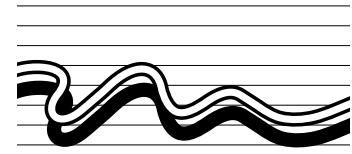


APPENDIX J

Mestre Greve Associates GHG Analysis

M E M O R A N D U M



Mestre Greve Associates
Division of Landrum & Brown

Date : April 20, 2011

To : Makana Nova, City of Newport Beach

From : Tanya Moon
Mestre Greve Associates, Division of Landrum & Brown

**Subject: Greenhouse Gas Assessment for Grading Activities on 10 Big Canyon Drive
Report # 515901GHG**

Dear Ms. Nova,

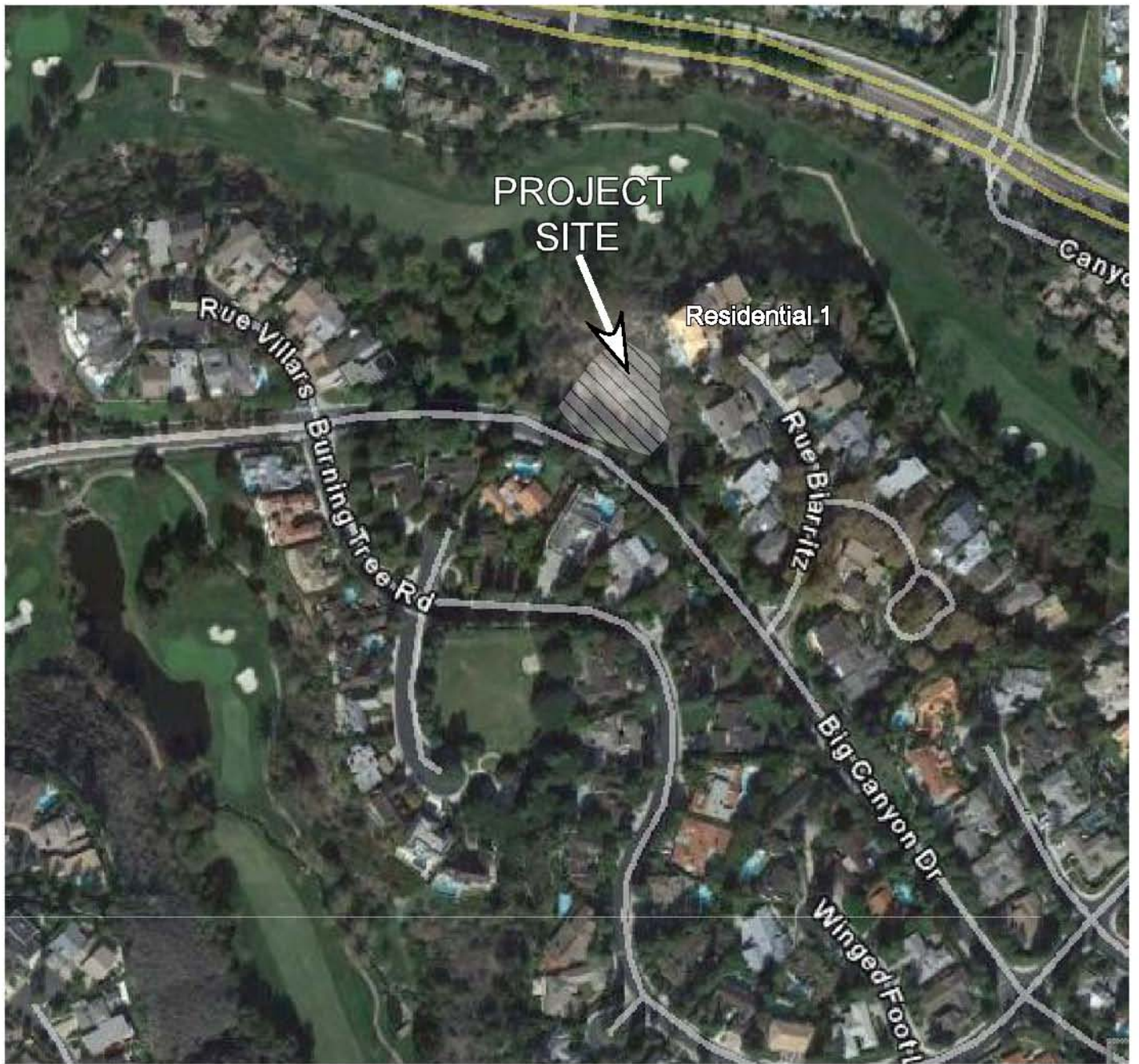
This memo presents the results of the greenhouse gas emission assessment for 10 Big Canyon Drive in the City of Newport Beach. The air quality and noise assessments have been conducted for the grading of this single residential lot. We understand that the project site is 1.9 acres. The project includes the removal of 19,000 cubic yards of unusable soil from the site. Approximately 12,000 cubic yards of this soil will be exported to the northern portion of the subject property to the northwest, and across the Big Canyon Golf Course. The remaining 7,000 cubic yards will be exported to the spoils site located at the east end of the golf course, adjacent to MacArthur Boulevard. Additionally, 45,000 cubic yards of soil will be imported from the Orange County Sanitation District. The vicinity map is shown in Exhibit 1.

Some background and regulatory information are also presented, for information purposes.

Greenhouse Gases and Climate Change

Impact of Climate Change. The Earth's climate has always been in the process of changing, due to many different natural factors. These factors have included changes in the Earth's orbit, volcanic eruptions, and varying amounts of energy released from the sun. Differences such as these have caused fluctuations in the temperature of the climate, ranging from ice ages to long periods of warmth. However, since the late 18th century, humans have had an increasing impact of the rate of climate change, beginning with the Industrial Revolution.

Many human activities have augmented the amount of "greenhouse gases" ("GHGs") being released into our atmosphere, specifically the burning of fossil fuels, such as coal and oil, and deforestation. The gases increase the efficiency of the greenhouse effect, which is the process of trapping and recycling energy (in the form of heat) that the Earth emits naturally, resulting in higher temperatures worldwide. The Intergovernmental Panel on Climate Change stated in



N.T.S.



February 2007 that warming is unequivocal, expressing very high confidence (expressed as a nine out of ten chance of being correct) that the net effect of human activities since 1750 has been one of warming. According to the National Oceanic and Atmospheric Administration (NOAA) and National Aeronautics and Space Administration (NASA) data, the average surface temperature of the Earth has increased by about 1.2 to 1.4 °F since 1900. The warmest global average temperatures in human record have all occurred within the past 15 years, with the warmest two years being 1998 and 2005. [EPA, 2007, epa.gov/climatechange/basicinfo.html].

This process of heating is often referred to as ‘global warming,’ although the National Academy of Sciences prefers the terms ‘climate change’ as an umbrella phrase which includes global warming as well as other environmental changes, in addition to the increasing temperatures. Some of these effects include changes to rainfall, wind, and current weather patterns, as well as snow and ice cover, and sea level.

Depending on which GHG emissions scenario is used, climate models predict that the Earth’s average temperature could rise anywhere between 2.5 to 10.4 °F from 1990 to the end of this century. The degree of change is influenced by the assumed amount of GHG emissions, and how quickly atmospheric GHG levels are stabilized. At this point, however, the climate change models are not capable of predicting local impacts, but rather, can only predict global trends. [EPA, 2007, epa.gov/climatechange/basicinfo.html].

Global GHG emissions are measured in million metric tons of carbon dioxide equivalent (“MMT CO₂EQ”) units. A metric ton is approximately 2,205 lbs. Some GHGs emitted into the atmosphere are naturally occurring, while others are caused solely by human activities. The principal GHGs that enter the atmosphere because of human activities are:

- **Carbon dioxide (CO₂)** enters the atmosphere through the burning of fossil fuels (oil, natural gas, and coal), agriculture, irrigation, and deforestation, as well as the manufacturing of cement.
- **Methane (CH₄)** is emitted through the production and transportation of coal, natural gas, and oil, as well as from livestock. Other agricultural activities influence methane emissions as well as the decay of waste in landfills.
- **Nitrous oxide (N₂O)** is released most often during the burning of fuel at high temperatures. This greenhouse gas is caused mostly by motor vehicles, which also include non-road vehicles, such as those used for agriculture.
- **Fluorinated Gases** are emitted primarily from industrial sources, which often include hydrofluorocarbons (HFC), perfluorocarbons (PFC), and sulfur hexafluoride (SF₆). Though they are often released in smaller quantities, they are referred to as High Global Warming Potential Gases because of their ability to cause global warming. Fluorinated gases are often used as substitutes for ozone depleting substances.

These gases have different potentials for trapping heat in the atmosphere, called global warming potential (“GWP”). For example, one pound of methane has 21 times more heat capturing potential than one pound of carbon dioxide. When dealing with an array of emissions, the gases are converted to carbon dioxide equivalents for comparison purposes. The GWPs for common greenhouse gases are shown in Table 1.

Table 1
Global Warming Potentials (GWP)

Gas	Global Warming Potential
Carbon Dioxide	1
Methane	21
Nitrous Oxide	310
HFC-23	11,700
HFC-134a	1,300
HFC-152a	140
PFC: Tetrafluoromethane (CF ₄)	6,500
PFC: Hexafluoroethane (C ₂ F ₆)	9,200
Sulfur Hexafluoride (SF ₆)	23,900

Source: EPA 2006. Non CO2 Gases Economic Analysis and inventory.
(<http://www.epa.gov/nonco2/econ-inv/table.html>), December 2006

Consumption of fossil fuels in the transportation sector was the single largest source of California’s GHG emissions in 2004, accounting for 40.7 percent of total GHG emissions in the state (California Energy Commission 2006a). This category was followed by the electric power sector (including both in-state and out-of-state sources) (22.2 percent) and the industrial sector (20.5 percent) (California Energy Commission 2006a). A byproduct of fossil fuel combustion is CO₂. Processes that absorb and accumulate CO₂, often called CO₂ “sinks,” include absorption by vegetation and dissolution into the ocean. Methane, a highly potent GHG, results from off-gassing associated with agricultural practices and municipal solid waste landfills.

Impact of Climate Change on California and Human Health The long term environmental impacts of global warming may include sea level rise that could cause devastating erosion and flooding of coastal cities and villages, as well as more intense hurricanes and typhoons worldwide. In the United States, Chicago is projected to experience 25 percent more frequent heat waves and Los Angeles a four-to-eight-fold increase in heat wave days by the end of the century (IPCC, 2007: Climate Change 2007: Impacts, Adaptation and Vulnerability, Contribution of Working Group II to the Third Assessment Report of the Intergovernmental Panel on Climate Change, Cambridge University Press, Cambridge).

Locally, global warming could cause changing weather patterns with increased storm and drought severity in California. Changes to local and regional ecosystems include the potential loss of species and a significant reduction in winter snow pack (e.g., estimates include a 30 to 90% reduction in snow pack in the Sierra Nevada mountain range). Current data suggest that in the next 25 years, in every season of the year, California could experience unprecedented heat, longer and more extreme heat waves, greater intensity and frequency of heat waves, and longer dry

periods. The California Climate Change Center (2006) predicted that California could witness the following events:

- Temperature rises between 3 and 10.5 °F
- 6 to 20 inches or more increase in sea level
- 2 to 4 times as many heat-wave days in major urban centers
- 2 to 6 times as many heat-related deaths in major urban centers
- 1 to 1.5 times more critically dry years
- 10 to 55% increase in the risk of wildfires

An increase in the frequency of extreme events may result in more event-related deaths, injuries, infectious diseases, and stress-related disorders. Particular segments of the population such as those with heart problems, asthma, the elderly, the very young and the homeless can be especially vulnerable to extreme heat. Also, climate change may increase the risk of some infectious diseases; particularly those diseases that appear in warm areas and are spread by mosquitoes and other insects. These "vector-borne" diseases include malaria, dengue fever, yellow fever, and encephalitis. Also, algal blooms could occur more frequently as temperatures warm — particularly in areas with polluted waters — in which case diseases (such as cholera) that tend to accompany algal blooms could become more frequent.

Adaptation Impact. Adaptation refers to potential climate change impacts on the project. Global warming is already having a profound impact on water resources. Climate change already altered the weather patterns and water supply in California leading to increased water shortages (i.e., a dwindling snowpack, bigger flood flows, rising sea levels, longer and harsher droughts). Water supplies are also at risk from rising sea levels. Risks may include degradation of California's estuaries, wetlands, and groundwater aquifers which would threaten the quality and reliability of the major California fresh water supply (Climate Change Adaptation Strategies for California's Water, State of California Department of Water Resources, October 2008).

Higher temperatures will also likely increase electricity demand due to higher air conditioning use. Even if the population remained unchanged, toward the end of the century annual electricity demand could increase by as much as 20 percent if temperatures rise into the higher warming range. (Implementing aggressive efficiency measures could lower this estimate).

Higher temperatures may require that the project consume more electricity for cooling. Additionally, more water may be needed for the landscaping. However, sea level rise will not impact the project because it is so far and high relative to the ocean.

Adaptation includes the responses to the changing climate and policies to minimize the predicted impacts (e.g., building better coastal defenses to sea level rise). Adaptation is not included in this report. It should be note that adaptation is not mitigation. Mitigation includes intervention or policies to reduce GHG emissions or to enhance the sinks of GHGs.

Regulatory Framework

Federal Plans, Policies, Regulations, and Laws. The federal government began studying the phenomenon of global warming as early as 1978 with the National Climate Protection Act, 92 Stat. 601, which required the President to establish a program to “assist the Nation and the world to understand and respond to natural and man-induced climate processes and their implications.” The 1987 Global Climate Protection Act, Title XI of Pub. L. 100-204, directed the U.S. EPA to propose a “coordinated national policy on global climate change,” and ordered the Secretary of State to work “through the channels of multilateral diplomacy” to coordinate efforts to address global warming. Further, in 1992, the United States ratified a nonbinding agreement among 154 nations to reduce atmospheric GHGs.

More recently, in *Massachusetts v. EPA* (April 2, 2007), the United State Supreme Court held that GHGs fall within the Clean Air Act’s definition of an “air pollutant,” and directed the EPA to consider whether GHGs are causing climate change. If so, the EPA must regulate GHG emissions from automobiles under the Clean Air Act.

While EPA has not finalized a regulation, it did issue a proposed rule on April 17, 2009. The rule declared that GHGs endanger human health and is the first step to regulation through the federal Clean Air Act. If it becomes final, the EPA would define air pollution to include the six key GHGs – CO₂, CH₄, N₂O, HFCs, PFCs, and SF₆.

In addition, Congress has increased the corporate average fuel economy (CAFE) of the U.S. automotive fleet. In December 2007, President Bush signed a bill raising the minimum average miles per gallon for cars, sport utility vehicles, and light trucks to 35 miles per gallon by 2020. This increase in CAFE standard will create a substantial reduction in GHG emissions from automobiles, which is the largest single emitting GHG sector in California.

As of this writing, however, there are no adopted federal plans, policies, regulations or laws setting a mandatory limit on GHG emissions. Further, the EPA has not finalized its evaluation in the wake of *Massachusetts v. EPA*.

California State Plans, Policies, Regulations, and Laws. In the past year, California has distinguished itself as a national leader in efforts to address global climate change by enacting several major pieces of legislation, engaging in multi-national and multi-state collaborative efforts, and preparing a wealth of information on the impacts associated with global climate change.

In November 2008, the Governor issued Executive Order S-13-08 directing state agencies to plan for sea level rise and other climate change impacts. There are four key actions in the Executive Order: (1) initiation of a climate change adaptation strategy that will assess the state’s expected climate change impacts where the state is most vulnerable, with recommendations by early 2009; (2) an expert panel on sea level rise will inform state planning and development efforts; (3) interim guidance to state agencies on planning for sea level rise in coastal and floodplain areas for new projects; and (4) initiation of a report on critical existing

and planned infrastructure projects vulnerable to sea level rise. (<http://gov.ca.gov/executive-order/11036/>)

Pursuant to AB 32, the California Air Resources Board (“CARB”) has adopted a number of relevant policies and directives. In December 2008, the Scoping Plan was adopted. The Plan is a central requirement of the statute. In addition, it has adopted a number of protocols for industry and government sectors, including one for local government (<http://www.arb.ca.gov/cc/protocols/localgov/localgov.htm>). (See also, the Local Government Toolkit (<http://www.coolcalifornia.org/local-government>)).

In response to SB 97, the Office of Planning and Research (“OPR”) issued a Technical Advisory on CEQA and Climate Change in June 2008. The Advisory provides an outline of what should be included in a GHG analysis under CEQA (<http://www.opr.ca.gov/ceqa/pdfs/june08-ceqa.pdf>). In January 2009, OPR issued draft amendments to the CEQA Guidelines that address GHGs. Among the amendments are the following:

- Determining the Significance of Impacts from Greenhouse Gas Emissions (Guidelines § 15064.4) ;
- Thresholds of Significance (Guidelines □ 15064.7(c));
- Discussion of Cumulative Impacts (Guidelines □ 15130(a)(1)(B) and Guidelines § 15130(f));
- Tiering and Streamlining the Analysis of Greenhouse Gas Emissions (Guidelines § 15183.5);

Assembly Bill 32, the California Global Warming Solutions Act of 2006 (Health and Safety Code § 38500 et seq.). In September 2006, Governor Arnold Schwarzenegger signed AB 32, the California Global Warming Solutions Act of 2006. In general, AB 32 directs the California Air Resources Board (“CARB”) to do the following:

- On or before June 30, 2007, CARB shall publish a list of discrete early action measures for reducing GHG emissions that can be implemented by January 1, 2010;
- By January 1, 2008, establish the statewide GHG emissions cap for 2020, based on CARB’s calculation of statewide GHG emissions in 1990 (an approximately 25 percent reduction in existing statewide GHG emissions);
- Also by January 1, 2008, adopt mandatory reporting rules for GHG emissions sources that “contribute the most to statewide emissions” (Health & Safety Code § 38530);
- By January 1, 2009, adopt a scoping plan that indicates how GHG emission reductions will be achieved from significant GHG sources through regulations, market mechanisms, and other strategies;

- On or before January 1, 2010, adopt regulations to implement the early action GHG emission reduction measures;
- On or before January 1, 2011, adopt quantifiable, verifiable, and enforceable emission reduction measures by regulation that will achieve the statewide GHG emissions limit by 2020; and
- On January 1, 2012, CARB's GHG emissions regulations become operative.
- On January 1, 2020, achieve 1990 levels of GHG emissions.

In a December 2006 report, CARB estimated that California emitted between 425 and 468 million metric tons of CO₂ in 1990. In December 2007, CARB finalized 1990 emissions at 427 million metric tons of CO₂. In the August 2007 draft report, CARB estimated California emitted approximately 480 million metric tons of CO₂ in 2004. Based on the U.S. Census Bureau California 2007 population of 36,553,215, this would result in about 13 metric tons of CO₂ per capita.

AB 32 takes into account the relative contribution of each source or source category to protect adverse impacts on small businesses and others by requiring CARB to recommend a *de minimis* (minimal importance) threshold of GHG emissions below which emissions reduction requirements would not apply. AB 32 also allows the Governor to adjust the deadlines mentioned above for individual regulations or the entire state to the earliest feasible date in the event of extraordinary circumstances, catastrophic events, or threat of significant economic harm.

CARB "Early Action Measures" (June 30, 2007). On June 21, 2007, CARB approved its early action measures to address climate change, as required by AB 32. The three measures include: (1) a low carbon fuel standard, which will reduce the carbon-intensity in California fuels, thereby reducing total CO₂ emissions; (2) reduction of refrigerant losses from motor vehicle air conditioning system maintenance through the restriction of "do-it-yourself" automotive refrigerants; and (3) increased CH₄ (methane) capture from landfills through the required implementation of state-of-the-art capture technologies.

CARB Mandatory Reporting Regulations (December 2008). Under AB 32, CARB propounded regulations to govern mandatory greenhouse gas emissions reporting for certain sectors of the economy, most dealing with approximately 94 percent of the industrial and commercial stationary sources of emissions. Regulated entities include electricity generating facilities, electricity retail providers, oil refineries, hydrogen plants, cement plants, cogeneration facilities, and industrial sources that emit over 25,000 metric tons of CO₂ from stationary source combustion.

Senate Bill 97 (2007). By July 1, 2009, the Governor's Office of Planning and Research (OPR) is directed to prepare, develop, and transmit to the Resources Agency guidelines for the feasible mitigation of greenhouse gas emissions or the effects of greenhouse gas emissions, as required by the California Environmental Quality Act. The Resources Agency is required to

certify and adopt these guidelines by January 1, 2010. OPR is required to periodically update these guidelines as CARB implements AB 32. In addition, SB 97 states that the failure to include a discussion of greenhouse gas emissions in any CEQA document for a project funded under the Highway Safety, Traffic Reduction, Air Quality and Port Security Bond Act of 2006, or projects funded under the Disaster Preparedness and Flood Prevention Bond Act of 2006 shall not be a cause of action under CEQA. This last provision will be repealed on January 1, 2010.

Executive Order S-01-07 (2007). Executive Order S-01-07 calls for a reduction in the carbon intensity of California's transportation fuels by at least 10 percent by 2020. As noted above, the low-carbon fuel standard ("LCFS") was adopted by CARB as one of its three "early action measures" on June 21, 2007.

Senate Bill 1368 (2006) (Public Utilities Code §§ 8340-41). SB 1368 required the California Public Utilities Commission ("PUC") to establish a "GHG emission performance standard" by February 1, 2007, for all electricity providers under its jurisdiction, including the state's three largest privately-owned utilities. Pub. Res. Code § 8341(d)(1). These utilities provide approximately 30 percent of the state's electric power. After the PUC acted, the CEC adopted a performance standard "consistent with" the PUC performance standard and applied it to local publicly-owned utilities on May 23, 2007 (over one month ahead of its June 30, 2007 deadline). Cal. Pub. Res. Code § 8341(e)(1). However, the California Office of Administrative Law ("OAL") found four alleged flaws in the CEC's rulemaking. The CEC overcame these alleged flaws and adopted reformulating regulations in August 2007.

Senate Bill 107 (2006). Senate Bill 107 ("SB 107") requires investor-owned utilities such as Pacific Gas and Electric, Southern California Edison and San Diego Gas and Electric, to generate 20 percent of their electricity from renewable sources by 2010. Previously, state law required that this target be achieved by 2017.

Senate Bill 375 (September 2008). In September 2008, SB 375 was signed by Governor Schwarzenegger. SB 375 is a comprehensive global warming bill that helps to achieve the goals of AB32. To help establish these targets, the CARB assigned a Regional Targets Advisory Committee to recommend factors to be considered and methodologies for setting greenhouse gas emission reduction targets. SB 375 also provides incentive – relief from certain CEQA requirements for development projects that are consistent with regional plans that achieve the targets. SB 375 requires CARB to develop, in collaboration with the Metropolitan Planning Organization (MPO), passenger vehicle greenhouse gas emissions reduction targets for 2020 and 2035 by September 30, 2010. The MPO is required to include and adopt, in their regional transportation plan, a sustainable community strategy that will meet the region's target provided by CARB.

Western Regional Climate Action Initiative (Arizona, California, New Mexico, Oregon, Utah, Washington)(2007). Acknowledging that the western states already experience a hotter, drier climate, the Governors of the foregoing states have committed to three time-sensitive actions: (1) by August 26, 2007, to set a regional goal to reduce emissions from the states collectively, consistent with state-by state goals; (2) by August 26, 2008, to develop "a design for a regional

market-based multi-sector mechanism, such as a load-based cap and trade program, to achieve the regional GHG reduction goal;” and (3) to participate in a multi-state GHG registry “to enable tracking, management, and crediting for entities that reduce GHG emissions, consistent with state GHG reporting mechanisms and requirements.”

Executive Order S-3-05 (June 1, 2005). Executive Order S-3-05 calls for a reduction in GHG emissions to 2000 levels by 2010; 1990 levels by 2020; and for an 80 percent reduction in GHG emissions below 1990 levels by 2050. It also directs the California Environmental Protection Agency (“CalEPA”) to prepare biennial science reports on the potential impact of continued global warming on certain sectors of the California economy.

California’s Renewable Energy Portfolio Standard Program (2005). In 2002, California established its Renewable Energy Portfolio Standard Program, which originally included a goal of increasing the percentage of renewable energy in the state’s electricity mix to 20 percent by 2017. The state’s most recent 2005 Energy Action Plan raises the renewable energy goal from 20 percent by 2017, to 33 percent by 2020.

Title 24, Part 6, California Code of Regulations (2005). In 2005, California adopted new energy efficiency standards for residential and nonresidential buildings in order to reduce California’s energy consumption. This program has been partially responsible for keeping California’s per capita energy use approximately flat over the past 30 years.

Assembly Bill 1493 (2002) (Health and Safety Code § 43018.5). Assembly Bill 1493 (“AB 1493”) required CARB to develop and adopt the nation’s first GHG emission standards for automobiles. Not only have litigants challenged their legality in federal court, but also USEPA denied California’s request for a Clean Air Act waiver to implement its regulations. As of this writing, California and other states that seek to adopt California’s greenhouse gas emissions standards for automobiles are challenging USEPA’s denial in federal court.

Climate Action Registry (2001). California Senate Bills 1771 and 527 created the structure of the California Climate Action Registry (“Registry”), and former Governor Gray Davis signed the final version of the Registry’s enabling legislation into law on October 13, 2001. These bills establish the Registry as a non-profit entity to help companies and organizations establish GHG emissions baselines against which future GHG emission reduction requirements could be applied. Using any year from 1990 forward as a base year, participants can record their annual GHG emissions with the Registry. In return for this voluntary action, the State of California promises to offer its “best efforts” to ensure that participants receive consideration for their early action if they are subject to any future state, federal, or international emissions regulatory scheme.

South Coast Air Quality Management District Plans, Policies, Regulations and Laws. The South Coast Air Quality Management District (“SCAQMD”) adopted a “Policy on Global Warming and Stratospheric Ozone Depletion” in April 1990. The policy commits the SCAQMD to consider global impacts in rulemaking and in drafting revisions to the Air Quality Management Plan. In March 1992, the SCAQMD Governing Board reaffirmed this policy and adopted amendments to the policy to include the following directives:

- Phase out the use and corresponding emissions of chlorofluorocarbons (CFCs), methyl chloroform (1,1,1-trichloroethane or TCA), carbon tetrachloride, and halons by December 1995;
- Phase out the large quantity use and corresponding emissions of hydrochlorofluorocarbons (HCFCs) by the year 2000;
- Develop recycling regulations for HCFCs (e.g., SCAQMD Rules 1411 and 1415);
- Develop an emissions inventory and control strategy for methyl bromide; and,
- Support the adoption of a California GHG emission reduction goal.

The legislative and regulatory activity detailed above is expected to require significant development and implementation of energy efficient technologies and shifting of energy production to renewable sources.

City of Newport Beach Plans, Policies, Regulations, and Laws.

The City of Newport Beach does not have any plans, policies, regulations, significance thresholds or laws addressing climate change at this time.

Significance Thresholds

California Air Resource Board Significance Thresholds: The CARB is the lead agency for implementing AB32. In October 2008, CARB published a Proposed Scoping Plan, in coordination with the Climate Action Team (CAT), to establish a comprehensive set of actions designed to reduce overall greenhouse gas emissions in California. The measures in the Scoping Plan approved by the Board will be developed over the next two years and be in place by 2020. California is the fifteenth largest emitter of GHGs on the planet, representing about 2 percent of the worldwide emissions. According to climate scientists, California and the rest of the developed world will have to cut emissions by 80 percent from today's levels to stabilize the amount of CO₂ in the atmosphere and prevent the most severe effects of global climate change. This long range goal is reflected in California Executive Order S-3-05 that requires an 80 percent reduction of greenhouse gases from 1990 levels by 2050. Reducing GHG emissions to 1990 levels means cutting approximately 30 percent from business-as-usual emissions levels projected for 2020, or about 15 percent from today's levels. On a per-capita basis, that means reducing our annual emissions of 14 tons of CO₂ equivalent for every man, woman and child in California down to about 10 tons per person by 2020.

Significant progress can be made toward the 2020 goal with existing technologies and improving the efficiency of energy use. Other solutions involve improving our state's infrastructure, transitioning to cleaner and more secure sources of energy, and adopting 21st century land use planning and development practices. Key elements of California's recommendations for reducing its greenhouse gas emissions to 1990 levels by 2020 include:

- Expanding and strengthening existing energy efficiency programs as well as building and appliance standard;
- Achieving a statewide renewable energy mix of 33 percent;
- Developing a California cap-and-trade program that links with other Western Climate Initiative partner programs to create a regional market system;
- Establishing targets for transportation-related greenhouse gas emissions for regions throughout California, and pursuing policies and incentives to achieve those targets;
- Adopting and implementing measures pursuant to existing State laws and policies, including California's clean car standards, goods movement measures, and the Low Carbon Fuel Standard; and
- Creating targeted fees, including a public goods charge on water use, fees on high global warming potential gases, and a fee to fund the administrative costs of the State's long term commitment to AB 32 implementation.

To meet the 1990 target established by AB 32, CARB recommends a de minimis (minimal importance) emission threshold of 0.1 MMT annual (100,000 MT per year) CO₂EQ per transportation source category. Source categories whose total aggregated emissions are below this level are not proposed for emission reduction requirements in the Scoping Plan but may contribute toward the target via other means. As each regulation to implement the Scoping Plan is developed, CARB and other agencies will consider more specific de minimis levels below which the regulatory requirements would not apply. These levels will consider the cost to comply, especially for small businesses, and other factors. Until approved thresholds and guidelines are adopted at the local and regional level, the proposed de minimis threshold of 100,000 MT CO₂EQ per year for transportation sources will be utilized for transportation sources.

In addition to the Proposed Scoping Plan, CARB released the Preliminary Draft Staff Proposal (Staff Proposal) on October 24, 2008 with the objective of developing interim significant thresholds for commercial and residential projects. CARB has already proposed a threshold of 7,000 annual MT for industrial operational sources. However, the Staff Proposal has not yet developed thresholds applicable for residential and commercial sources. Therefore, criteria for determining threshold levels for residential and commercial sources have yet to be defined. Under CARB's Staff Proposal, recommended approaches for setting interim significant thresholds for GHG under the CEQA are underway. CARB staff proposes to define certain performance standards (e.g., for energy efficiency) by referencing or compiling lists from existing local, state or national standards. For some sub-sources of GHG emissions (e.g., construction, transportation, waste), CARB staff has not identified reference standards.

The Staff Proposal's Potential Performance Standards and Measures were released in December 2008. Inside the Staff Proposal, CARB's Potential Performance Standard and Measures included some construction measures. These guideline measures are:

- Provide alternative transportation mode options or incentives for workers to and from worksite on days that construction requires 200 or more workers; and
- Recycle and/or salvage at least 75% of non-hazardous construction and demolition debris by weight (residential) or by weight in volume (commercial); and
- Use recycled materials for at least 20% of construction materials based on cost for building materials, based on volume for roadway, parking lot, sidewalk and curb material. Recycled materials may include salvaged, reused, and recycled content materials.

CARB's Staff Proposal has identified California Energy Commission's (CEC) Tier II Energy Efficiency goals as an appropriate performance standard for energy use. Under State Law, the CEC is required to establish eligibility criteria, conditions for incentives, and rating standards. Thus, the CEC established energy efficiency standards for homes and commercial structures, and requires new buildings to exceed current building standards by meeting Tier Energy Efficiency goals. Currently, CEC's proposed guidelines for the solar energy incentive program recommend a Tier II goal for residential and commercial projects of a 30% reduction in building combined space heating, cooling, and water heating energy compared to the 2008 Title 24 standards.

Existing green building rating systems like LEED, GreenPoint Rated, the California Green Building Code, and others, contain examples of measures that are likely to result in substantial GHG emission reductions from residential and commercial projects. Performance standards that already exist and have been proven to be effective, at the local, state, national or international level, are preferable. For residential and commercial projects, staff has proposed that the GHG emissions of some projects that meet GHG performance standards might under some circumstances still be considered cumulatively considerable and therefore significant. However, criteria threshold for residential and commercial has yet to be developed.

SCAQMD's Significance Thresholds: In December 5, 2008, the South Coast Air Quality Management District (SCAQMD) adopted GHG significance threshold for Stationary Sources, Rules and Plans where the SCAQMD is lead agency. The threshold utilizes a tiered approach, with a screening significance threshold of 10,000 MTCO₂EQ, if the project was not part of a general plan's GHG reduction plan. The SCAQMD has also developed draft thresholds for commercial and residential projects, where it is not the lead. The draft recommends a 3,000 MTCO₂EQ per year screening threshold. The SCAQMD's working group has not set a date for finalizing the recommendations. Although the 3,000 MTCO₂EQ is a preliminary recommendation, it will be used for this analysis as the significance threshold.

Short term Construction Emissions

Temporary impacts will result from construction activities. The primary source of GHG emissions generated by construction activities is from use of diesel-powered construction equipment and other combustion sources (i.e., generators, worker vehicles, materials delivery, etc.). The GHG air pollutants emitted by construction equipment would primarily be carbon dioxide.¹

Typical emission rates for construction equipment were obtained from URBEMISv9.2.4 (Urban Emissions Model Version 9.2.4) which was released By CARB in 2008. URBEMIS is a computer program that can be used to estimate emissions including operation (vehicle and area) sources, as well as construction projects associated with land development projects in California.

While the URBEMISv9.2.4 model does not include other GHG emissions generated by the proposed project (such as CH₄, N₂O, and Fluorinated Gases), CO₂ emissions comprise approximately 99.6 percent of GHG emissions from burning diesel fuel. Consequently, non-CO₂ GHG emissions represent a very small percentage (approximately 0.4 percent) of the total short-term construction GHG emissions and would not represent a significant source of GHG emissions generated by the proposed project during construction, even when combined with CO₂ emissions. Therefore, non-CO₂ construction GHG emissions have not been quantified in this analysis.

The proposed project site is approximately 1.9 acres. The primary source of air quality emissions would primarily from the grading, import and export of soil. The grading associated with the project includes import and export of significant quantities of dirt. According to the City of Newport Beach, approximately 12,000 cubic yards will be moved to the adjacent surrounding areas, while approximately 7,000 cubic yards of hauled dirt will be exported to the east side of the Golf Course near MacArthur Boulevard approximately 3 miles away, and approximately 45,000 cubic yards of soil will be imported from the Orange County Sanitary District in City of Fountain Valley. Due to the limit of access on the project site, haul trucks of 10 cubic yard haul capacity will be utilized, resulting in approximately 87 haul trucks per day.

According to the SCAQMD's CEQA Handbook (Greenhouse Gas CEQA Significance Threshold Stakeholder Working Group #5, August 27, 2008), construction emissions are amortized over the life of the project, defined by SCAQMD as 30 years. Thus, the project's annualized construction emission will be compared to the applicable GHG significance threshold. Table 2 presents the results of the URBEMIS2007 model showing the annual CO₂ construction emissions projected. Worksheets showing the specific data utilized in the calculation are presented in the appendix.

¹ When one gallon of diesel fuel is burned it produces 22.384 pounds of CO₂, 0.000534 pounds of CH₄, and 0.0001928 pounds N₂O. Based on the global warming potential of 21 for CH₄ and 310 for N₂O relative to CO₂, the total pounds of CO₂-equivalent (CO₂EQ) emissions from diesel fuel is 22.455 CO₂EQ/gallon, which is 99.6 percent of the total emissions. Bay Area Air Quality Management District (BAAQS), *Source Inventory of Bay Area Greenhouse Gas Emissions*, November 2006.

Table 2
Construction CO₂ Emissions

Activity	MT CO₂
Mass Grading	0
Haul Trucks (including worker trips)	561
Amortized 30 years (CO₂MT/Year)	19

MT = metric tons.

The construction amortized emissions are projected to be below the SCAQMD screening threshold of 3,000 MTCO₂EQ/year. Consequently, no significant cumulative impacts are anticipated.

References

- California Energy Commission, “Inventory of California Greenhouse Gas Emissions and Sinks: 1990 to 2004,” December 2006.
- Edmund G. Brown, Jr., Attorney General, State of California, “Comments on Draft Environmental Impact Report for Coyote Canyon Specific Plan,” June 19, 2007.
- Michael Hendrix et. al., “Alternative Approaches to Analyze Greenhouse Gas Emissions and Global Climate Change in CEQA Documents,” Association of Environmental Professionals, Revised Draft April 27, 2007.
- State of California, “Climate Change Portal,” <http://www.climatechange.ca.gov/index.html>.
- United Nations Statistics Division, “Environment Indicators: Greenhouse Gas Emissions,” http://unstats.un.org/unsd/ENVIRONMENT/air_greenhouse_emissions.htm.
- United Nations Framework Convention on Climate Change, “National Greenhouse Gas Inventory Data for the Period 1990–2006 and Status of Reporting,” November 17, 2008.
- United Nations Framework Convention on Climate Change, “Sixth compilation and synthesis of initial national communications from Parties not included in Annex I to the Convention”, October 25, 2005.
- U.S. Environmental Protection Agency, “The U.S. Inventory of Greenhouse Gas Emissions and Sinks: Fast Facts,” April 2007.
- U.S. Environmental Protection Agency, “Climate Change,” <http://epa.gov/climatechange/index.html>.
- U.S. Environmental Protection Agency, “AP 42, Fifth Edition Compilation of Air Pollutant Emission Factors, Volume 1: Stationary Point and Area Sources,” <http://www.epa.gov/ttn/chief/ap42/>.
- U.S. Environmental Protection Agency, “Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990 – 2005,” April 15, 2007.
- Lancaster Landfill Draft Environmental Impact Report, Section 4.5.4.
- California Air Resource Board, “Climate Change Proposed Scoping Plan”, October 2008.
- California Air Resource Board, “Staff Proposal-Recommended Approaches for Setting Interim Significance Thresholds for Greenhouse Gases under the CEQA”, December 2008.
- California Air Resource Board, “Preliminary Draft Staff Proposal- Recommended Approaches for Setting Interim Significance Thresholds for Greenhouse Gases under the CEQA”, October 24, 2008.
- SCAQMD, Interim CEQA GHG Significance Threshold for Stationary Sources, Rules and Plans, December 5, 2008
- State of California Department of Water Resources (DWR), Climate Change Adaptation Strategies for California’s Water, October 2008

APPENDIX

(Urbemis Modeling)

4/19/2011 06:36:06 PM

Urbemis 2007 Version 9.2.4

Combined Annual Emissions Reports (Tons/Year)

File Name: C:\My Dropbox\L&B WORK_2\BigCanyon AQ_NZ NB2\big canyon nb 022811 mitg 50'.urb924

Project Name: Big Canyon Lot

Project Location: Orange County

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

CONSTRUCTION EMISSION ESTIMATES

	<u>CO2</u>
2011 TOTALS (tons/year unmitigated)	639.24
2011 TOTALS (tons/year mitigated)	639.24
Percent Reduction	0.00

Construction Unmitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

	<u>CO2</u>
2011	639.24
Mass Grading 02/01/2011-10/07/2011	618.69
Mass Grading Dust	0.00
Mass Grading Off Road Diesel	383.79
Mass Grading On Road Diesel	218.19
Mass Grading Worker Trips	16.70
Building 06/01/2011-06/30/2011	20.55
Building Off Road Diesel	20.55
Building Vendor Trips	0.00
Building Worker Trips	0.00
Coating 08/02/2011-08/15/2011	0.00
Architectural Coating	0.00
Coating Worker Trips	0.00

Phase Assumptions

Phase: Mass Grading 2/1/2011 - 10/7/2011 - Default Mass Site Grading/Excavation Description

Total Acres Disturbed: 1.9

Maximum Daily Acreage Disturbed: 1

Fugitive Dust Level of Detail: Low

Onsite Cut/Fill: 380 cubic yards/day; Offsite Cut/Fill: 0 cubic yards/day

On Road Truck Travel (VMT): 575.2

Off-Road Equipment:

- 1 Excavators (168 hp) operating at a 0.57 load factor for 8 hours per day
- 2 Other Material Handling Equipment (191 hp) operating at a 0.59 load factor for 8 hours per day
- 2 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 6 hours per day
- 1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase: Building Construction 6/1/2011 - 6/30/2011 - Default Building Construction Description

Off-Road Equipment:

- 1 Cranes (399 hp) operating at a 0.43 load factor for 8 hours per day
- 2 Forklifts (145 hp) operating at a 0.3 load factor for 8 hours per day
- 1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day
- 1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase: Architectural Coating 8/2/2011 - 8/15/2011 - Default Architectural Coating Description








- Rule: Residential Interior Coatings begins 1/1/2005 ends 6/30/2008 specifies a VOC of 100
- Rule: Residential Interior Coatings begins 7/1/2008 ends 12/31/2040 specifies a VOC of 50
- Rule: Residential Exterior Coatings begins 1/1/2005 ends 6/30/2008 specifies a VOC of 250
- Rule: Residential Exterior Coatings begins 7/1/2008 ends 12/31/2040 specifies a VOC of 100
- Rule: Nonresidential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250
- Rule: Nonresidential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

APPENDIX K

Figure S5: Runway Protection Zone


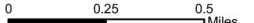
CITY of NEWPORT BEACH
 GENERAL PLAN
 Figure S5
**JWA CLEAR ZONE/RUNWAY
 PROTECTION ZONES AND
 ACCIDENT POTENTIAL ZONES**

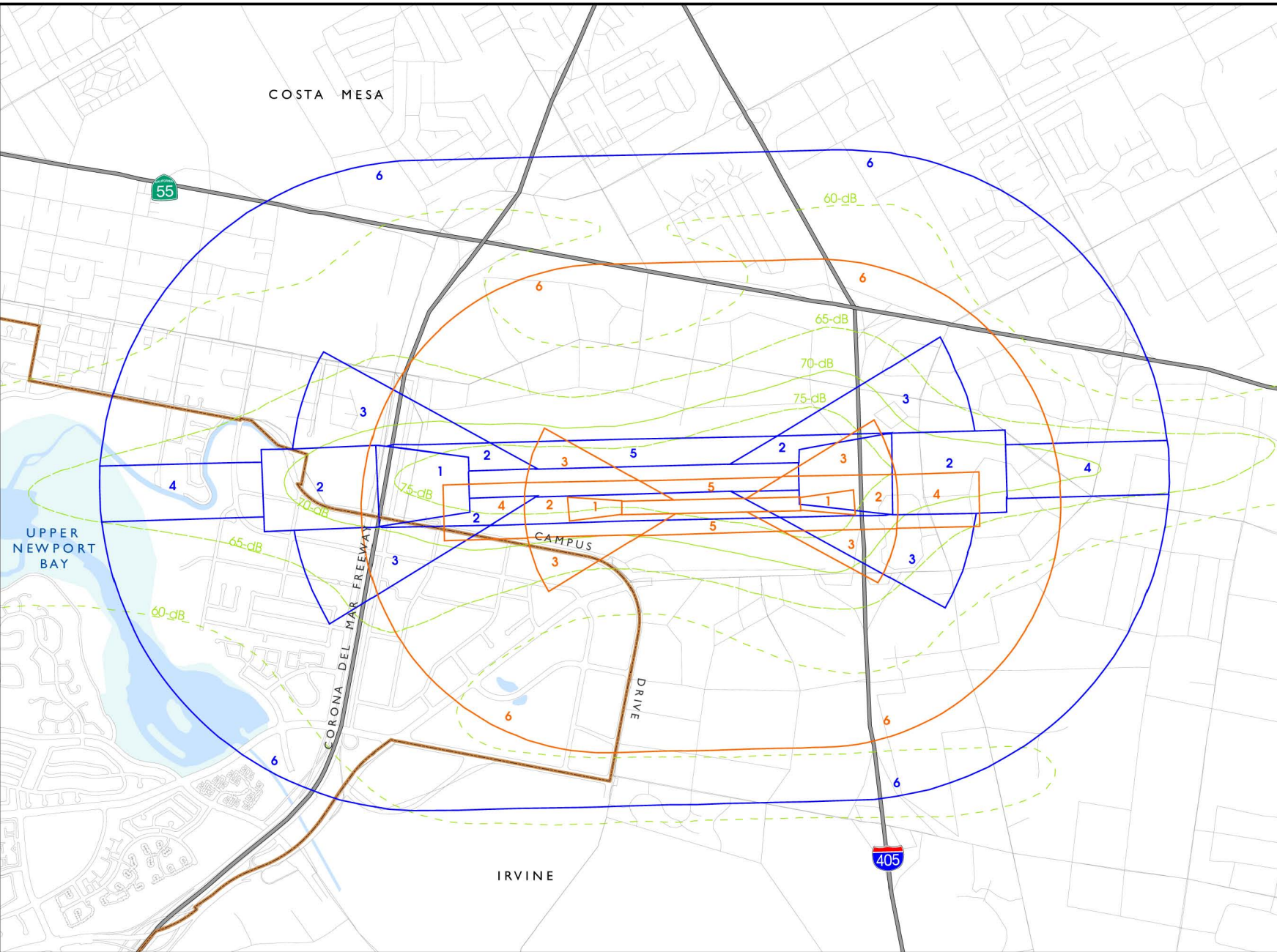
Legend

-  Safety Compatibility Zones for Runway 1L and 19R (a medium general aviation runway as described in the California Airport Land Use Planning handbook, January 2002)
-  Safety Compatibility Zones for Runway 1R and 19L (a short general aviation runway as described in the California Airport Land Use Planning handbook, January 2002)
-  AELUP Noise Contours
-  Water Body
-  City Boundary
-  Highway
-  Right of Way

Safety Compatibility Zones

1. Runway Protection Zone
2. Inner Approach/Departure Zone
3. Inner Turning Zone
4. Outer Approach/Departure Zone
5. Sideline Zone
6. Traffic Pattern Zone



 Source: Airport Land Use Commission for Orange County, 2006
 PROJECT NUMBER: 10579-01
 Date: 6/20/06



N:\GIS\Projects\NewportBeach_10579_Airport_safety_zones.mxd

APPENDIX L

Figure S3: Flood Hazards

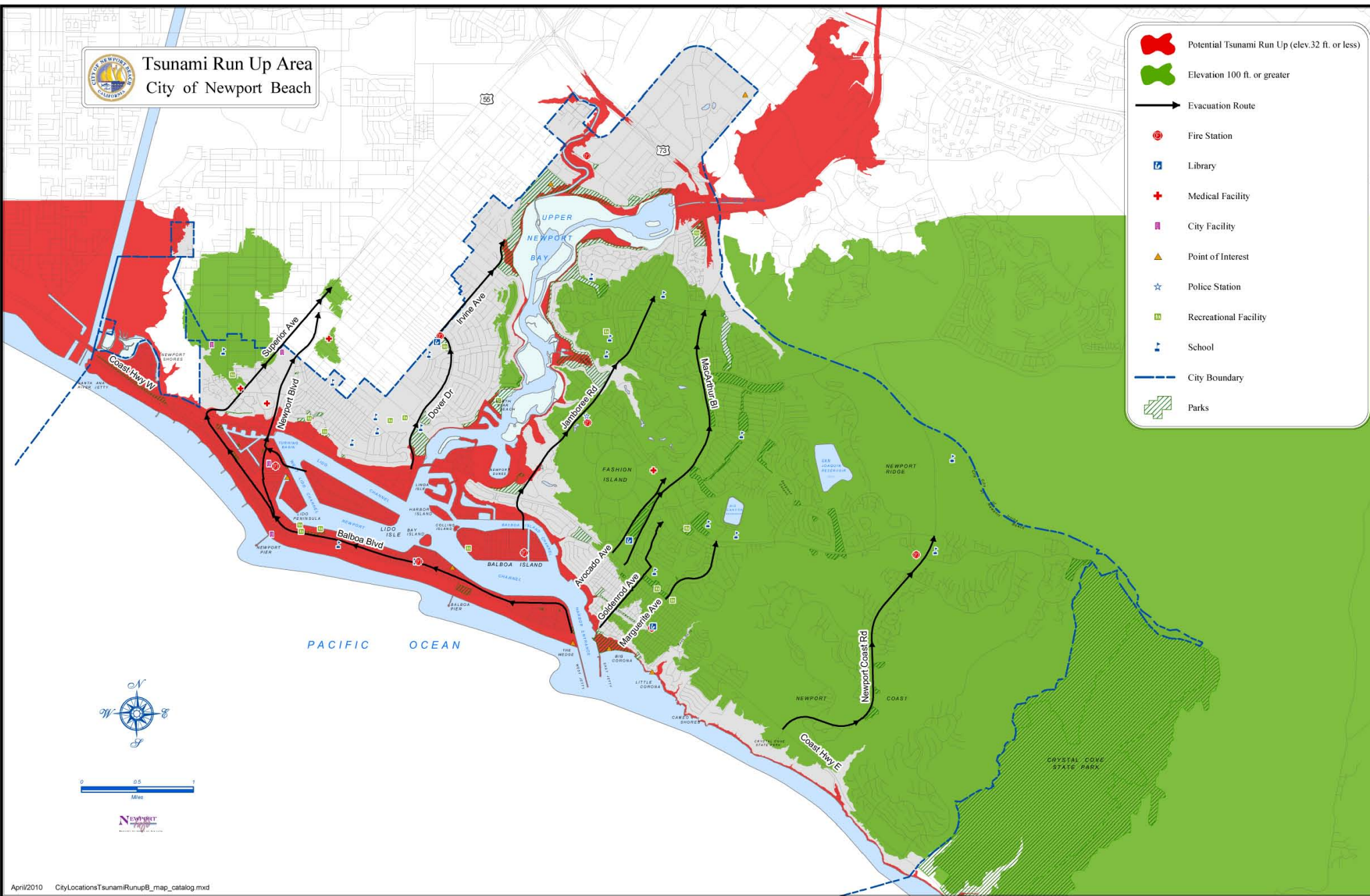
APPENDIX M

Tsunami Run-Up Areas Map



Tsunami Run Up Area City of Newport Beach

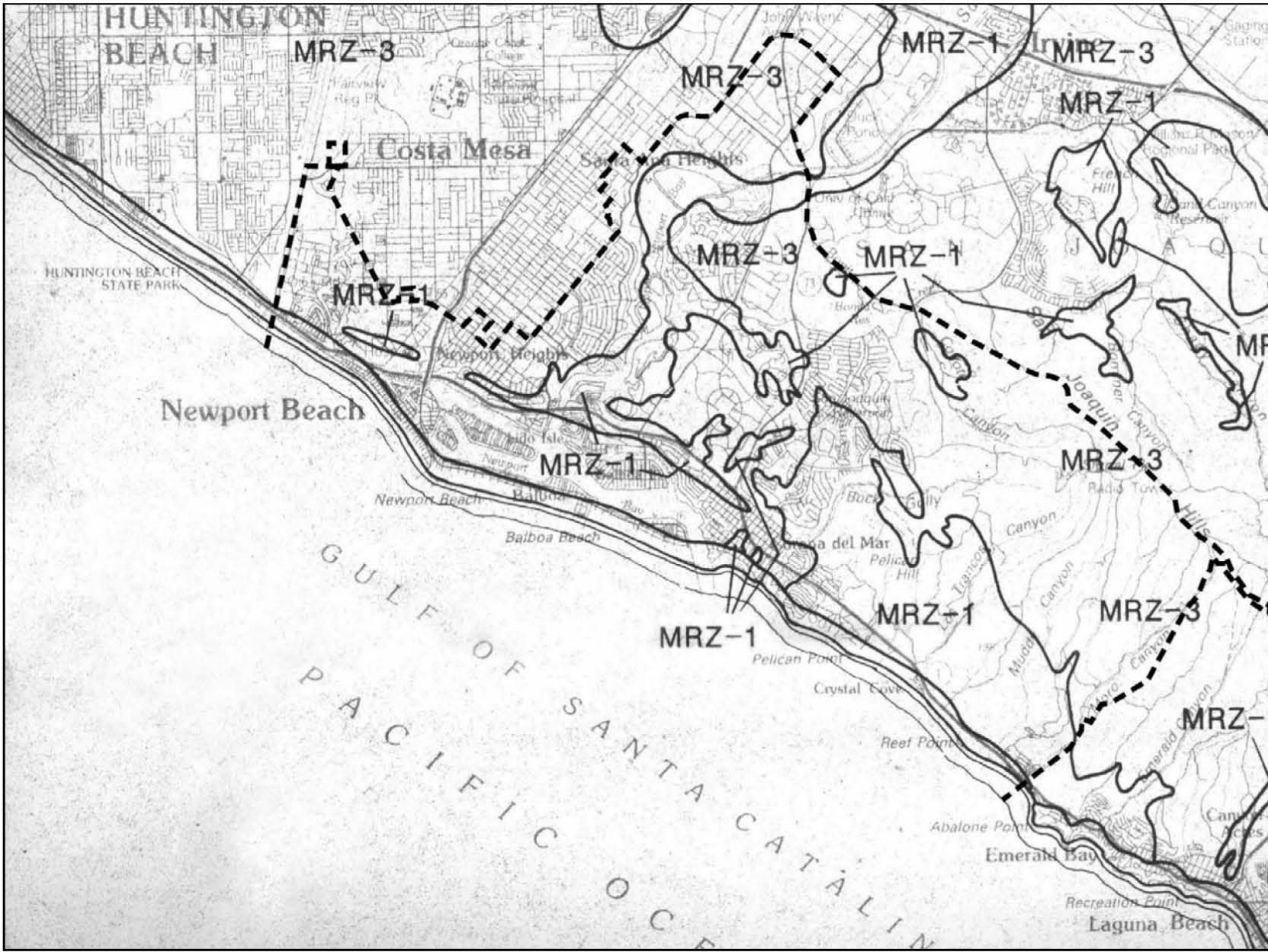
- Potential Tsunami Run Up (elev. 32 ft. or less)
- Elevation 100 ft. or greater
- Evacuation Route
- Fire Station
- Library
- Medical Facility
- City Facility
- Point of Interest
- Police Station
- Recreational Facility
- School
- City Boundary
- Parks



APPENDIX N

Figure 4.5-4 Mineral Resource Zones

CITY OF NEWPORT BEACH
 GENERAL PLAN UPDATE EIR
 Figure 4.5-4
 MINERAL RESOURCE
 ZONES



Legend

--- City Boundary (approximate)

Mineral Resource Zones

MRZ-1	Area with No Significant Mineral Deposits
MRZ-2	Area with Significant Mineral Deposits
MRZ-3	Areas Containing Mineral Deposits of Undetermined Significance
MRZ-4	Areas with Inadequate Information



0 0.5 1
 Not to Scale

Source: Department of Conservation Division of Mines and Geology, DMG Open-File Report 94-15, 1994.

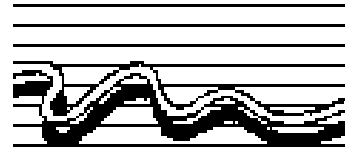
Project No. 10579-03



APPENDIX O

Mestre Greve Associates Noise Analysis

MEMORANDUM



Mestre Greve Associates

A Division of Landrum and Brown Inc.

Date : May 06, 2011

To : Makana Nova, City of Newport Beach

From : Tanya Moon
Mestre Greve Associates, Division of Landrum-Brown Inc.

**Subject: Noise Assessment for Grading Activities on the Single Big Canyon Lot.
Report # 515901 (II).**

Dear Ms. Nova,

This memo presents the noise and air quality emission assessment for the grading activities of a single lot in Big Canyon. A single custom home will be built on this lot. Standard grading equipment noise levels will be used to project the noise levels that will occur at nearby receptors. These levels will be compared to ambient noise levels and the criteria contained in the City's Noise Ordinance to determine potential impacts.

Noise will be analyzed based on grading activities of this single lot, and any mitigation measures necessary will be specified.

1.0 NOISE ANALYSIS

Community noise levels are measured in terms of the "A-weighted decibel," abbreviated dBA. DBA is the standard unit of measurement of the loudness of sound adjusted for the human ear. Several rating scales have been developed for measurement of community noise. Two of the predominate noise scales are the: Equivalent Noise Level (LEQ) and the Community Noise Equivalent Level (CNEL). LEQ can be measured for any time period, but is typically measured for 1 hour. It is the energy sum of all the events and background noise levels that occur during that time period. CNEL, or Community Noise Equivalent Level, scale represents a time weighted 24-hour average noise level based on the A-weighted decibel. The CNEL penalizes the evening time period (7 p.m. to 10 p.m.) noises by 5 dBA, and 10 dBA for the nighttime (10 p.m. to 7 a.m.) These time periods and penalties were selected to reflect people's increased sensitivity to noise during these time periods.

L(%) is another way of expressing the noise level exceeded for a percentage of time in a given measurement period. For example, 5 minutes is 25% of 20 minutes, thus L(25) is the noise level that is equal to or exceeded for five minutes in a twenty minute measurement period. It is the L(%) that is used for most Noise Ordinance standards. For example, the City of Culver

uses an ordinance standard of 55 dBA for 30 minutes per hour or an L(50) level of 55 dBA. In other words, the Noise Ordinance states that no noise level should exceed 55 dBA for more than fifty percent of a given period. Additionally, Lmax represents the maximum instantaneous level, while Lmin represents the minimum level. These L% noise levels can be compared to noise ordinance criteria.

Noise Ordinance

The Newport Beach Noise Ordinance (Chapter 10.26 Community Noise Control) establishes exterior and interior noise standards for noise generated on private property affecting a neighbor. Table 1 presents the City of Newport Beach's Noise Ordinance standards. The noise ordinance is designed to control unnecessary, excessive and annoying sounds from sources such as parking lots and mechanical equipment at the residential property line. The noise ordinance requirements cannot be applied to mobile noise sources such as heavy trucks when traveling on public roadways. Federal and State laws preempt control of the mobile noise sources on public roads. However, the requirements can be applied to vehicles traveling on public property.

The City of Newport Beach exterior and interior noise criteria are given in terms of 15 minute Leq and Lmax noise levels. These noise levels are not to be exceeded at a property from noise generated at a neighbor property. Noise levels are to be measured with A-weighting and a slow time response. Greater noise levels are permitted during the day (7 a.m. to 10 p.m.) as compared to the nighttime period (10 p.m. to 7 a.m.).

Table 1
City Of Newport Beach Noise Ordinance Standards

Zone	Noise Metric	Noise Level Not To Be Exceeded	
		7 a.m. to 10 p.m. (daytime)	10 p.m. to 7 a.m. (nighttime)
EXTERIOR NOISE STANDARDS			
I Residential	Leq (15 min)	55 dBA	50 dBA
	Lmax	75 dBA	70 dBA
II Commercial	Leq (15 min)	65 dBA	60 dBA
	Lmax	85 dBA	80 dBA
III Mixed Use Residential*	Leq (15 min)	60 dBA	50 dBA
	Lmax	80 dBA	70 dBA
IV Industrial/Manufacturing	Leq (15 min)	70 dBA	70 dBA
	Lmax	90 dBA	90 dBA
INTERIOR NOISE STANDARDS			
I Residential	Leq (15 min)	45 dBA	40 dBA
	Lmax	65 dBA	60 dBA
III Mixed Use Residential*	Leq (15 min)	45 dBA	45 dBA
	Lmax	65 dBA	65 dBA

* Residential within 100' of a commercial property where noise is from said commercial property

Section 10.26.035.D of the Newport Beach Municipal Code exempts construction equipment from the provisions of the Noise Ordinance and requires them to comply with Section 10.28 of the Code. Section 10.28.040 of the Code restricts hours of construction to between the hours of 7:00 a.m. and 6:30 p.m. Monday through Friday and 8:00 a.m. and 6:00 p.m. on Saturday. Noise generating construction activities are not allowed on Sundays or Holidays. The project does not propose any construction activities outside of these hours, and therefore, will not result in a significant noise impact.

Existing Noise Measurements

Noise measurements in the vicinity of the project site are needed to establish the existing noise environment. Short-term noise measurements were conducted at two sites: Site 1 was at the nearest residences on Rue Biarritz at the end of the cul-de-sac, and Site 2 was on-site at the southwest property line adjacent to the golf course. The two measurement sites are illustrated in Exhibit 1.

The measurements were performed on Wednesday, July 21, 2010, between the hours of 10:30 a.m. and 12:00 p.m. The site locations are described in Table 2.

Table 2
Noise Measurement Locations

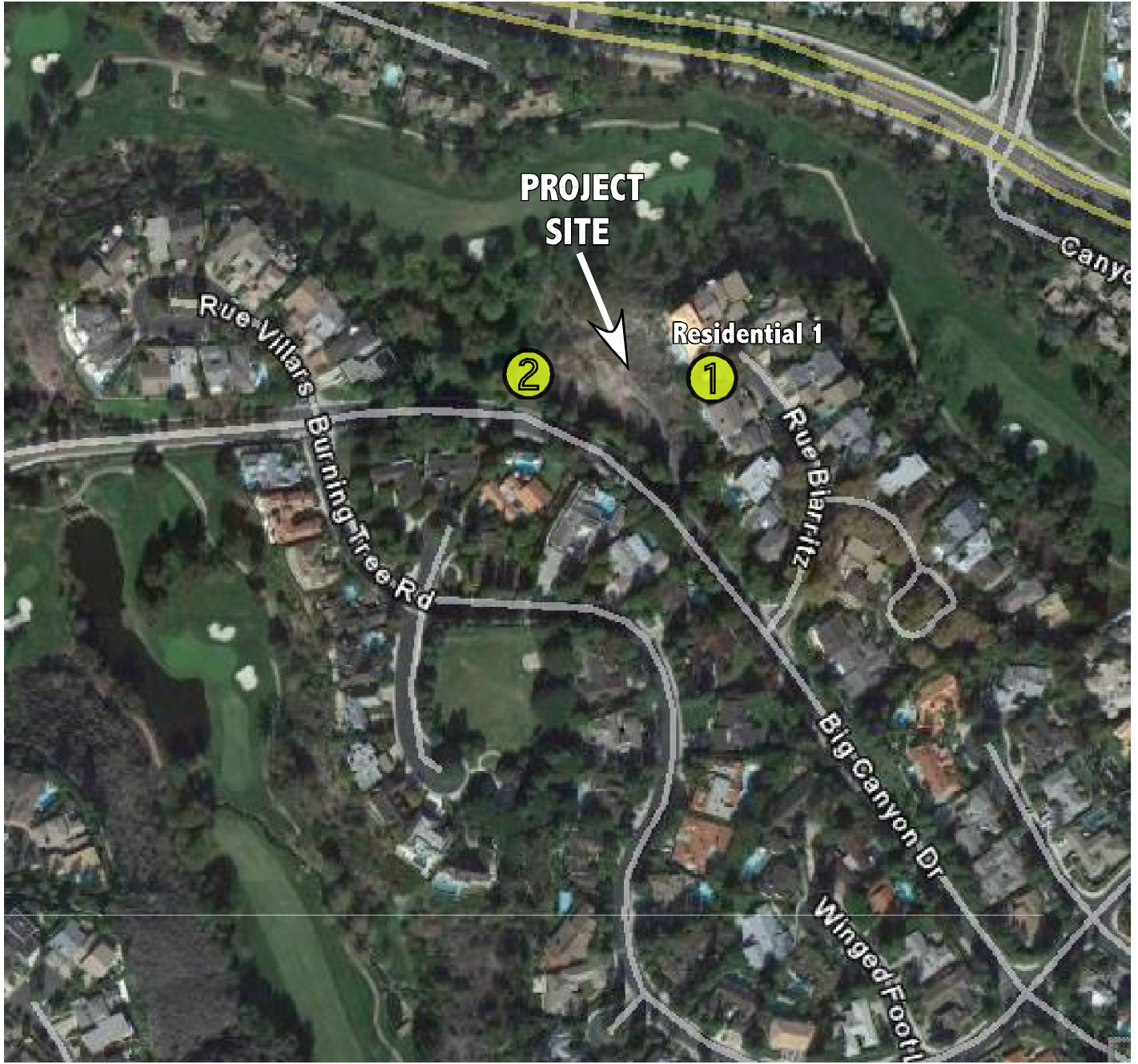
Site	Location
1	Single-family home on Rue Biarritz the cul-de-sac to the north
2	On-site at southwest property line near golf course and Big Canyon Road

Measurements at the sites were performed using a Brüel & Kjær Model 2236 automated digital noise data acquisition system and sound meter mounted on a tripod. A large windscreen covered the microphone during the measurements to dampen-out the effect of unwanted wind-generated noise. For each measurement site, two 10-minute periods of data were collected. Before and after the measurements were taken, a Brüel & Kjær calibrator with calibration traceable to the National Institute of Standards and Technology was used to calibrate the sound meter. Table 3 presents the results of the measurements.

Table 3
Existing Noise Measurement Results (dBA)

Site	Time	Leq	Lmax	Lmin	L1.7	L8.3	L25	L50	L90	L99
1	10:35 am	49.5	61.7	40.9	58.5	52.5	48.5	45.5	42.5	41.5
	10:47 am	50.3	64.3	40.2	58.5	54.5	49.0	45.5	42.0	41.0
2	11:02 am	49.4	61.4	36.6	57.0	55.0	48.0	44.0	40.0	38.0
	11:14 am	46.9	53.8	37.0	50.5	49.5	48.0	46.0	42.5	38.5

Site 1 is located at the adjacent residences on Rue Biarritz at the end of the cul-de-sac to the north over looking the project site. Traffic on Big Canyon Road and distant Jamboree Road



1 Noise measurement receptor



was the main source at this location, while occasional vehicles in the cul-de-sac were secondary. Other sources contributing to the noise environment were air planes overhead, gardeners and yard maintenance trucks, people, and trash trucks. The Lmax was 64.3 dBA, and was caused by a vehicle in the cul-de-sac. The Leq at this site measured 50.3 dBA.

Site 2 is located on-site adjacent to the property line between the project site and the existing golf course. The noise monitor was located near Big Canyon Road. Big Canyon Road was approximately 3 to 5 feet higher than the noise monitor. Infrequent traffic on Big Canyon Road and steady but distant gardener's trimming equipment on the golf course were the dominant sources at this location, while distant traffic on Jamboree Road and golf carts were secondary. Occasionally, airplane overhead and other urban noise also contributed to the ambient noise. The Lmax was 61.4 dBA, and was caused by a car pass-by on Big Canyon Road. The Leq at this site measured 49.4 dBA and was driven mainly by a gardener's trimming equipment on the golf course.

Construction Noise

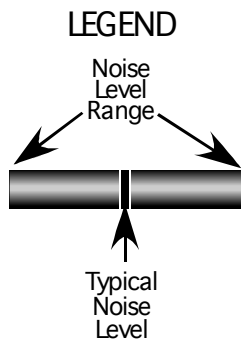
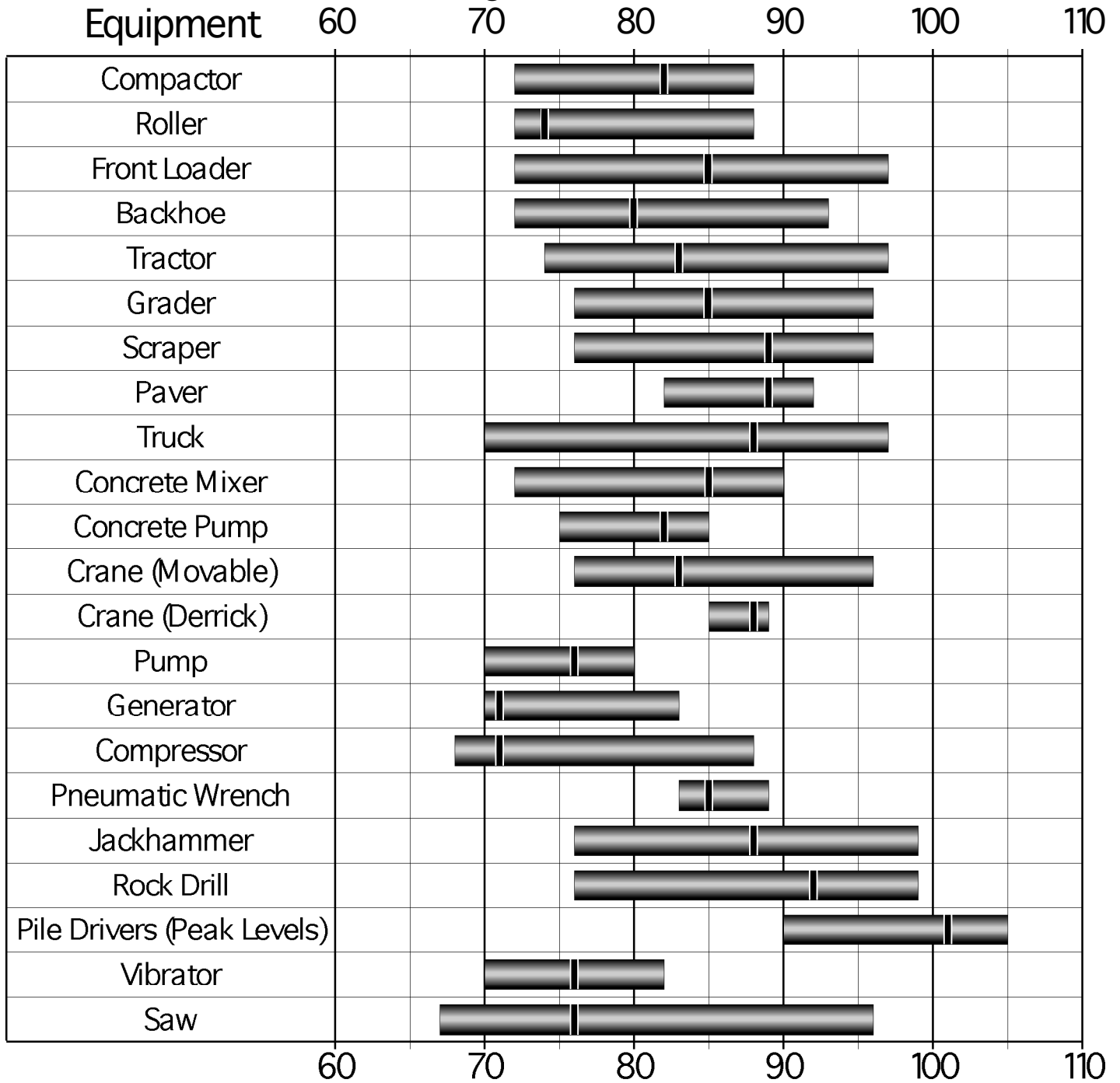
Construction noise represents a short term impact on ambient noise levels. Noise generated by construction equipment, including trucks, graders, bulldozers, excavator and loaders can reach high levels. Construction of the project includes grading, as well as importing and exporting of dirt.

Construction noise, generally, represents a short-term impact on ambient noise levels. Noise generated by construction equipment and construction activities can reach high levels. Construction equipment noise comes under the control of the Environmental Protection Agency's Noise Control Program (Part 204 of Title 40, Code of Federal Regulations). Examples of construction noise at 50 feet are presented in Exhibit 2. Note that at twice the distance (i.e. 100 feet) the noise levels will be 6 dB lower than those shown in Exhibit 2. At four times the distance (i.e. 200 feet), the noise levels will be 12 dB lower. Note that noise measurements made by Mestre Greve Associates for other projects show that the noise levels generated by commonly used grading equipment (i.e. loaders, graders and trucks) generate noise levels that typically do not exceed the middle of the range shown in Exhibit 2.

The nearest residential area is located along Rue Biarritz cul-de-sac to the north over looking the project site. Construction activities may occur approximately 50 feet from this home. At this distance, construction noise levels could be about 90 dBA. The average noise levels from construction equipment are typically 12 dBA lower, and could be in the range of 58 and 78 dBA at the nearest residential area.

The peak noise levels generated by on-site construction activities could be in excess of the daytime 75 dBA Lmax noise Ordinance Standard. However, Section 10.26.035.D of the Newport Beach Municipal Code exempts construction equipment from the provisions of the Noise Ordinance and requires them to comply with Section 10.28 of the Code. Section 10.28.040 of the Code restricts hours of construction to between the hours of 7:00 a.m. and

A-Weighted Sound Level (dBA) At 50 Feet



Sources: "Handbook of Noise Control,"
by Cyril Harris, 1979
"Transit Noise and Vibration Impact Assessment"
by Federal Transit Administration, 1995

Exhibit 2

Construction Equipment Noise Levels

6:30 p.m. Monday through Friday and 8:00 a.m. and 6:00 p.m. on Saturday. Noise generating construction activities are not allowed on Sundays or Holidays. The project does not propose any construction activities outside of these hours, and therefore, will not result in a significant noise impact.

The grading associated with the project includes import and export of significant quantities of dirt. According to the City of Newport Beach, approximately 12,000 cubic yards will be moved to the adjacent surrounding areas, while approximately 7,000 cubic yards of hauled dirt will be exported to the east side of the Golf Course near MacArthur Boulevard approximately 3 miles away, and approximately 45,000 cubic yards of soil will be imported from the Orange County Sanitary District in City of Fountain Valley. Haul trucks associated mainly with the importing of 45,000 cubic yards of soil will generate noise along public roadways. The trucks are expected to enter and exit the site via Big Canyon Road, and thus, travel on Big Canyon Road, San Joaquin Hill Road and other adjacent roadways. The City's information indicated that the importing of soil is anticipated to take about 32 days. Due to the limit of access on the project site, haul trucks of 10 cubic yard haul capacity will be utilized, resulting in approximately 141 haul trucks per day. This would add approximately 141 daily trucks or 282 truck trips per day to the adjacent roadways. Given a maximum of 282 truck trips a day, the CNEL noise levels due to the haul trucks via Big Canyon Road would be approximately 61 dBA at 40 feet from the centerline. This is the closest distance to the nearest typical home. This noise level is below the City's 65 CNEL noise standard, and would not be considered to be significant. Once the trucks are on MacArthur Boulevard and other roadways, there is enough existing traffic on these roadways so that there will not be any significant impact.

APPENDIX P


Figures N2 and N5: Existing Noise Contours and
Future Noise Contours

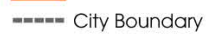
CITY of NEWPORT BEACH
 GENERAL PLAN
 Figure N2
**EXISTING
 NOISE CONTOURS**

Roadway Noise Contours

-  70 CNEL
-  65 CNEL
-  60 CNEL

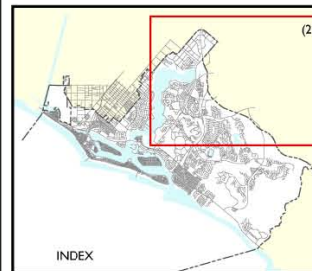
AELUP Noise Contours



-  70 CNEL
-  65 CNEL
-  60 CNEL

 City Boundary

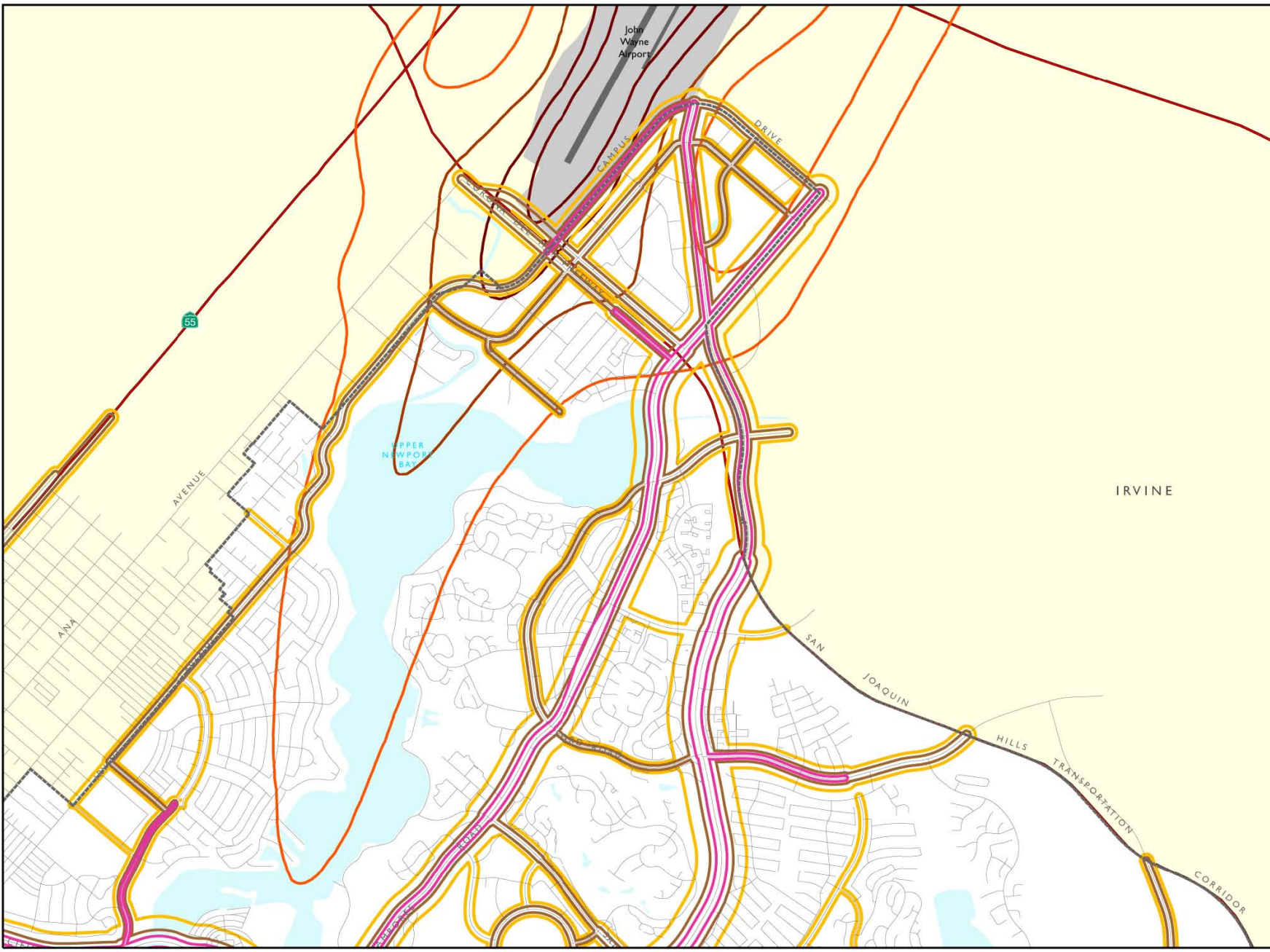
 John Wayne Airport

The noise contours represent the maximum possible traffic noise levels at locations within them (i.e., they do not account for building placement or traffic speeds, nor include the attenuating effects of walls, structures, and terrain features that might intervene between the roads and any location of interest).




 0  Miles

Source: City of Newport Beach, Meste Greve Associates and EP Associates
 PROJECT NUMBER: 10579-01
 Date: 4/20/06




CITY of NEWPORT BEACH
 GENERAL PLAN
 Figure N5
**FUTURE
 NOISE CONTOURS**

Roadway Noise Contours

-  70 CNEL
-  65 CNEL
-  60 CNEL

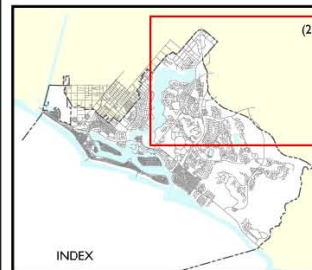
AELUP Noise Contours



-  70 CNEL
-  65 CNEL
-  60 CNEL

 City Boundary

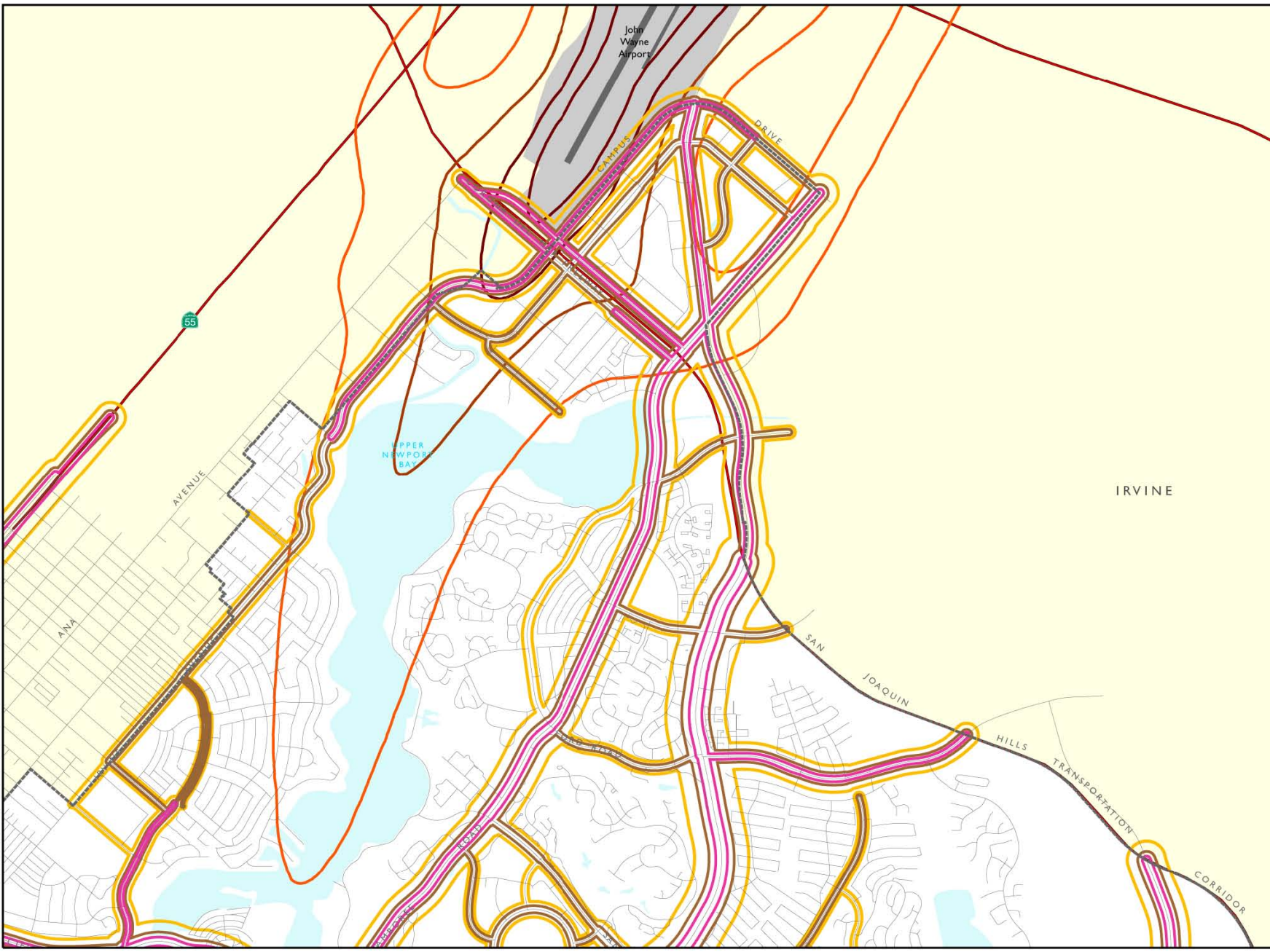
 John Wayne Airport

The noise contours represent the maximum possible traffic noise levels at locations within them (i.e., they do not account for building placement or traffic speeds, nor include the attenuating effects of walls, structures, and terrain features that might intervene between the roads and any location of interest).




 0  Miles

Source: City of Newport Beach, Mestel Greve Associates and EP Associates
 PROJECT NUMBER: 10579-01
 Date: 4/20/06



N:\GISProjects\NewportBeach_10579\Noise1.mxd

APPENDIX Q

Cumulative Projects List

Cumulative Project List

The following projects were considered along with the proposed project to determine potential cumulative project impacts. As noted in the Environmental Analysis, reference to cumulative impacts refers to the listed projects below.

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.

Project	Proposed Land Uses	Location	Determination/Status	Discretionary Actions
North Newport Center Planned Community	The North Newport Center PC Development Plan serves as the controlling zoning ordinance for the sub-areas identified in the Planned Community Development Plan and is authorized and intended to implement the provisions of the Newport Beach General Plan.	The North Newport Center Planned Community District is comprised of seven sub-areas that include Fashion Island and Block 600 and portions of Block 100, Block 400, Block 500, Block 800, and San Joaquin Plaza.	As of December 31, 2010, the remaining entitlement consists of 126,933 square feet of retail in Fashion Island; 430 dwelling units in Block 500; and 434,736 square feet of office in Block 600.	<ul style="list-style-type: none"> • Addendum to the General Plan Program EIR
919 Bayside Dr Project	Development of 17 individual residential lots; 1 common recreational lot with possible pool and trellis structure; 2 landscape/open space lots; waterfront and dock lots.	919 Bayside Dr; southwest of Bayside Dr and Jamboree Rd	IS/MND and project approved in 2008. The CDP has been approved by the Coastal Commission. Project has not been constructed.	<ul style="list-style-type: none"> • IS/MND • Code Amendment • Use Permit • TTM • CDP (CCC)
AERIE Project	Residential development including the following: (a) the demolition of the existing residential structures on the 1.4-acre site; (b) the development of 8 residential condominium units; and (c) the replacement, reconfiguration, and expansion of the existing gangway platform, pier walkway, and dock facilities on the site.	201–207 Carnation Ave and 101 Bayside Pl; southwest of Bayside Dr between Bayside Pl and Carnation Ave, Corona del Mar	Final EIR was certified and project approved by the City on July 14, 2009. Project currently in litigation. The CDP has been approved by the Coastal Commission. Project has not been constructed.	<ul style="list-style-type: none"> • EIR • GP Amendment • Coastal Land Use Plan (CLUP) Amendment • Zone Change • Tract Map • Modification Permit • CDP (CCC)

Project	Proposed Land Uses	Location	Determination/Status	Discretionary Actions
Coast Community College District-Newport Beach Learning Center Project	3-story, 67,000-sf learning facility	505–1533 Monrovia Ave; west of Monrovia Ave and north of the terminus of 15 th St	IS/MND and project approved August 2009. Pursuant to the City's Traffic Phasing Ordinance, a traffic study is required. The traffic study and parcel map were approved by the City on April 22, 2010. The project is currently under construction.	<ul style="list-style-type: none"> • IS/MND • Parcel Map • Traffic Study
Hoag Memorial Hospital Presbyterian Master Plan Update Project	Reallocation of up to 225,000 sf of previously approved (but not constructed) square footage from the Lower Campus to the Upper Campus.	1 Hoag Dr; northwest of West Coast Hwy and Newport Blvd	Final EIR certified and project approved on May 13, 2008. No new development has been constructed.	<ul style="list-style-type: none"> • EIR • GP Amendment • Planned Community Development Plan (PC) Text Amendment • Development Agreement Amendment • CDP (CCC)
Hyatt Regency Newport Beach Expansion Project	Improvements to the existing hotel which include the addition of 88 new timeshare units; a 24,387-sf, 800-seat ballroom/meeting building; a 10,072-sf spa and new pool; and a 2-level parking garage.	1107 Jamboree Rd; northwest of Back Bay Dr and Jamboree Rd	Final EIR certified and project approved on February 24, 2009. The project has not obtained a CDP; therefore, the City's entitlements cannot be implemented.	<ul style="list-style-type: none"> • EIR • Use Permit • Parcel Map • Modification Permit • Development Agreement • CDP (CCC)
LDS Rectory Project	Construction of a rectory with a 2,316-sf project footprint which consists of 1,825 sf of living space and a 491-sf, attached 2-car garage; fuel modification buffer extending 40 ft to the nearest property line; approximately 6,066-sf site.	2300 Bonita Canyon Dr; northeast of Bonita Canyon Dr at terminus with Prairie Rd	IS/MND and project approved on November 19, 2009. No activity.	<ul style="list-style-type: none"> • IS/MND • Use Permit • Site Plan Review
Newport Beach City Hall and Park Development Project	Relocation of City Hall (except for the Fire Department). Construction and operation of the following: (a) an approximate 98,000-sf City Hall building, Community Room, and Council Chambers; (b) a 450-space parking structure; (c) an approximate 17,000-sf expansion of the Newport Beach Central Library; and (d) construction of a public park.	1100 Avocado Ave; between Avocado Ave and MacArthur Blvd	Final EIR certified and project approved on November 24, 2009. Project construction began in May 2010. Construction is proposed to be completed in late 2012/early 2013.	<ul style="list-style-type: none"> • EIR • Design plans • Exemption from Zoning Code and PC 27

Project	Proposed Land Uses	Location	Determination/Status	Discretionary Actions
Santa Barbara Condominiums Project	79 condominium units totaling approximately 205,232 net sf; approximately 97,231 gross sf of subterranean parking structures for a total of 201 parking spaces on site; approximately 79,140 sf of open space and approximately 21,300 sf of recreational area.	Santa Barbara Drive west of Fashion Island	IS/MND and project approved in January 2006. The CDP has been approved by the Coastal Commission. No activity.	<ul style="list-style-type: none"> • IS/MND • GP Amendment • CLUP Amendment • Code Amendment • Parcel Map • TTM • Modification Permit • CDP (CCC)
Beauchamp Project	5 unit residential development	2000-2016 East Balboa Blvd ; east of East Balboa Street and L Street	Draft IS/MND was released for public review on January 12, 2010. Planning Commission recommended approval on March 4, 2010. The IS/MND and the project were approved by the City Council on May 25, 2010. The CDP has been approved by the Coastal Commission. Project has not been constructed.	<ul style="list-style-type: none"> • GP Amendment • CLUP Amendment • CDP (CCC)
Newport Business Plaza Project	Demolition of 2 existing connected buildings to construct a new 46,044 gross square foot business plaza.	4699 Jamboree Road and 5190 Campus Drive	The City Council approved the project on January 25, 2011.	<ul style="list-style-type: none"> • GP Amendment • PC text amendment • Tentative Parcel Map
Newport Marina – ETCO Development	A mixed use development consisting of 27 residential units and approximately 36,000 square feet of retail and office uses	2300 Newport Boulevard	FEIR certified in February 2006. Tentative Tract Map extended in October 2010.	<ul style="list-style-type: none"> • Site Plan Review • Use Permit • Tentative Tract Map
Marina Park Project	Development includes a public park and beach with recreational facilities; restrooms; a new Girl Scout House; a public short-term visiting vessel marina and sailing center; and a new community center with classrooms, and ancillary office space.	1700 Balboa Blvd; west of 15 th St and east of 19 th St	Draft EIR was released for public review from February 27, 2009, through April 13, 2009. Due to changes in the project, a Draft Recirculated EIR was prepared and released for public review on January 25, 2010. The Final EIR was certified and the project approved by the City on May 11, 2010. The CDP application is under review by the Coastal Commission. Construction is proposed to start mid-year 2012 and be completed in 2014.	<ul style="list-style-type: none"> • EIR • General Construction Activity Storm Water (NPDES) Permit (RWQCB) • CDP (CCC) • Section 401 Certification (RWQCB) • Section 1602 Streambed Alteration Agreement (CDFG)

Project	Proposed Land Uses	Location	Determination/Status	Discretionary Actions
Mariner's Medical Arts Project	A 12,763 sq. ft. addition to an existing 17,500 sq. ft. medical office complex. The existing medical office complex was designed by Master architect Richard Neutra and is considered to be significant historical resource.	1901 Westcliff Dr	City staff is determining the scope of the project. Environmental documentation has not been completed.	<ul style="list-style-type: none"> Undetermined
Megonigal Residence Project	3,566 sf, single-family residence.	2333 Pacific Dr, Corona del Mar	Final EIR and project approved on January 12, 2010. The CDP has been approved. Building permits have been issued for this project.	<ul style="list-style-type: none"> EIR Modification Permit
Newport Beach Country Club Project	Demolition of existing tennis and golf clubhouses to construct a new 3,735 sf tennis clubhouse and 35,000 sf golf clubhouse. Included in the project are 27 short-term visitor-serving units (bungalows); a bungalow spa/fitness area and concierge and guest meeting facilities; and five single-family residential dwelling units (villas).	1600 East Coast Hwy	IS/MND was released for public review from September 20, 2010 through October 19, 2010. This project is currently scheduled for review at Planning Commission on August 4, 2011.	<ul style="list-style-type: none"> Development Agreement PC Development Plan Amendment TTM Transfer of Development Rights CDP (CCC)
Newport Beach Country Club (International Bay Club)	Demolition of existing golf course and clubhouse to construct of a new 51,213 sf golf clubhouse and ancillary facilities including a cart barn and bag storage.	1600 -1602 East Coast Highway; northwest of Pacific Coast Highway and Newport Center Drive	An IS/MND was released for public review from October 8, 2010 November 8, 2010. This project is currently scheduled for review at Planning Commission on August 4, 2011.	<ul style="list-style-type: none"> General Plan Amendment Planned Community (PC) Text Adoption Temporary Use Permit Development Agreement CDP (CCC)
PRES Office Building B Project	Increase the maximum allowable entitlement by 11,544 gross sf; increase the maximum allowable entitlement in office suite B by 9,917 net sf to allow for development of a new 2-level office building over a ground-level parking structure.	4300 Von Karman Ave	An IS/MND was released for public review on May 19, 2010. The Final EIR was certified and the project approved by the City Council on February 22, 2011.	<ul style="list-style-type: none"> GP Amendment PC Text Amendment
Old Newport GPA Project	Demolition of 3 existing buildings to construct a new 25,000-sf medical office building.	328, 332, and 340 Old Newport Blvd	IS/MND approved on March 9, 2010. No activity.	<ul style="list-style-type: none"> Modification Permit Traffic Study Use Permit GP Amendment
Rhine Channel Contaminated	Dredging of approximately 150,000 cubic yards of contaminated sediments within portions of Lower Newport	In the vicinity of Marina Park, the American Legion Post, and 15 th Street	An IS/MND and conceptual project were approved by City Council on July 27, 2010. Application for	<ul style="list-style-type: none"> Section 404 Permit (USACE) Section 10 Permit

Project	Proposed Land Uses	Location	Determination/Status	Discretionary Actions
Sediment Cleanup Project	Harbor, specifically from the Rhine Channel and nearby areas bayward of Marina Park, the American Legion Post and 15 th Street. Transport sediment by ocean barge for disposal and beneficial reuse within the approved Port of Long Beach Middle Harbor Redevelopment Project confined aquatic disposal facility.		disposal has been filed with the Port of Long Beach.	<p>(USACE)</p> <ul style="list-style-type: none"> ▪ 401 Water Quality Certification (RWQCB) ▪ CDP (CCC) • Dredging Lease (California State Lands Commission)
Sunset Ridge Park Project	Develop the approximate 18.9-acre site with active and passive recreational uses and an access road to the park through Newport Banning Ranch.	Northwest of West Coast Hwy and Superior Ave	The Final EIR was certified and the project approved by the City on March 23, 2010. The project is in litigation.	<ul style="list-style-type: none"> • EIR • Site Plan • CDP (CCC) • Streambed Alteration Agreement (CDFG) • Section 7 (USFWS)
Koll/Conexant Conceptual Plan; Uptown Newport Village Specific Plan Project:	1,504 unit residential development; 260 units on Koll site and 1,244 units on Conexant site (Uptown Newport Village)	4343 Von Karman Avenue and 4311, 4321, and 4343 Jamboree Rd; north of MacArthur Blvd and Jamboree Rd	City Council approved the Conceptual Development Plan on September 28, 2010. NOP for preparation of an EIR on Uptown Newport Village Specific Plan (Conexant site) released for public review on May 28, 2010. The project is on hold at the applicant's request.	<ul style="list-style-type: none"> • Specific Plan Adoption • PC Development Plan Amendment • Regional Water Quality Control Board • South Coast Air Quality Management District • Caltrans District 12 • Airport Land Use Commission • Department of Toxic Substances Control
Plaza Corona del Mar	Development of 1,750 sf new office space and seven (7) detached townhomes.	3900-3928 East Coast Highway	MND to be processed.	<ul style="list-style-type: none"> • Tentative Tract Map
Earl's Landing	Demolition of an existing restaurant and construction of new mixed-use building with a restaurant and 6 residential units	2751 and 2801 West Coast Highway	Submitted to the City on January 11, 2011.	<ul style="list-style-type: none"> • GP Amendment • Tentative Tract Map • Planned Development Permit • CUP
Bella Cara Dermatology GPA	9,500-square-foot office building containing 4,000 square feet of medical office space and 5,500 square feet of general office space	481-485 Old Newport Boulevard	Class 3 exemption. Project was denied by the Planning Commission and is currently on appeal to the City Council.	<ul style="list-style-type: none"> • GP Amendment

Project	Proposed Land Uses	Location	Determination/Status	Discretionary Actions
Mariner's Pointe	A 23,015-sf, two-story commercial building and a three-story parking structure.	200-300 West Coast Highway	Draft EIR was released for public review from April 11, 2011, through May 11, 2011. The project is currently scheduled for review by the Planning Commission on June 23, 2011.	<ul style="list-style-type: none"> • GP Amendment • Code Amendment • CUP • Variance • Site Development Review • Traffic Study
MacArthur at Dolphin-Striker Way	Demolition of a 7,996-sf restaurant 13,525 sf commercial retail development.	4221 Dolphin-Striker Way	IS/MND under preparation.	<ul style="list-style-type: none"> • PC text amendment • TDR • Traffic Study
<p>AELUP: Airport Environs Land Use Plan; CDP: Coastal Development Permit; CUP: Conditional Use Permit; cy: cubic yards; DA: Development Agreement; DTSP: Downtown Specific Plan; EIR: Environmental Impact Report; FAA: Federal Aviation Administration; GPA: General Plan Amendment; gsf: gross square feet; HBGS: Huntington Beach Generating Station; I-405: Interstate 405 freeway; IBC: Irvine Business Complex; IS: Initial Study; ITC: Irvine Technology Center; LAFCO: Local Agency Formation Commission; LCP: Local Coastal Program; MCAS: Marine Corps Air Station; MND: Mitigated Negative Declaration; ND: Negative Declaration; PA: Planning Area; PC: Planned Community; sf: square feet; SP: Specific Plan; SR-73: State Route 73; TDR: transfer of development rights; TPM: Tentative Parcel Map; TTM: Tentative Tract Map; VTTM: Vesting Tentative Tract Map; ZC: Zone Change</p>				

APPENDIX R

Mitigation Monitoring Program

**Mitigation Monitoring and Reporting Program
Big Canyon Residential Lot Grading
Newport Beach, CA**

No.	Mitigation Measure	Method of Verification	Timing of Implementation	Responsibility
Air Quality				
MM -1	All diesel powered construction equipment shall use diesel oxidation catalyst.	Grading Approval	Plan Prior to the start of and throughout grading	Grading Contractor Building Division
MM - 2	To reduce daily PM ₁₀ emissions, the on-site cut/fill activities shall be limited to a maximum of 400 cubic yards per day, when grading activities are within 25 meters (82 feet) of the nearest homes. The grading in this area would involve approximately 5,000 cubic yards and take approximately 13 days. Once the grading activities are outside the 25 meter zone, the on-site cut/fill activities shall be operated at a maximum 1,422 cubic yards per day. The grading for the remaining project area (outside 25 meters) would total 14,000 cubic yards, and take approximately 10 days.	Grading Approval	Plan Throughout grading	Grading Contractor Building Division
MM-3	Soil stabilizers shall be applied to inactive areas, and ground cover shall be replaced in disturbed areas that are inactive within five days.	Grading Approval	Plan Throughout grading	Grading Contractor Building Division
MM-4	All exposed dirt surfaces shall be watered three times daily	Grading Approval	Plan Throughout grading	Grading Contractor Building Division
MM-5	Water shall be provided while loading and unloading dirt to reduce visible dust plumes.	Grading Approval	Plan Throughout grading	Grading Contractor Building Division
MM-6	The speed of construction equipment on unpaved roads shall be less than 15 mph.	Grading Approval	Plan Throughout grading	Grading Contractor Building Division
MM-7	Haul road dust shall be watered three times daily.	Grading Approval	Plan Throughout grading	Grading Contractor Building Division
Geology and Soils				
MM-8	The underlying soils shall be removed and compacted per the grading recommendations in the Associated Soils Engineering Geotechnical Plan dated June 25, 2010 and to the satisfaction of the City Engineer prior to the issuance of a building permit.	Grading Approval	Plan Prior to the issuance of a grading permit	Grading Contractor Building Division

No.	Mitigation Measure	Method of Verification	Timing of Implementation	Responsibility
Hydrology and Water Quality				
MM-9	Should the resource agencies determine that the project would impact the 0.004 acres of relic drainage, the project applicant shall either provide 0.004 acres of on-site drainage adjacent to the existing CDFG wetland mitigation area on the golf course, acquire 0.004 acres of drainage area within an approved off-site CDFG mitigation bank or pay an in-lieu fee.	Resource Agency Approval and Proof of mitigation	Prior to the start of construction	Project Applicant Planning Division
MM-10	Prior to the issuance of a grading permit, an adequate vehicular turnaround area shall be provided on-site, suitable to the City Traffic Engineer. All trucks and construction equipment shall drive forward from the site onto Big Canyon Drive. Backing onto Big Canyon Drive from the site shall be prohibited.	Grading Approval Plan	Prior to the issuance of a grading permit	Project Applicant Public Works Department
The following mitigation measures are applicable carry-over measures from MND 2008-003				
Biology				
MM-11	<p>The project site has some potential to support nesting migratory birds. Impacts to such species are prohibited under the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code. In order to ensure that the proposed project will not impact nesting migratory birds, the following mitigation measure is recommended:</p> <p>If vegetation is to be removed during the nesting season, recognized from February 1 through August 31, a qualified biologist will conduct a nesting bird survey of potentially suitable nesting vegetation no more than three days prior to vegetation removal. If active nests are identified during nesting bird surveys, then the nesting vegetation will be avoided until the nesting event has completed and the juveniles can survive independently from the nest. The biologist will flag the active nesting vegetation, and will establish an adequate buffer around the nesting vegetation of 300 feet (500 feet for raptors). If active nests are identified, clearing/grading shall not occur within the buffer until the nesting event has completed.</p>	Survey from a qualified biologist	Prior to Issuance of the grading permit	Applicant Planning Division
Cultural Resources				
MM-12	Prior to approval of a grading plan, the property owner/developer shall submit a letter to the Planning	Letter from a qualified archaeologist	Prior to Issuance of the grading permit	Applicant Planning Division

No.	Mitigation Measure	Method of Verification	Timing of Implementation	Responsibility
	<p>Division showing that a qualified archaeologist has been hired to ensure that the following actions are implemented.</p> <ul style="list-style-type: none"> • The archaeologist must be present at the pregrading conference in order to establish procedures for temporarily halting or redirecting work to permit the sampling, identification, and evaluation of artifacts if potentially significant artifacts are uncovered. If artifacts are uncovered and determined to be significant, the archaeological observer shall determine appropriate actions in cooperation with the property owner/developer for exploration and/or salvage. • Specimens that are collected prior to or during the grading process will be donated to an educational or research institution. • Any archaeological work at the site shall be conducted under the direction of the certified archaeologist. If any artifacts are discovered during grading operations when the archaeological monitor is not present, grading shall be diverted around the area until the monitor can survey the area. • A final report detailing the findings and disposition of the specimens shall be submitted to the City Engineer. Upon Completion of the grading, the archaeologist shall notify the City as to when the final report will be submitted. 			
MM-13	<p>Prior to approval of a grading plan, the property owner/develop shall submit a letter to the Planning Division showing that a certified paleontologist has been hired to ensure that the following actions are implemented:</p> <ul style="list-style-type: none"> • The paleontologist must be present at the pregrading conference in order to establish procedures to temporarily halt or redirect work to permit the sampling, identification, and evaluation of fossils. If potentially significant materials are discovered, the paleontologist shall determine appropriate actions in cooperation with the property owner/developer for exploration and/or salvage. • Specimens that are collected 	Letter from a qualified paleontologist	Prior to issuance of the grading permit	Applicant Planning Division

No.	Mitigation Measure	Method of Verification	Timing of Implementation	Responsibility
	<p>prior to or during the grading process will be donated to an appropriate educational or research institution.</p> <ul style="list-style-type: none"> Any paleontological work at the site shall be conducted under the direction of the certified paleontologist. If any fossils are discovered during grading operations when the paleontological monitor is not present, grading shall be diverted around the area until the monitor can survey the area. A final report detailing the findings and disposition of the specimens shall be submitted. Upon the completion of the grading, the paleontologist shall notify the City as to when the final report will be submitted. 			
MM-14	The Traffic Engineer shall require during the grading plan check review phase that the proposed project be designed to accommodate vehicular turnaround on-site. Backing out on to Big Canyon Drive shall be prohibited.	Grading Approval Plan	Prior to issuance of the grading permit	Applicant Public Department Works