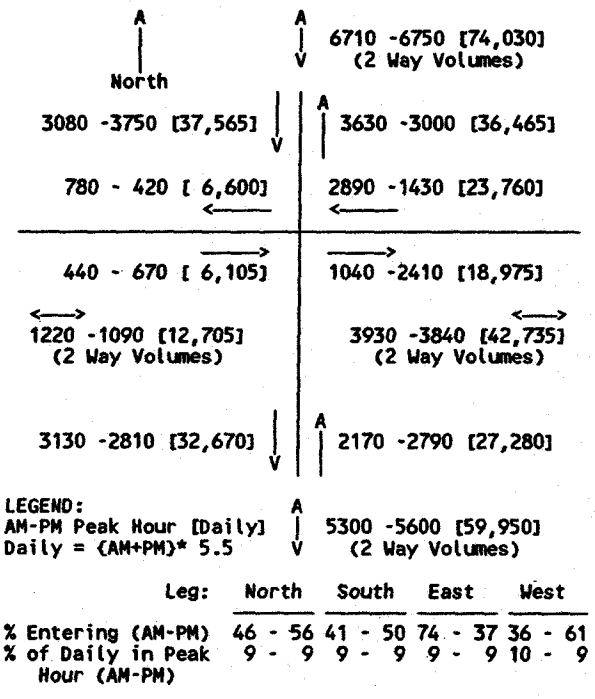
| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 2 | 3200 | 140 | 80 | 0 | 0 | 140 | 80 | 0.044 | 0.025 |
| Northbound Through | 4 | 6400 | 1910 | 2230 | 0 | 0 | 1910 | 2230 | 0.298* | 0.348* |
| Northbound Right | Free 1 | 1600 | 120 | 480 | 0 | 0 | 120 | 480 | 0.075 | 0.300 |
| Southbound Left | 2 | 3200 | 600 | 1390 | 0 | 0 | 600 | 1390 | 0.188* | 0.434* |
| Southbound Through | 4 | 6400 | 2470 | 2300 | 0 | 0 | 2470 | 2300 | 0.386 | 0.359 |
| Southbound Right | Free 1 | 1600 | 10 | 60 | 0 | 0 | 10 | 60 | 0.006 | 0.038 |
| Eastbound Left | 2 | 3200 | 30 | 10 | 0 | 0 | 30 | 10 | 0.009 | 0.003 |
| Eastbound Through | 2 | 3200 | 320 | 540 | 0 | 0 | 320 | 540 | 0.100* | 0.169* |
| Eastbound Right | 1 | 1600 | 90 | 120 | 0 | 0 | 90 | 120 | 0.056 | 0.075 |
| Westbound Left | 2 | 3200 | 570 | 390 | 0 | 0 | 570 | 390 | 0.178* | 0.122* |
| Westbound Through | 2 | 3200 | 630 | 280 | 0 | 0 | 630 | 280 | 0.197 | 0.088 |
| Westbound Right | Free 1 | 1600 | 1690 | 760 | 0 | 0 | 1690 | 760 | 1.056 | 0.475 |
| Northbound Right Turn Adjustment | None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted. | | | | | | | | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Clearance Interval | | | | | | | | | 0.000* | 0.000* |
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) ——→ | | | | | | | | | 0.76 | 1.07 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | | | | | | | | | C | F |

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




LEGEND: AM-PM Peak Hour
[Estimated 2-Way Daily]

PLOT OF INTERSECTION LEG VOLUMES




| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 46 - 56 | 41 - 50 | 74 - 37 | 36 - 61 |
| % of Daily in Peak Hour (AM-PM) | 9 - 9 | 9 - 9 | 9 - 9 | 10 - 9 |

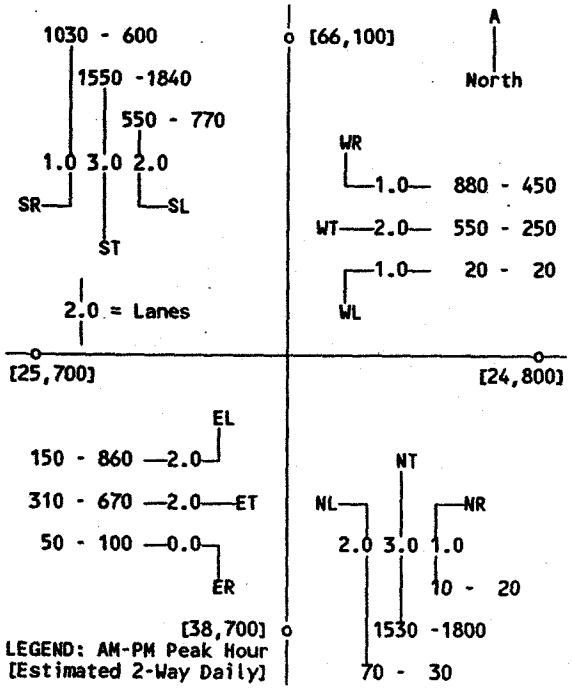
# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

INTERSECTION: MACARTHUR BOULEVARD (NS) and SAN JOAQUIN HILLS ROAD (EW) — COUNT DATE: 01-01-04
LAND USE: GENERAL PLAN BUILDOUT WITHOUT PROJECT — GEOMETRICS: Existing

| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 2 | 3200 | 70 | 30 | 0 | 0 | 70 | 30 | 0.022 | 0.009 |
| Northbound Through | 3 | 4800 | 1530 | 1800 | 0 | 0 | 1530 | 1800 | 0.319* | 0.375* |
| Northbound Right | 1 | 1600 | 10 | 20 | 0 | 0 | 10 | 20 | 0.006 | 0.013 |
| Southbound Left | 2 | 3200 | 550 | 770 | 0 | 0 | 550 | 770 | 0.172* | 0.241* |
| Southbound Through | 3 | 4800 | 1550 | 1840 | 0 | 0 | 1550 | 1840 | 0.323 | 0.383 |
| Southbound Right | Free 1 | 1600 | 1030 | 600 | 0 | 0 | 1030 | 600 | 0.644 | 0.375 |
| Eastbound Left | 2 | 3200 | 150 | 860 | 0 | 0 | 150 | 860 | 0.047* | 0.269* |
| Eastbound Through | 2 | 3200 | 310 | 670 | 0 | 0 | 310 | 670 | 0.113 | 0.241 |
| Eastbound Right | 0 | 0 | 50 | 100 | 0 | 0 | 50 | 100 | 0.000 | 0.000 |
| Westbound Left | 1 | 1600 | 20 | 20 | 0 | 0 | 20 | 20 | 0.013 | 0.013 |
| Westbound Through | 2 | 3200 | 550 | 250 | 0 | 0 | 550 | 250 | 0.172* | 0.078* |
| Westbound Right | Free 1 | 1600 | 880 | 450 | 0 | 0 | 880 | 450 | 0.550 | 0.281 |
| Northbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Clearance Interval | | | | | | | | | 0.000* | 0.000* |
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) → | | | | | | | | | 0.71 | 0.96 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | | | | | | | | | C | E |

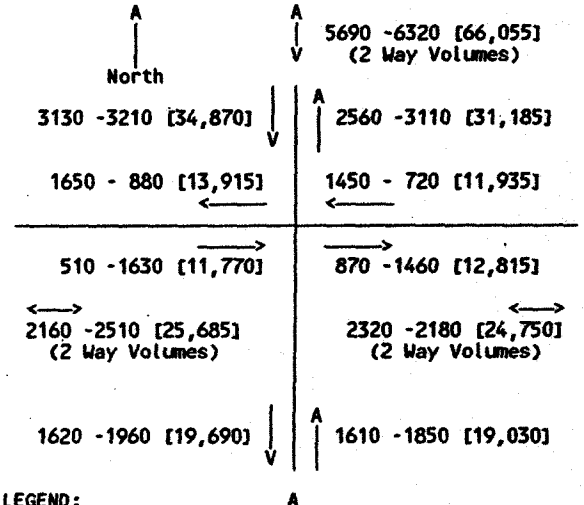
None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted.

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




LEGEND: AM-PM Peak Hour
[Estimated 2-Way Daily]

PLOT OF INTERSECTION LEG VOLUMES




LEGEND:
AM-PM Peak Hour [Daily]
Daily = (AM+PM)* 5.5
A
V
3230 -3810 [38,720]
(2 Way Volumes)

| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 55 - 51 | 50 - 49 | 63 - 33 | 24 - 65 |
| % of Daily in Peak Hour (AM-PM) | 9 - 10 | 8 - 10 | 9 - 9 | 8 - 10 |

# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

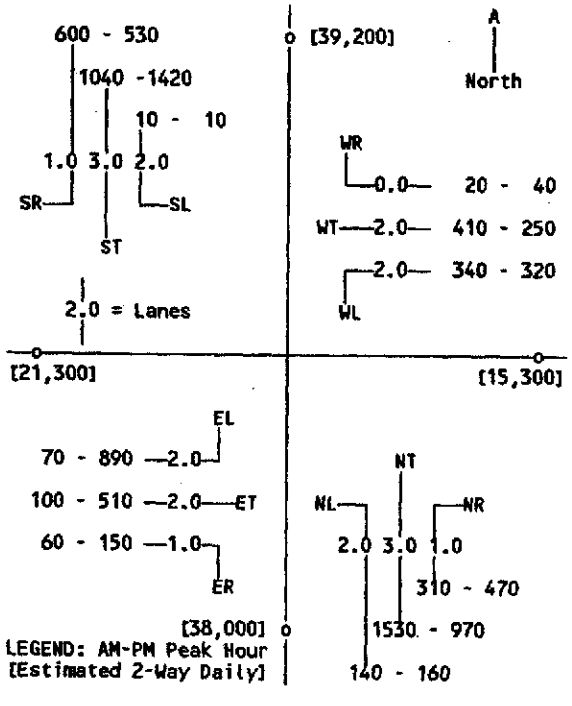
INTERSECTION: MACARTHUR BOULEVARD (NS) and SAN MIGUEL DRIVE (EW)
LAND USE: GENERAL PLAN BUILDOUT WITHOUT PROJECT

COUNT DATE: 01-01-04
GEOMETRICS: Existing

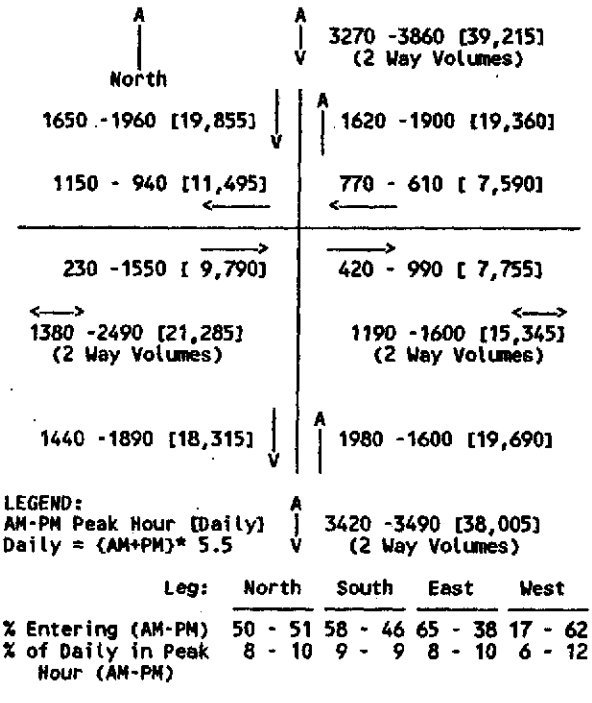
| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 2 | 3200 | 140 | 160 | 0 | 0 | 140 | 160 | 0.044 | 0.050* |
| Northbound Through | 3 | 4800 | 1530 | 970 | 0 | 0 | 1530 | 970 | 0.319* | 0.202 |
| Northbound Right | 1 | 1600 | 310 | 470 | 0 | 0 | 310 | 470 | 0.194 | 0.294 |
| Southbound Left | 2 | 3200 | 10 | 10 | 0 | 0 | 10 | 10 | 0.003* | 0.003 |
| Southbound Through | 3 | 4800 | 1040 | 1420 | 0 | 0 | 1040 | 1420 | 0.217 | 0.296* |
| Southbound Right | 1 | 1600 | 600 | 530 | 0 | 0 | 600 | 530 | 0.375 | 0.331 |
| Eastbound Left | 2 | 3200 | 70 | 890 | 0 | 0 | 70 | 890 | 0.022* | 0.278* |
| Eastbound Through | 2 | 3200 | 100 | 510 | 0 | 0 | 100 | 510 | 0.031 | 0.159 |
| Eastbound Right | 1 | 1600 | 60 | 150 | 0 | 0 | 60 | 150 | 0.038 | 0.094 |
| Westbound Left | 2 | 3200 | 340 | 320 | 0 | 0 | 340 | 320 | 0.106 | 0.100 |
| Westbound Through | 2 | 3200 | 410 | 250 | 0 | 0 | 410 | 250 | 0.134* | 0.091* |
| Westbound Right | 0 | 0 | 20 | 40 | 0 | 0 | 20 | 40 | 0.000 | 0.000 |
| Northbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | | | | | | | | 0.097* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Clearance Interval | | | | | | | | | 0.000* | 0.000* |
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) | | | | | | | | | 0.58 | 0.72 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | | | | | | | | | A | C |

None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted.

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




PLOT OF INTERSECTION LEG VOLUMES




| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 50 - 51 | 58 - 46 | 65 - 38 | 17 - 62 |
| % of Daily in Peak Hour (AM-PM) | 8 - 10 | 9 - 9 | 8 - 10 | 6 - 12 |

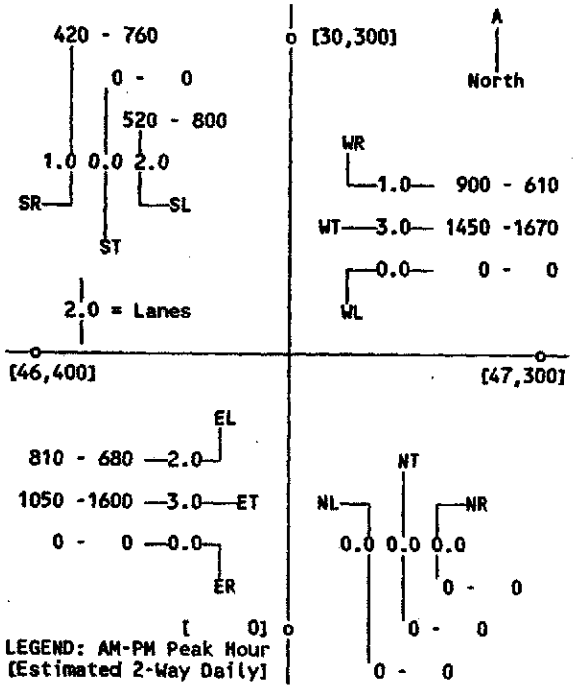
# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

INTERSECTION: MACARTHUR BOULEVARD (NS) and COAST HIGHWAY (EW) — COUNT DATE: 01-01-04
LAND USE: GENERAL PLAN BUILDOUT WITHOUT PROJECT — GEOMETRICS: Existing

| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000 | 0.000 |
| Northbound Through | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000* | 0.000* |
| Northbound Right | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000 | 0.000 |
| Southbound Left | 2 | 3200 | 520 | 800 | 0 | 0 | 520 | 800 | 0.163* | 0.250* |
| Southbound Through | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000 | 0.000 |
| Southbound Right | Free 1 | 1600 | 420 | 760 | 0 | 0 | 420 | 760 | 0.262 | 0.475 |
| Eastbound Left | 2 | 3200 | 810 | 680 | 0 | 0 | 810 | 680 | 0.253* | 0.213* |
| Eastbound Through | 3 | 4800 | 1050 | 1600 | 0 | 0 | 1050 | 1600 | 0.219 | 0.333 |
| Eastbound Right | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000 | 0.000 |
| Westbound Left | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000 | 0.000 |
| Westbound Through | 3 | 4800 | 1450 | 1670 | 0 | 0 | 1450 | 1670 | 0.302* | 0.348* |
| Westbound Right | Free 1 | 1600 | 900 | 610 | 0 | 0 | 900 | 610 | 0.563 | 0.381 |
| Northbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Clearance Interval | | | | | | | | | 0.000* | 0.000* |
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) → | | | | | | | | | 0.72 | 0.81 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | | | | | | | | | C | D |

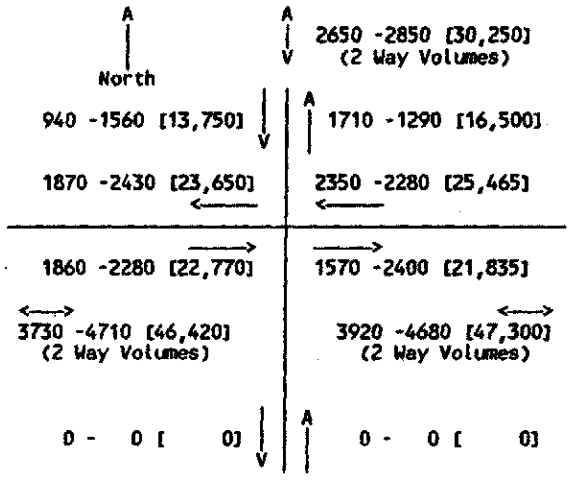
None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted.

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




LEGEND: AM-PM Peak Hour
[Estimated 2-Way Daily]

PLOT OF INTERSECTION LEG VOLUMES




LEGEND:
AM-PM Peak Hour [Daily]
Daily = (AM+PM)* 5.5

A
0 - 0 [ 0]
(2 Way Volumes)

| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 35 - 55 | 0 - 0 | 60 - 49 | 50 - 48 |
| % of Daily in Peak Hour (AM-PM) | 9 - 9 | 0 - 0 | 8 - 10 | 8 - 10 |

# General Plan Buildout With Project

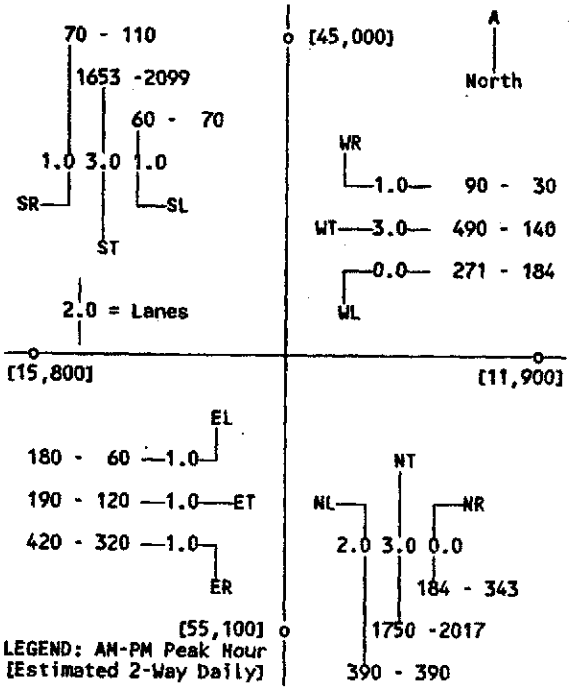
# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

INTERSECTION: JAMBOREE ROAD (NS) and EASTBLUFF DRIVE/FORD ROAD (EW) — COUNT DATE: 01-01-04
LAND USE: GENERAL PLAN BUILDOUT WITH PROJECT — GEOMETRICS: Existing

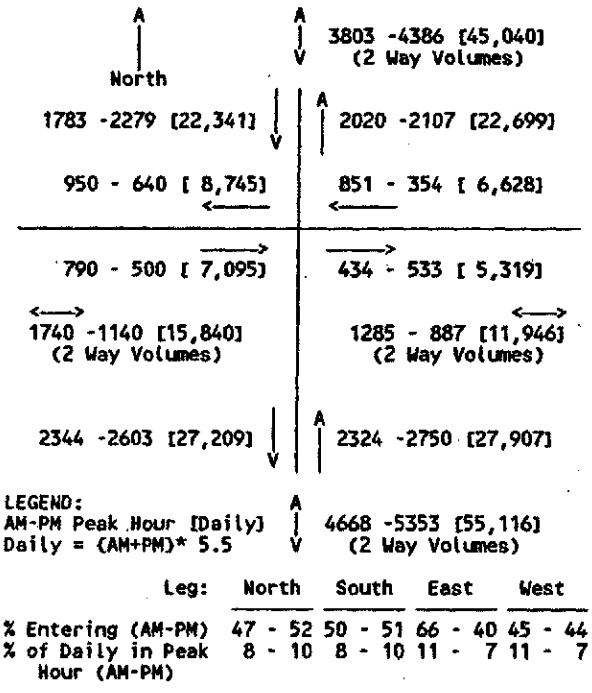
| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 2 | 3200 | 390 | 390 | 0 | 0 | 390 | 390 | 0.122* | 0.122* |
| Northbound Through | 3 | 4800 | 1740 | 2010 | 10 | 7 | 1750 | 2017 | 0.403 | 0.492 |
| Northbound Right | 0 | 0 | 180 | 340 | 4 | 3 | 184 | 343 | 0.000 | 0.000 |
| Southbound Left | 1 | 1600 | 60 | 70 | 0 | 0 | 60 | 70 | 0.038 | 0.044 |
| Southbound Through | 3 | 4800 | 1650 | 2090 | 3 | 9 | 1653 | 2099 | 0.344* | 0.437* |
| Southbound Right | 1 | 1600 | 70 | 110 | 0 | 0 | 70 | 110 | 0.044 | 0.069 |
| Eastbound Left | 1 | 1600 | 180 | 60 | 0 | 0 | 180 | 60 | 0.113 | 0.038 |
| Eastbound Through | 1 | 1600 | 190 | 120 | 0 | 0 | 190 | 120 | 0.119* | 0.075* |
| Eastbound Right | Free 1 | 1600 | 420 | 320 | 0 | 0 | 420 | 320 | 0.262 | 0.200 |
| Westbound Left | 0 | 0 | 270 | 180 | 1 | 4 | 271 | 184 | 0.000 | 0.000 |
| Westbound Through | 3 | 4800 | 490 | 140 | 0 | 0 | 490 | 140 | 0.159* | 0.068* |
| Westbound Right | 1 | 1600 | 90 | 30 | 0 | 0 | 90 | 30 | 0.056 | 0.019 |
| Northbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Clearance Interval | | | | | | | | | 0.000* | 0.000* |
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) ——→ | | | | | | | | | 0.74 | 0.70 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | | | | | | | | | C | B |

None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted.

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




PLOT OF INTERSECTION LEG VOLUMES




| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 47 - 52 | 50 - 51 | 66 - 40 | 45 - 44 |
| % of Daily in Peak Hour (AM-PM) | 8 - 10 | 8 - 10 | 11 - 7 | 11 - 7 |

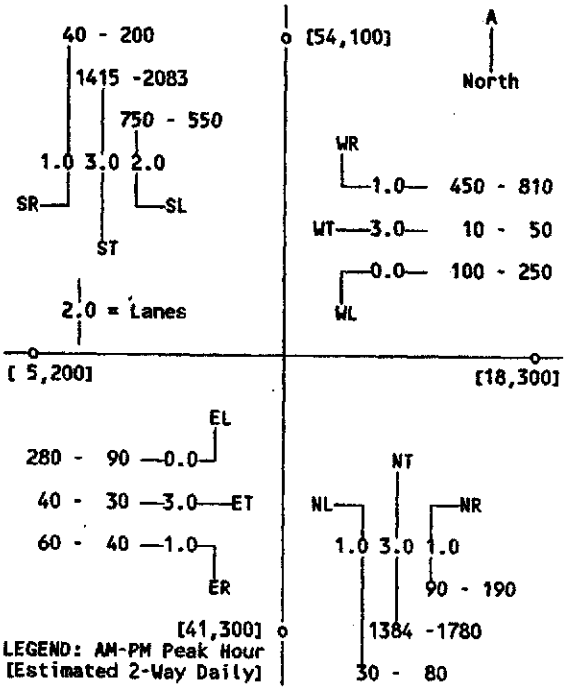
# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

INTERSECTION: JAMBOREE ROAD (NS) and SAN JOAQUIN HILLS ROAD (EW) — COUNT DATE: 01-01-04
LAND USE: GENERAL PLAN BUILDOUT WITH PROJECT — GEOMETRICS: Existing

| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 1 | 1600 | 30 | 80 | 0 | 0 | 30 | 80 | 0.019 | 0.050 |
| Northbound Through | 3 | 4800 | 1370 | 1770 | 14 | 10 | 1384 | 1780 | 0.288* | 0.371* |
| Northbound Right | Free 1 | 1600 | 90 | 190 | 0 | 0 | 90 | 190 | 0.056 | 0.119 |
| Southbound Left | 2 | 3200 | 750 | 550 | 0 | 0 | 750 | 550 | 0.234* | 0.172* |
| Southbound Through | 3 | 4800 | 1410 | 2070 | 5 | 13 | 1415 | 2083 | 0.295 | 0.434 |
| Southbound Right | Free 1 | 1600 | 40 | 200 | 0 | 0 | 40 | 200 | 0.025 | 0.125 |
| Eastbound Left | 0 | 0 | 280 | 90 | 0 | 0 | 280 | 90 | 0.000 | 0.000 |
| Eastbound Through | 3 | 4800 | 40 | 30 | 0 | 0 | 40 | 30 | 0.067* | 0.025* |
| Eastbound Right | Free 1 | 1600 | 60 | 40 | 0 | 0 | 60 | 40 | 0.038 | 0.025 |
| Westbound Left | 0 | 0 | 100 | 250 | 0 | 0 | 100 | 250 | 0.000 | 0.000 |
| Westbound Through | 3 | 4800 | 10 | 50 | 0 | 0 | 10 | 50 | 0.023* | 0.063* |
| Westbound Right | 1 | 1600 | 450 | 810 | 0 | 0 | 450 | 810 | 0.281 | 0.506 |
| Northbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Clearance Interval | | | | | | | | | 0.000* | 0.000* |
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) | | | | | | | | | 0.61 | 0.63 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | | | | | | | | | B | B |

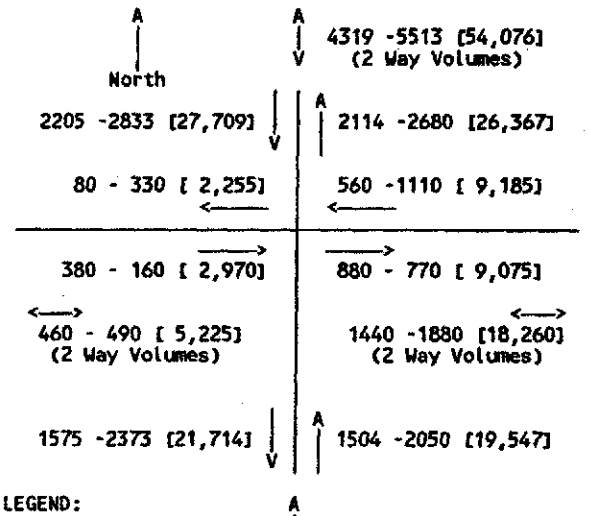
None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted.

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




LEGEND: AM-PM Peak Hour
[Estimated 2-Way Daily]

PLOT OF INTERSECTION LEG VOLUMES




LEGEND:
AM-PM Peak Hour [Daily]
Daily = (AM+PM)* 5.5
3079 -4423 [41,261]
(2 Way Volumes)

| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 51 - 51 | 49 - 46 | 39 - 59 | 83 - 33 |
| % of Daily in Peak Hour (AM-PM) | 8 - 10 | 7 - 11 | 8 - 10 | 9 - 9 |

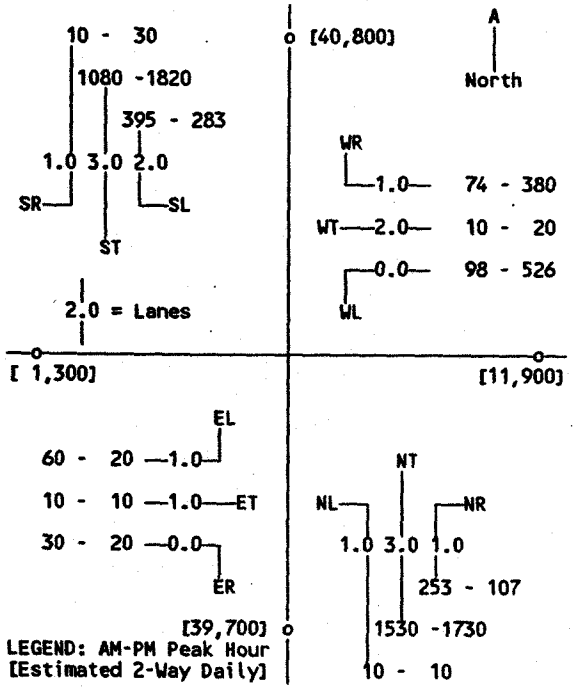
# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

INTERSECTION: JAMBOREE ROAD (NS) and SANTA BARBARA DRIVE (EW) — COUNT DATE: 01-01-04
LAND USE: GENERAL PLAN BUILDOUT WITH PROJECT — GEOMETRICS: Existing

| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 1 | 1600 | 10 | 10 | 0 | 0 | 10 | 10 | 0.006 | 0.006 |
| Northbound Through | 3 | 4800 | 1530 | 1730 | 0 | 0 | 1530 | 1730 | 0.319* | 0.360* |
| Northbound Right | 1 | 1600 | 250 | 100 | 3 | 7 | 253 | 107 | 0.158 | 0.067 |
| Southbound Left | 2 | 3200 | 390 | 270 | 5 | 13 | 395 | 283 | 0.123* | 0.088* |
| Southbound Through | 3 | 4800 | 1080 | 1820 | 0 | 0 | 1080 | 1820 | 0.225 | 0.379 |
| Southbound Right | 1 | 1600 | 10 | 30 | 0 | 0 | 10 | 30 | 0.006 | 0.019 |
| Eastbound Left | 1 | 1600 | 60 | 20 | 0 | 0 | 60 | 20 | 0.038* | 0.013 |
| Eastbound Through | 1 | 1600 | 10 | 10 | 0 | 0 | 10 | 10 | 0.025 | 0.019* |
| Eastbound Right | 0 | 0 | 30 | 20 | 0 | 0 | 30 | 20 | 0.000 | 0.000 |
| Westbound Left | 0 | 0 | 90 | 520 | 8 | 6 | 98 | 526 | 0.000 | 0.000 |
| Westbound Through | 2 | 3200 | 10 | 20 | 0 | 0 | 10 | 20 | 0.034* | 0.171* |
| Westbound Right | 1 | 1600 | 60 | 370 | 14 | 10 | 74 | 380 | 0.046 | 0.238 |
| Northbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | 0.012* | 0.067* |
| Clearance Interval | | | | | | | | | 0.000* | 0.000* |
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) | | | | | | | | | 0.53 | 0.71 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | | | | | | | | | A | C |

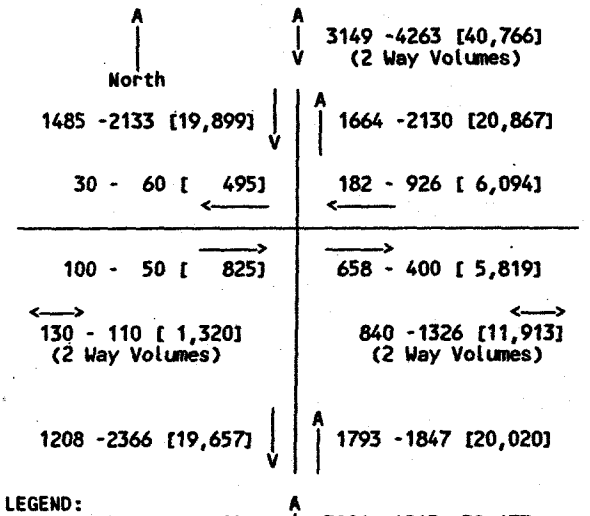
None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted.

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




LEGEND: AM-PM Peak Hour
[Estimated 2-Way Daily]

PLOT OF INTERSECTION LEG VOLUMES




LEGEND:
AM-PM Peak Hour [Daily]
Daily = (AM+PM)* 5.5

3001 -4213 [39,677]
(2 Way Volumes)

| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 47 - 50 | 60 - 44 | 22 - 70 | 77 - 45 |
| % of Daily in Peak Hour (AM-PM) | 8 - 10 | 8 - 11 | 7 - 11 | 10 - 8 |

Kunzman Associates

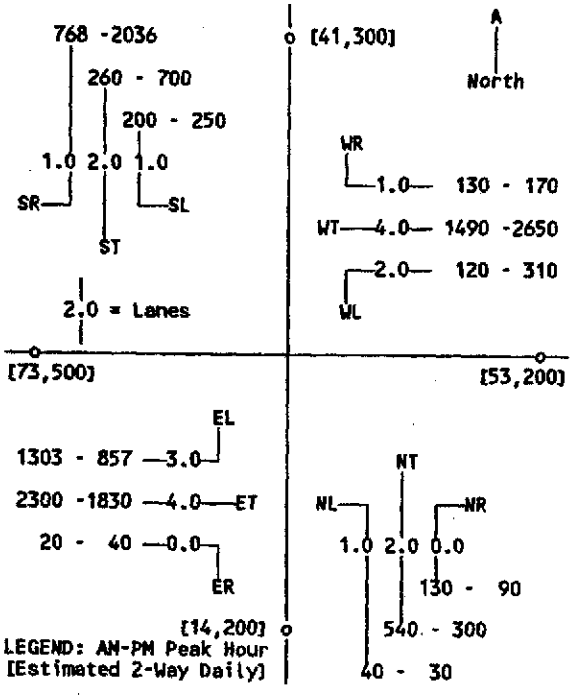
# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

INTERSECTION: JAMBOREE ROAD (NS) and COAST HIGHWAY (EW) — COUNT DATE: 01-01-04
LAND USE: GENERAL PLAN BUILDOUT WITH PROJECT — GEOMETRICS: Existing

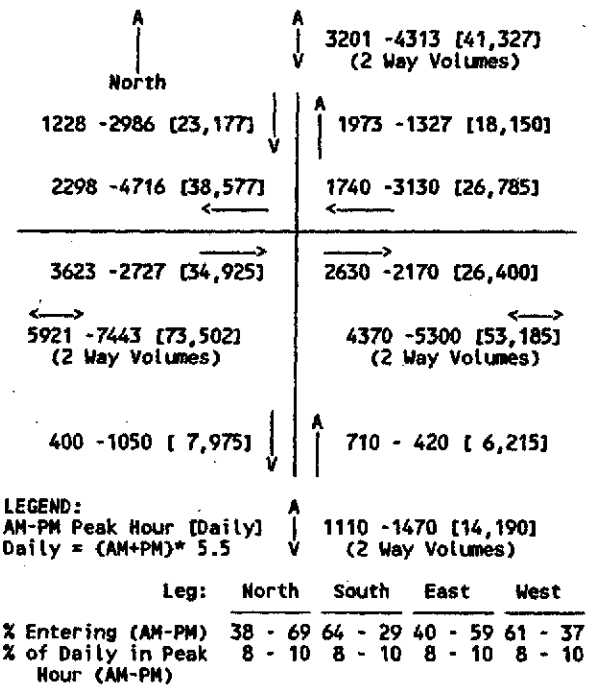
| MOVEMENT | | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | | 1 | 1600 | 40 | 30 | 0 | 0 | 40 | 30 | 0.025 | 0.019 |
| Northbound Through | | 2 | 3200 | 540 | 300 | 0 | 0 | 540 | 300 | 0.209* | 0.122* |
| Northbound Right | | 0 | 0 | 130 | 90 | 0 | 0 | 130 | 90 | 0.000 | 0.000 |
| Southbound Left | | 1 | 1600 | 200 | 250 | 0 | 0 | 200 | 250 | 0.125* | 0.156* |
| Southbound Through | | 2 | 3200 | 260 | 700 | 0 | 0 | 260 | 700 | 0.081 | 0.219 |
| Southbound Right | Free | 1 | 1600 | 760 | 2030 | 8 | 6 | 768 | 2036 | 0.480 | 1.273 |
| Eastbound Left | | 3 | 4800 | 1300 | 850 | 3 | 7 | 1303 | 857 | 0.271* | 0.179* |
| Eastbound Through | | 4 | 6400 | 2300 | 1830 | 0 | 0 | 2300 | 1830 | 0.363 | 0.292 |
| Eastbound Right | | 0 | 0 | 20 | 40 | 0 | 0 | 20 | 40 | 0.000 | 0.000 |
| Westbound Left | | 2 | 3200 | 120 | 310 | 0 | 0 | 120 | 310 | 0.038 | 0.097 |
| Westbound Through | | 4 | 6400 | 1490 | 2650 | 0 | 0 | 1490 | 2650 | 0.233* | 0.414* |
| Westbound Right | Free | 1 | 1600 | 130 | 170 | 0 | 0 | 130 | 170 | 0.081 | 0.106 |
| Northbound Right Turn Adjustment | | | | | | | | | | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | | | | | | | | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | | 0.000* | 0.000* |
| Clearance Interval | | | | | | | | | | 0.000* | 0.000* |
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) | | | | | | | | | | 0.84 | 0.87 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | | | | | | | | | | D | D |

None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted.

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




PLOT OF INTERSECTION LEG VOLUMES




| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 38 - 69 | 64 - 29 | 40 - 59 | 61 - 37 |
| % of Daily in Peak Hour (AM-PM) | 8 - 10 | 8 - 10 | 8 - 10 | 8 - 10 |

Kunzman Associates

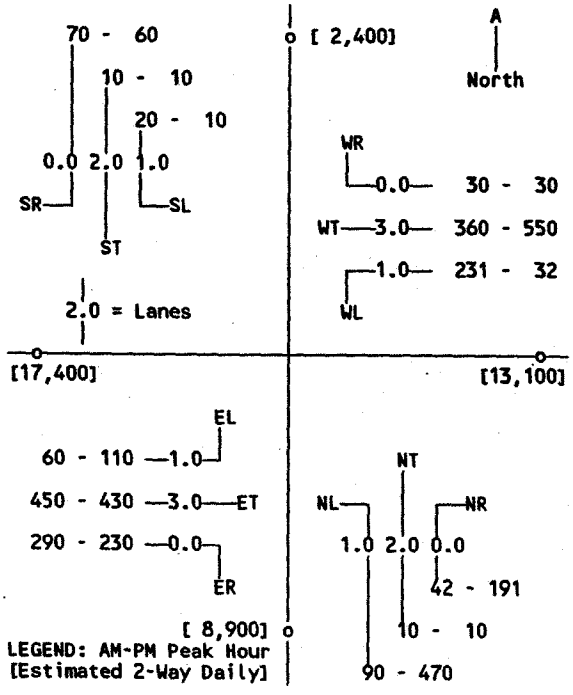
# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

INTERSECTION: SANTA CRUZ DRIVE (NS) and SAN JOAQUIN HILLS ROAD (EW) — COUNT DATE: 01-01-04
LAND USE: GENERAL PLAN BUILDOUT WITH PROJECT — GEOMETRICS: Existing

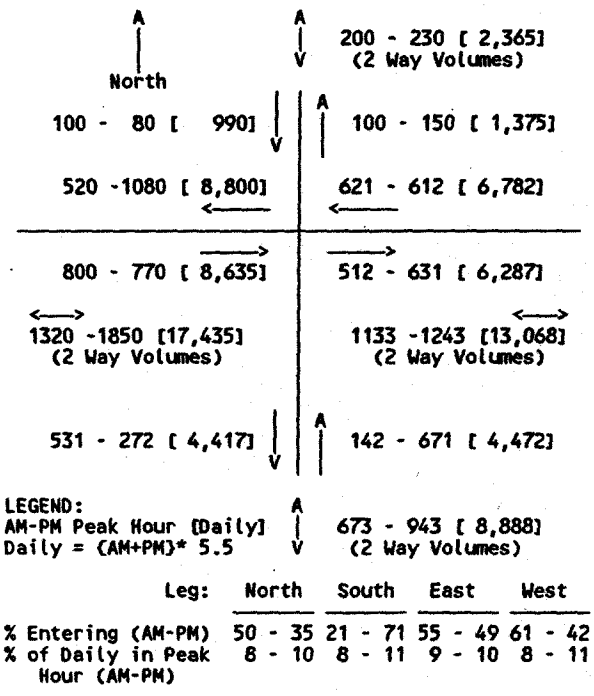
| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 1 | 1600 | 90 | 470 | 0 | 0 | 90 | 470 | 0.056* | 0.294* |
| Northbound Through | 2 | 3200 | 10 | 10 | 0 | 0 | 10 | 10 | 0.016 | 0.063 |
| Northbound Right | 0 | 0 | 40 | 190 | 2 | 1 | 42 | 191 | 0.000 | 0.000 |
| Southbound Left | 1 | 1600 | 20 | 10 | 0 | 0 | 20 | 10 | 0.013 | 0.006 |
| Southbound Through | 2 | 3200 | 10 | 10 | 0 | 0 | 10 | 10 | 0.025* | 0.022* |
| Southbound Right | 0 | 0 | 70 | 60 | 0 | 0 | 70 | 60 | 0.000 | 0.000 |
| Eastbound Left | 1 | 1600 | 60 | 110 | 0 | 0 | 60 | 110 | 0.038 | 0.069* |
| Eastbound Through | 3 | 4800 | 450 | 430 | 0 | 0 | 450 | 430 | 0.154* | 0.138 |
| Eastbound Right | 0 | 0 | 290 | 230 | 0 | 0 | 290 | 230 | 0.000 | 0.000 |
| Westbound Left | 1 | 1600 | 230 | 30 | 1 | 2 | 231 | 32 | 0.144* | 0.020 |
| Westbound Through | 3 | 4800 | 360 | 550 | 0 | 0 | 360 | 550 | 0.081 | 0.121* |
| Westbound Right | 0 | 0 | 30 | 30 | 0 | 0 | 30 | 30 | 0.000 | 0.000 |
| Northbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Clearance Interval | | | | | | | | | 0.000* | 0.000* |
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) ——→ | | | | | | | | | 0.38 | 0.51 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | | | | | | | | | A | A |

None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted.

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




PLOT OF INTERSECTION LEG VOLUMES




| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 50 - 35 | 21 - 71 | 55 - 49 | 61 - 42 |
| % of Daily in Peak Hour (AM-PM) | 8 - 10 | 8 - 11 | 9 - 10 | 8 - 11 |

# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

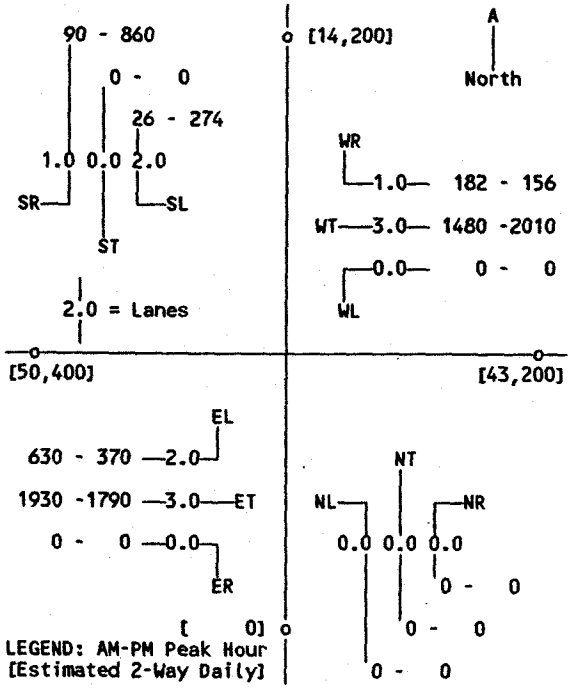
INTERSECTION: NEWPORT CENTER DRIVE (NS) and COAST HIGHWAY (EW)
LAND USE: GENERAL PLAN BUILDOUT WITH PROJECT

COUNT DATE: 01-01-04
GEOMETRICS: Existing

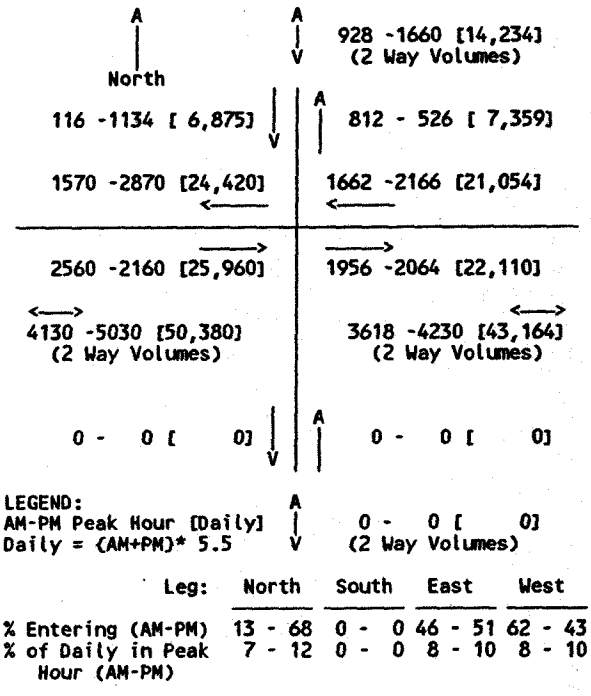
| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000 | 0.000 |
| Northbound Through | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000* | 0.000* |
| Northbound Right | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000 | 0.000 |
| Southbound Left | 2 | 3200 | 20 | 270 | 6 | 4 | 26 | 274 | 0.008* | 0.086* |
| Southbound Through | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000 | 0.000 |
| Southbound Right | Free 1 | 1600 | 90 | 860 | 0 | 0 | 90 | 860 | 0.056 | 0.538 |
| Eastbound Left | 2 | 3200 | 630 | 370 | 0 | 0 | 630 | 370 | 0.197* | 0.116* |
| Eastbound Through | 3 | 4800 | 1930 | 1790 | 0 | 0 | 1930 | 1790 | 0.402 | 0.373 |
| Eastbound Right | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000 | 0.000 |
| Westbound Left | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000 | 0.000 |
| Westbound Through | 3 | 4800 | 1480 | 2010 | 0 | 0 | 1480 | 2010 | 0.308* | 0.419* |
| Westbound Right | Free 1 | 1600 | 180 | 150 | 2 | 6 | 182 | 156 | 0.114 | 0.098 |
| Northbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Clearance Interval | | | | | | | | | 0.000* | 0.000* |
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) | | | | | | | | | 0.51 | 0.62 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | | | | | | | | | A | B |

None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted.

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




PLOT OF INTERSECTION LEG VOLUMES



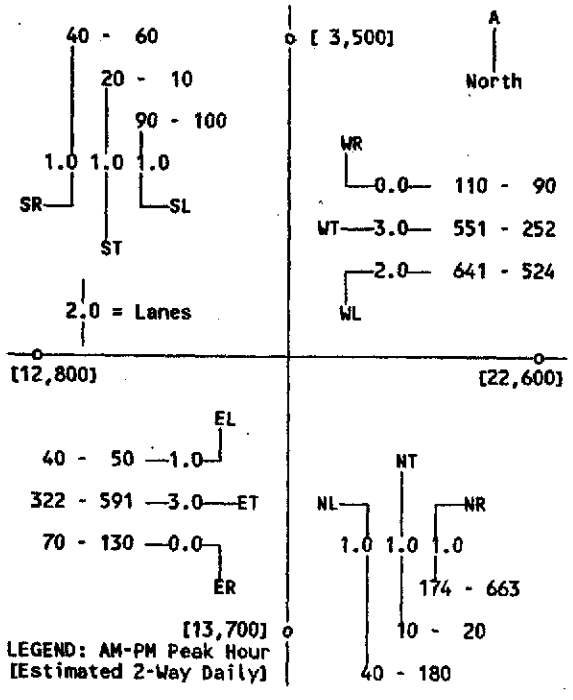

| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 13 - 68 | 0 - 0 | 46 - 51 | 62 - 43 |
| % of Daily in Peak Hour (AM-PM) | 7 - 12 | 0 - 0 | 8 - 10 | 8 - 10 |

# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

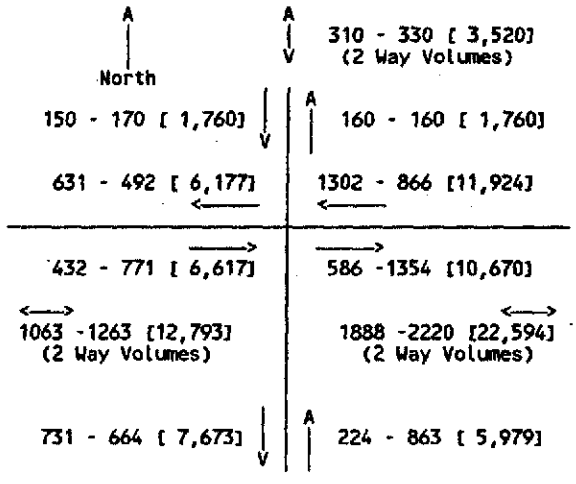
INTERSECTION: SANTA ROSA DRIVE/BIG CANYON DRIVE (NS) and SAN JOAQUIN HILLS ROA — COUNT DATE: 01-01-04
LAND USE: GENERAL PLAN BUILDOUT WITH PROJECT — GEOMETRICS: Existing

| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 1 | 1600 | 40 | 180 | 0 | 0 | 40 | 180 | 0.025 | 0.113* |
| Northbound Through | 1 | 1600 | 10 | 20 | 0 | 0 | 10 | 20 | 0.006* | 0.013 |
| Northbound Right | 1 | 1600 | 170 | 660 | 4 | 3 | 174 | 663 | 0.109 | 0.414 |
| Southbound Left | 1 | 1600 | 90 | 100 | 0 | 0 | 90 | 100 | 0.056* | 0.063 |
| Southbound Through | 1 | 1600 | 20 | 10 | 0 | 0 | 20 | 10 | 0.013 | 0.006* |
| Southbound Right | 1 | 1600 | 40 | 60 | 0 | 0 | 40 | 60 | 0.025 | 0.038 |
| Eastbound Left | 1 | 1600 | 40 | 50 | 0 | 0 | 40 | 50 | 0.025 | 0.031 |
| Eastbound Through | 3 | 4800 | 320 | 590 | 2 | 1 | 322 | 591 | 0.082* | 0.150* |
| Eastbound Right | 0 | 0 | 70 | 130 | 0 | 0 | 70 | 130 | 0.000 | 0.000 |
| Westbound Left | 2 | 3200 | 640 | 520 | 1 | 4 | 641 | 524 | 0.200* | 0.164* |
| Westbound Through | 3 | 4800 | 550 | 250 | 1 | 2 | 551 | 252 | 0.138 | 0.071 |
| Westbound Right | 0 | 0 | 110 | 90 | 0 | 0 | 110 | 90 | 0.000 | 0.000 |
| Northbound Right Turn Adjustment | | | None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted. | | | | | | 0.000* | 0.227* |
| Southbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Clearance Interval | | | | | | | | | 0.000* | 0.000* |
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) ——→ | | | | | | | | | 0.34 | 0.66 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | | | | | | | | | A | B |

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




PLOT OF INTERSECTION LEG VOLUMES




| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 48 - 52 | 23 - 57 | 69 - 39 | 41 - 61 |
| % of Daily in Peak Hour (AM-PM) | 9 - 9 | 7 - 11 | 8 - 10 | 8 - 10 |

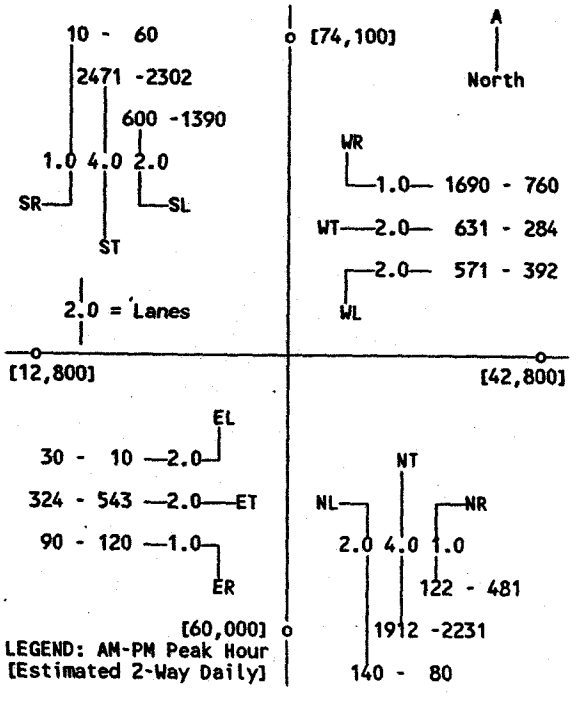
# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

INTERSECTION: MACARTHUR BOULEVARD (NS) and FORD ROAD (EW)
LAND USE: GENERAL PLAN BUILDOUT WITH PROJECT

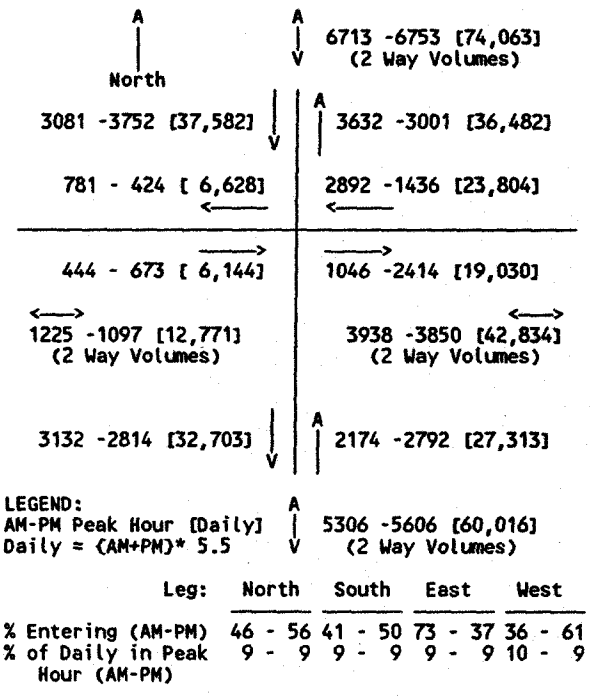
COUNT DATE: 01-01-04
GEOMETRICS: Existing

| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 2 | 3200 | 140 | 80 | 0 | 0 | 140 | 80 | 0.044 | 0.025 |
| Northbound Through | 4 | 6400 | 1910 | 2230 | 2 | 1 | 1912 | 2231 | 0.299* | 0.349* |
| Northbound Right | Free 1 | 1600 | 120 | 480 | 2 | 1 | 122 | 481 | 0.076 | 0.301 |
| Southbound Left | 2 | 3200 | 600 | 1390 | 0 | 0 | 600 | 1390 | 0.188* | 0.434* |
| Southbound Through | 4 | 6400 | 2470 | 2300 | 1 | 2 | 2471 | 2302 | 0.386 | 0.360 |
| Southbound Right | Free 1 | 1600 | 10 | 60 | 0 | 0 | 10 | 60 | 0.006 | 0.038 |
| Eastbound Left | 2 | 3200 | 30 | 10 | 0 | 0 | 30 | 10 | 0.009 | 0.003 |
| Eastbound Through | 2 | 3200 | 320 | 540 | 4 | 3 | 324 | 543 | 0.101* | 0.170* |
| Eastbound Right | 1 | 1600 | 90 | 120 | 0 | 0 | 90 | 120 | 0.056 | 0.075 |
| Westbound Left | 2 | 3200 | 570 | 390 | 1 | 2 | 571 | 392 | 0.178* | 0.123* |
| Westbound Through | 2 | 3200 | 630 | 280 | 1 | 4 | 631 | 284 | 0.197 | 0.089 |
| Westbound Right | Free 1 | 1600 | 1690 | 760 | 0 | 0 | 1690 | 760 | 1.056 | 0.475 |
| Northbound Right Turn Adjustment | None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted. | | | | | | | | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Clearance Interval | | | | | | | | | 0.000* | 0.000* |
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) ——> | | | | | | | | | 0.77 | 1.08 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | | | | | | | | | C | F |

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




PLOT OF INTERSECTION LEG VOLUMES




| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 46 - 56 | 41 - 50 | 73 - 37 | 36 - 61 |
| % of Daily in Peak Hour (AM-PM) | 9 - 9 | 9 - 9 | 9 - 9 | 10 - 9 |

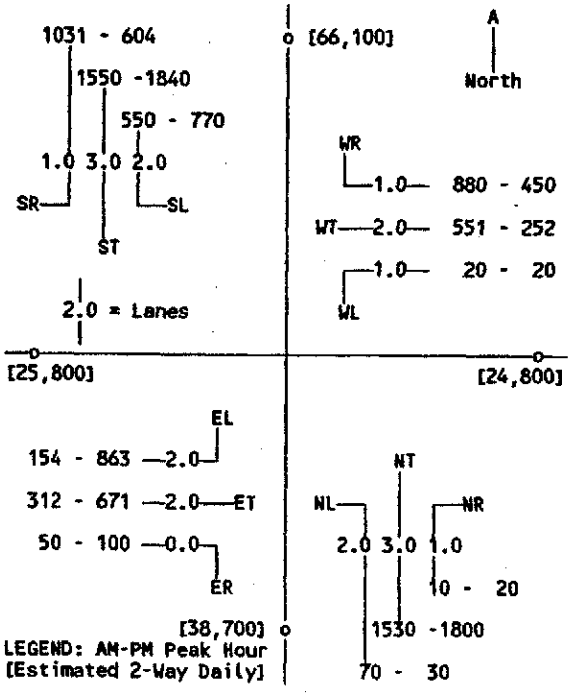
# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

INTERSECTION: MACARTHUR BOULEVARD (NS) and SAN JOAQUIN HILLS ROAD (EW) — COUNT DATE: 01-01-04
LAND USE: GENERAL PLAN BUILDOUT WITH PROJECT — GEOMETRICS: Existing

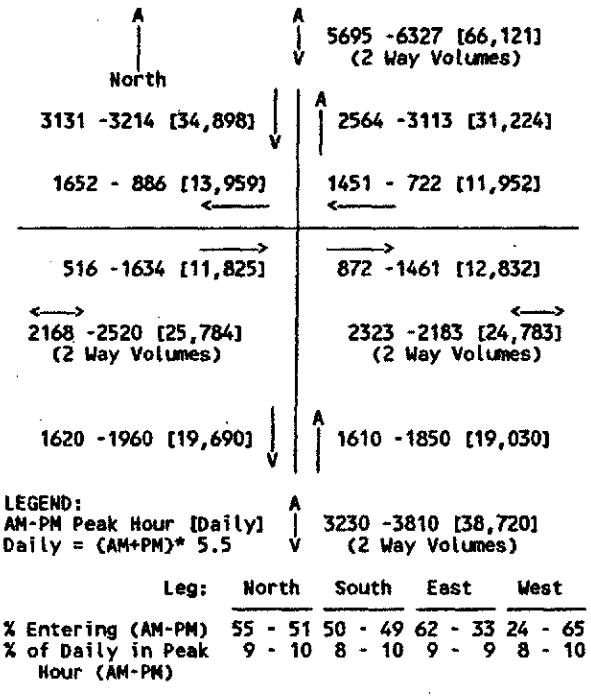
| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 2 | 3200 | 70 | 30 | 0 | 0 | 70 | 30 | 0.022 | 0.009 |
| Northbound Through | 3 | 4800 | 1530 | 1800 | 0 | 0 | 1530 | 1800 | 0.319* | 0.375* |
| Northbound Right | 1 | 1600 | 10 | 20 | 0 | 0 | 10 | 20 | 0.006 | 0.013 |
| Southbound Left | 2 | 3200 | 550 | 770 | 0 | 0 | 550 | 770 | 0.172* | 0.241* |
| Southbound Through | 3 | 4800 | 1550 | 1840 | 0 | 0 | 1550 | 1840 | 0.323 | 0.383 |
| Southbound Right | Free 1 | 1600 | 1030 | 600 | 1 | 4 | 1031 | 604 | 0.644 | 0.378 |
| Eastbound Left | 2 | 3200 | 150 | 860 | 4 | 3 | 154 | 863 | 0.048* | 0.270* |
| Eastbound Through | 2 | 3200 | 310 | 670 | 2 | 1 | 312 | 671 | 0.113 | 0.241 |
| Eastbound Right | 0 | 0 | 50 | 100 | 0 | 0 | 50 | 100 | 0.000 | 0.000 |
| Westbound Left | 1 | 1600 | 20 | 20 | 0 | 0 | 20 | 20 | 0.013 | 0.013 |
| Westbound Through | 2 | 3200 | 550 | 250 | 1 | 2 | 551 | 252 | 0.172* | 0.079* |
| Westbound Right | Free 1 | 1600 | 880 | 450 | 0 | 0 | 880 | 450 | 0.550 | 0.281 |
| Northbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Clearance Interval | | | | | | | | | 0.000* | 0.000* |
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) | | | | | | | | | 0.71 | 0.97 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | | | | | | | | | C | E |

None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted.

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




PLOT OF INTERSECTION LEG VOLUMES




| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 55 - 51 | 50 - 49 | 62 - 33 | 24 - 65 |
| % of Daily in Peak Hour (AM-PM) | 9 - 10 | 8 - 10 | 9 - 9 | 8 - 10 |

# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

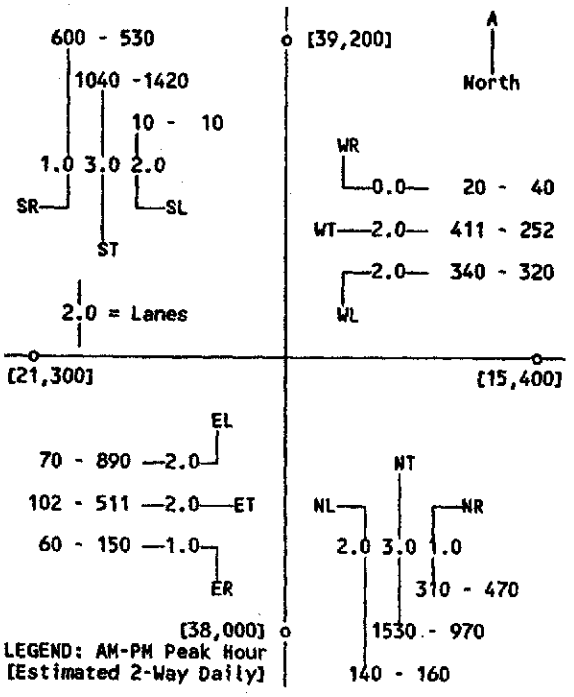
INTERSECTION: MACARTHUR BOULEVARD (NS) and SAN MIGUEL DRIVE (EW)
LAND USE: GENERAL PLAN BUILDOUT WITH PROJECT

COUNT DATE: 01-01-04
GEOMETRICS: Existing

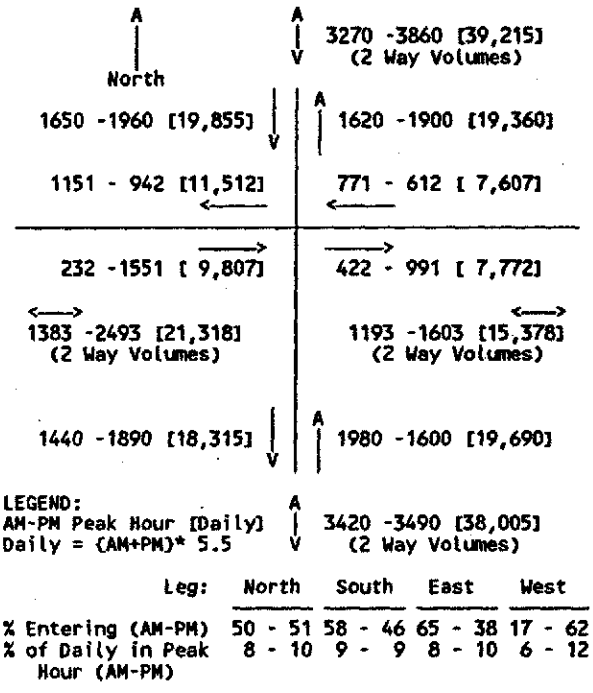
| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 2 | 3200 | 140 | 160 | 0 | 0 | 140 | 160 | 0.044 | 0.050* |
| Northbound Through | 3 | 4800 | 1530 | 970 | 0 | 0 | 1530 | 970 | 0.319* | 0.202 |
| Northbound Right | 1 | 1600 | 310 | 470 | 0 | 0 | 310 | 470 | 0.194 | 0.294 |
| Southbound Left | 2 | 3200 | 10 | 10 | 0 | 0 | 10 | 10 | 0.003* | 0.003 |
| Southbound Through | 3 | 4800 | 1040 | 1420 | 0 | 0 | 1040 | 1420 | 0.217 | 0.296* |
| Southbound Right | 1 | 1600 | 600 | 530 | 0 | 0 | 600 | 530 | 0.375 | 0.331 |
| Eastbound Left | 2 | 3200 | 70 | 890 | 0 | 0 | 70 | 890 | 0.022* | 0.278* |
| Eastbound Through | 2 | 3200 | 100 | 510 | 2 | 1 | 102 | 511 | 0.032 | 0.160 |
| Eastbound Right | 1 | 1600 | 60 | 150 | 0 | 0 | 60 | 150 | 0.038 | 0.094 |
| Westbound Left | 2 | 3200 | 340 | 320 | 0 | 0 | 340 | 320 | 0.106 | 0.100 |
| Westbound Through | 2 | 3200 | 410 | 250 | 1 | 2 | 411 | 252 | 0.135* | 0.091* |
| Westbound Right | 0 | 0 | 20 | 40 | 0 | 0 | 20 | 40 | 0.000 | 0.000 |
| Northbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | | | | | | | | 0.097* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Clearance Interval | | | | | | | | | 0.000* | 0.000* |
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) | | | | | | | | | 0.58 | 0.72 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | | | | | | | | | A | C |

None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted.

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




PLOT OF INTERSECTION LEG VOLUMES




| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 50 - 51 | 58 - 46 | 65 - 38 | 17 - 62 |
| % of Daily in Peak Hour (AM-PM) | 8 - 10 | 9 - 9 | 8 - 10 | 6 - 12 |

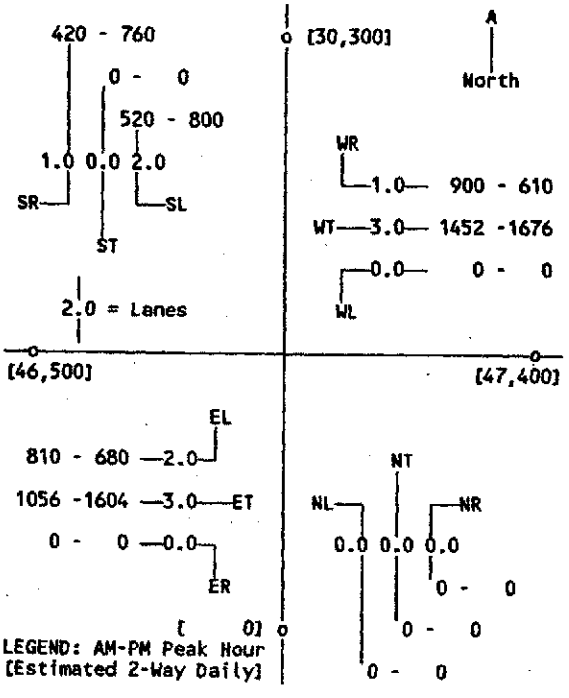
# INTERSECTION VOLUMES, LANES, AND INTERSECTION CAPACITY UTILIZATION CALCULATION

INTERSECTION: MACARTHUR BOULEVARD (NS) and COAST HIGHWAY (EW) — COUNT DATE: 01-01-04
LAND USE: GENERAL PLAN BUILDOUT WITH PROJECT — GEOMETRICS: Existing

| MOVEMENT | LANES | CAPACITY | BASE VOLUME (AM) | BASE VOLUME (PM) | ADDED VOLUME (AM) | ADDED VOLUME (PM) | TOTAL VOLUME (AM) | TOTAL VOLUME (PM) | VOLUME TO CAPACITY RATIO (AM) | VOLUME TO CAPACITY RATIO (PM) |
|---|---|---|---|---|---|---|---|---|---|---|
| Northbound Left | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000 | 0.000 |
| Northbound Through | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000* | 0.000* |
| Northbound Right | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000 | 0.000 |
| Southbound Left | 2 | 3200 | 520 | 800 | 0 | 0 | 520 | 800 | 0.163* | 0.250* |
| Southbound Through | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000 | 0.000 |
| Southbound Right | Free 1 | 1600 | 420 | 760 | 0 | 0 | 420 | 760 | 0.262 | 0.475 |
| Eastbound Left | 2 | 3200 | 810 | 680 | 0 | 0 | 810 | 680 | 0.253* | 0.213* |
| Eastbound Through | 3 | 4800 | 1050 | 1600 | 6 | 4 | 1056 | 1604 | 0.220 | 0.334 |
| Eastbound Right | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000 | 0.000 |
| Westbound Left | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000 | 0.000 |
| Westbound Through | 3 | 4800 | 1450 | 1670 | 2 | 6 | 1452 | 1676 | 0.303* | 0.349* |
| Westbound Right | Free 1 | 1600 | 900 | 610 | 0 | 0 | 900 | 610 | 0.563 | 0.381 |
| Northbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Southbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Eastbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Westbound Right Turn Adjustment | | | | | | | | | 0.000* | 0.000* |
| Clearance Interval | | | | | | | | | 0.000* | 0.000* |
| INTERSECTION CAPACITY UTILIZATION, ICU (Sum of Components with *) → | | | | | | | | | 0.72 | 0.81 |
| LEVEL OF SERVICE (A=.000-.6 ICU; B=.601-.7; C=.701-.8; D=.801-.9; E=.901-1.0; F=1.001+) | | | | | | | | | C | D |

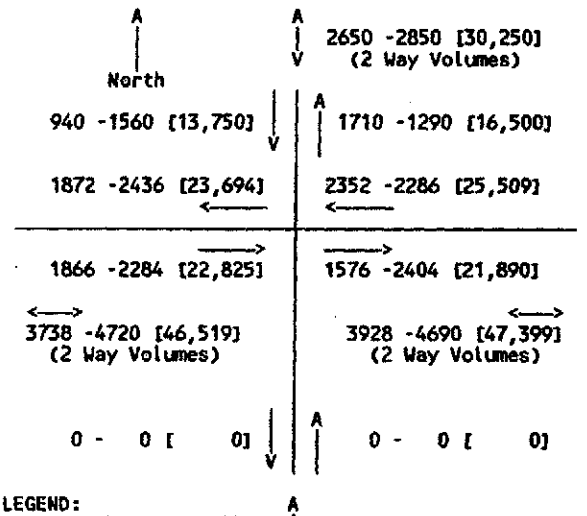
None of right turns (RT) are assumed to occur on red light when there is separate RT lane & when movement is permitted.

PLOT OF PEAK HOUR TURNING VOLUMES AND LANES




LEGEND: AM-PM Peak Hour
[Estimated 2-Way Daily]

PLOT OF INTERSECTION LEG VOLUMES




LEGEND:
AM-PM Peak Hour [Daily]
Daily = (AM+PM)* 5.5
0 - 0 [ 0]
(2 Way Volumes)

| Leg: | North | South | East | West |
|---|---|---|---|---|
| % Entering (AM-PM) | 35 - 55 | 0 - 0 | 60 - 49 | 50 - 48 |
| % of Daily in Peak Hour (AM-PM) | 9 - 9 | 0 - 0 | 8 - 10 | 8 - 10 |