THE RESIDENCES AT NEWPORT PLACE
EVALUATION OF
PROJECT TRIP GENERATION AND CONSTRUCTION TRAFFIC

INTRODUCTION

This report has been prepared for the proposed Residences at Newport Place project, to provide an evaluation of the project trip generation and construction traffic associated with the project. The Residences at Newport Place project site is the site of the existing MacArthur Square commercial center, located at the southwest corner of MacArthur Boulevard and Corinthian Way. The Residences at Newport Place project would remove the entire existing MacArthur Square development, and construct 384 apartments and a 5,677-square-foot restaurant. A copy of the project site plan is provided on Figure 1. The following is a discussion of the estimated project trip generation and construction traffic that would be associated with the project.

PROJECT TRIP GENERATION

The traffic expected to be generated by the proposed Residences at Newport Place was calculated using trip generation rates from the Institute of Transportation Engineers (ITE) Trip Generation Manual (9th Edition). Trip rates for the project are based on ITE Land Use Category 220 – Apartments, and Land Use Category 931 – Restaurant. The trip estimates also take into account the trips associated with the existing MacArthur Square uses on the site, which will be removed. The difference between the trips associated with the existing uses and the trips estimated to be generated by the proposed Residences at Newport Place development will represent the Project trip generation for traffic evaluation purposes.

Trip estimates were prepared using two sets of assumptions as it relates to the existing uses on the site – one for purposes of addressing the California Environmental Quality Act (CEQA) requirements, and one for purposes of evaluating the project in accordance with the City's Traffic Phasing Ordinance (TPO).

For purposes of a CEQA evaluation, the Project trip generation estimates reflect actual conditions on the ground at the time the application for the project was submitted. At that time, 13,956 square feet of restaurant space in the MacArthur Square development was vacant. Therefore, the trips associated with the former restaurant space are not taken as trip credit in the CEQA trip generation estimates. The trip generation estimates based on the CEQA guidelines are summarized on Table 1, which shows that the project would result in a net increase of 208 daily trips, with 118 additional trips in the morning peak hour, and 66 additional trips in the evening peak hour.

The TPO ordinance allows for trip credit to be applied to all existing uses on the site, even if currently vacant, based on the last known land use, if any, that could be resumed with no discretionary approval. Therefore, the trip generation credits for the TPO condition are based on the square footage of all existing buildings on the site, including the vacant restaurant space. The trip generation estimates based on the TPO Ordinance are summarized on Table 2, which shows that the project would result in a net reduction of 1,047 (-1,047) daily trips, with an increase of 105 (+105) trips in the morning peak hour, and a reduction of 39 (-39) trips in the evening peak hour.

Based on the City's TPO requirements, a Traffic Study would not be required of any project that generates no more than 300 average daily trips. Based on the trip generation estimates using both the CEQA and the TPO standards, the project would generate less than 300 average daily trips, and therefore, a Traffic Study is not required for the project.

CONSTRUCTION TRAFFIC

The following discussion has been prepared to address the anticipated construction traffic associated with heavy vehicles and construction workers during the construction phases of the project.

Construction activities would include demolition, site clearing, grading and excavation, and construction of structures and site features. Large construction equipment such as bulldozers, loaders, scrapers, and pavers would be required during various construction phases. Large equipment is generally brought to the site at the start of the construction phase and kept on site until its term of use ends. A staging area would be designated on-site to store construction equipment and supplies during construction.

Throughout construction, the size of the work crew reporting to the site each day would vary depending on the construction phase and the construction activities taking place at the time. Parking for workers would be provided on-site during all phases of construction. Construction workers would not be allowed to park on local streets. If needed during the peak construction periods, off-site parking will be provided, and workers will carpool or be shuttled to the worksite, if adjacent off-site parking is not obtained.

The following information and details regarding construction activities and quantities has been provided by the Applicant. The construction activities would consist of four construction phases:

- Demolition of the existing buildings on the site,
- Excavation and grading,
- Foundation construction, and
- Above-ground construction.

The demolition phase will include demolition and removal of the buildings, foundations and footings, and the asphalt parking lot and light fixtures. Demolition will result in approximately 8,400 tons of demolition debris, which will be crushed on site, and then hauled off-site. It is estimated that approximately 5,600 cubic yards of construction debris and concrete will need to be removed from the site. Assuming a capacity of 18 cubic yards per truckload, demolition activities will require removal of approximately 311 truckloads of demolition debris. Assuming a two-month period for the demolition phase (approximately 21 workdays per month), this would equate to an average of 7 - 8 inbound and 7 - 8 outbound trucks per day for demolition debris. All trucks will be staged on site; no staging will occur in the public right-of-way.

The excavation and grading phase will involve a combination of cut and fill activity over a 2- to 3-month period, with an estimated 35,708 cubic yards of export. Assuming a capacity of 18 cubic yards per truckload, grading activities will require removal of approximately 1,984 truckloads of export. This would equate to an average of 31 to 47 incoming and outgoing truck trips per day. All trucks will be staged on site; no staging will occur in the public right-of-way.

The foundation and above-ground construction phase is estimated to take 16 months – four months for the foundation construction, and 12 months for the above-ground construction. It is estimated that there will be an average of 15 truck deliveries of construction materials per week during the foundation and building construction phases. All trucks will be staged on site; no staging will occur in the public right-of-way.

The size of the construction crew will vary, depending on the construction phase, and is estimated to consist of the following:

- Demolition – 12 workers
- Excavation and grading – 12 workers
- Foundation construction – 25 workers
- Above-ground construction – 60 workers

Summarizing the construction phase information provided above, the resulting construction truck traffic and construction crew traffic is estimated to be as follows:

The Residences at Newport Place Summary of Construction Traffic					
Construction Phase	Duration	Construction-related Vehicles	Daily Trips		
			Inbound	Outbound	Total
Demolition	2 months	Debris Haul Trucks	7 – 8	7 – 8	14 – 16
		Construction Workers	12	12	24
Excavation and Grading	2 to 3 months	Export Haul Trucks	31 – 47	31 – 47	62 – 94
		Construction Workers	12	12	24
Foundation Construction	4 months	Material Delivery Trucks	2 – 3	2 – 3	4 – 6
		Construction Workers	25	25	50
Above-ground Construction	12 months	Material Delivery Trucks	2 – 3	2 – 3	4 – 6
		Construction Workers	60	60	120
[1] *Source*: Construction plan information provided by the applicant					

In each case, the heavy haul vehicles and delivery trucks would arrive and depart the site throughout the construction day. Construction workers would arrive in the morning, and depart in the evening. Trucks would use the existing regional and local truck route network to approach the site, getting as close as possible on the truck route to the destination site before turning off the designated truck route.

The Applicant will be required to identify planned travel patterns for haul vehicles, and obtain a Haul Route permit from the City. All construction traffic will be required to use arterial roadways to get to and from the site. No residential streets can be used. Approach and departure routes for construction vehicles are assumed to be via MacArthur Boulevard. Depending on the origin/destination (the nearest landfill, or the deposit site identified for cut material), trucks will either arrive and depart on MacArthur Boulevard via the I-405 Freeway, to the north of the site; or on MacArthur Boulevard and Jamboree Road via the SR-73 Freeway, to the south of the site.

Temporary delays in traffic may occasionally occur due to heavy vehicles traveling at lower speeds on local streets. Such delays would be occasional, and of short duration, with the majority of them outside the peak hours. The project will be required to prepare a construction traffic management plan, which could include such things as requiring an encroachment permit for work in the public right-of-way, limiting heavy truck activity during peak hours, using flag men to manage short-term traffic control, requiring a formal traffic control plan for extended street and lane closures, limiting time and duration of closures, and/or requiring a minimum number of lanes to be open for travel during peak hours.

FIGURE 1
SITE PLAN

TABLE 1
RESIDENCES AT NEWPORT PLACE
SUMMARY OF PROJECT TRIP GENERATION
CEQA

Land Use	ITE Code	Unit	Trip Generation Rates [1] Daily	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total
Specialty Retail Center	826	KSF	44.320	*	*	*	1.192	1.518	2.710
Quality Restaurant	931	KSF	89.950	0.664	0.146	0.810	5.018	2.472	7.490
Medical-Dental Office Building	720	KSF	36.130	1.888	0.502	2.390	1.000	2.570	3.570
High-Turnover (Sit-Down) Restaurant	932	KSF	127.150	5.946	4.865	10.810	5.910	3.940	9.850
Apartment	220	DU	6.650	0.102	0.408	0.510	0.403	0.217	0.620

Land Use	Quantity	Unit	Trip Generation Estimates Daily	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total
Existing Use									
Specialty Retail	22.967	KSF	1,018	*	*	*	27	35	62
Quality Restaurant	10.174	KSF	915	7	1	8	51	25	76
Medical Office	5.467	KSF	198	10	3	13	5	14	19
High-Turnover (Sit-Down) Restaurant	5.713	KSF	726	34	28	62	34	23	57
Total Existing Trips			2,857	51	32	83	117	97	214
Proposed Use									
Apartment	384	DU	2,554	39	157	196	155	83	238
Quality Restaurant	5.677	KSF	511	4	1	5	28	14	42
Total Proposed Project Trips			3,065	43	158	201	183	97	280
Net Difference (Proposed Minus Existing)			208	-8	126	118	66	0	66

[1] Source: Institute of Transportation Engineers (ITE) Trip Generation Manual, 9th Edition

TABLE 2
RESIDENCES AT NEWPORT PLACE
SUMMARY OF PROJECT TRIP GENERATION
TPO

Land Use	ITE Code	Unit	Trip Generation Rates [1] Daily	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total
Specialty Retail Center	826	KSF	44.32	*	*	*	1.19	1.52	2.71
Quality Restaurant	931	KSF	89.95	0.66	0.15	0.81	5.02	2.47	7.49
Medical-Dental Office Building	720	KSF	36.13	1.89	0.50	2.39	1.00	2.57	3.57
High-Turnover (Sit-Down) Restaurant	932	KSF	127.15	5.95	4.86	10.81	5.91	3.94	9.85
Apartment	220	DU	6.65	0.1	0.41	0.51	0.40	0.22	0.62

Land Use	Quantity	Unit	Trip Generation Estimates Daily	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total
Existing Use									
Specialty Retail	22.967	KSF	1,018	*	*	*	27	35	62
Quality Restaurant	24.130	KSF	2,170	16	4	20	121	60	181
Medical Office	5.467	KSF	198	10	3	13	5	14	19
High-Turnover (Sit-Down) Restaurant	5.713	KSF	726	34	28	62	34	23	57
Total Existing Trips			4,112	60	35	95	187	132	319
Proposed Use									
Apartment	384	DU	2,554	38	157	195	154	84	238
Quality Restaurant	5.677	KSF	511	4	1	5	28	14	42
Total Proposed Project Trips			3,065	42	158	200	182	98	280
Net Difference (Proposed Minus Existing)			-1,047	-18	123	105	-5	-34	-39

[1] Source: Institute of Transportation Engineers (ITE) Trip Generation Manual, 9th Edition