Appendix B EIP Air Quality Technical Report

Draft

Air Quality Technical Report
Newland Street Residential Project EIR

Prepared for:

City of Huntington Beach
Department of Planning
2000 Main Street Huntington Beach, CA 92648
(714) 536-5271

Prepared by:

EIP Associates
12301 Wilshire Blvd, Suite 430 Los Angeles, CA 90025
(310) 268-8132

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NEWLAND STREET RESIDENTIAL PROJECT

Air Quality Technical Report

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2000 Main Street
Huntington Beach, California 92648

Prepared by
EIP Associates
12301 Wilshire Boulevard, Suite 430
Los Angeles, California 90025

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Air Quality Technical Report

INTRODUCTION

This technical report evaluates the potential effects on air quality resulting from construction and operational activities associated with implementation of the proposed project. This technical report describes the climate conditions of the City, as well as criteria air pollutants that are of concern in the South Coast Air Basin, and existing regional and local air quality in the South Coast Air Basin. In addition, potential direct and indirect project impacts resulting from construction and operation of the proposed project are identified, and potential mitigation measures that could avoid or reduce these impacts are identified, where feasible. Data used to prepare this report were obtained from the Traffic Impact Analysis prepared by Urban Crossroads for the proposed project, as well as construction information provided by the project applicant.

Project Description

The proposed project site is located at 21471 Newland Street in the City of Huntington Beach. The proposed project site is approximately 23.1 gross acres in size and is located south of Lomond Drive, west of Newland Street, and north of the terminus of Hamilton Avenue. The proposed project would involve the conversion of a former industrial site to a residential development with 204 multi-family residential units, as well as a 2-acre public park. Infrastructure improvements (i.e., utilities, sewer, storm drains, onsite roadways, etc.) necessary to serve the proposed development would be constructed on site. In addition, implementation of the proposed project would increase the site elevation by approximately three to five feet above existing grade, via import of fill, to comply with FEMA regulations. The project site was formerly used as an oil pipeline and storage tank terminal, for which decommissioning and remediation has been completed. A portion of the site is currently operating as a recreational vehicle and boat storage facility, which would be removed and replaced with the proposed new uses. Construction and operation of the 204 multi-family residential units could result in potential direct and indirect air quality impacts.

EXECUTIVE SUMMARY

- Implementation of the proposed project could cause construction-related daily emissions to exceed SCAQMD significance thresholds for NO_X.
- It is anticipated that the proposed project would not exceed SCAQMD thresholds of significance for criteria air pollutants during operation.
- Implementation of the proposed project will not result in the creation of CO hotspots in the project vicinity.
- The proposed project is not expected to generate objectionable odors that will affect a substantial number of people.

BACKGROUND

Project Site Characteristics

Presently, the majority of the project site is currently vacant, graded soil, and is surrounded by chain link and masonry fencing. The northeast corner of the project site (approximately 4.5 acres located at 21401 Newland Street) is currently used as a recreational vehicle and boat storage facility, consisting of a large paved surface parking area and a temporary trailer serving as an administration office. Land uses surrounding the project site include single-family residential housing to the north and east, and open space/wetlands to the west and south. The project site and surrounding uses are shown in Figure 1 (Project Site and Surrounding Land Uses).

Climate

The City of Huntington Beach is located within the South Coast Air Basin (Basin), named so because its geographical formation is that of a basin, with the surrounding mountains trapping the air and its pollutants in the valleys or basins below. This area includes all of Orange County and the nondesert portions of Los Angeles, San Bernardino, and Riverside Counties. The regional climate within the Basin is considered semi-arid and is characterized by warm summers, mild winters, infrequent seasonal rainfall, moderate daytime onshore breezes, and moderate humidity. The air quality within the Basin is influenced by a wide range of emissions sources—such as dense population centers, heavy vehicular traffic, and industry—and meteorology.

The annual average temperature varies little throughout the Basin, ranging from the low to middle 60s, measured in degrees Fahrenheit (°F). Coastal areas have a more pronounced oceanic influence, and show less variability in annual minimum and maximum temperatures than inland areas. The City of Huntington Beach is located in northern coastal Orange County, which is in the southern portion of the Basin. The annual average temperature in the City ranges from approximately 57.1°F in December and January to 72.8°F in August.

The majority of annual rainfall in the Basin occurs between November and April. Summer rainfall is minimal and generally limited to scattered thundershowers in coastal regions and slightly heavier showers in the eastern portion of the Basin, along the coastal side of the mountains. Average rainfall in the City ranges from approximately zero inches in July to 2.9 inches in January, with an average annual total of 1.1 inches.

The Basin experiences a persistent temperature inversion, which is characterized by increasing temperature with increasing altitude. This inversion limits the vertical dispersion of air contaminants, holding them relatively near the ground. As the sun warms the ground and the lower air layer, the temperature of the lower air layer approaches the temperature of the base of the inversion (upper) layer until the inversion layer finally breaks, allowing vertical mixing with the lower layer.

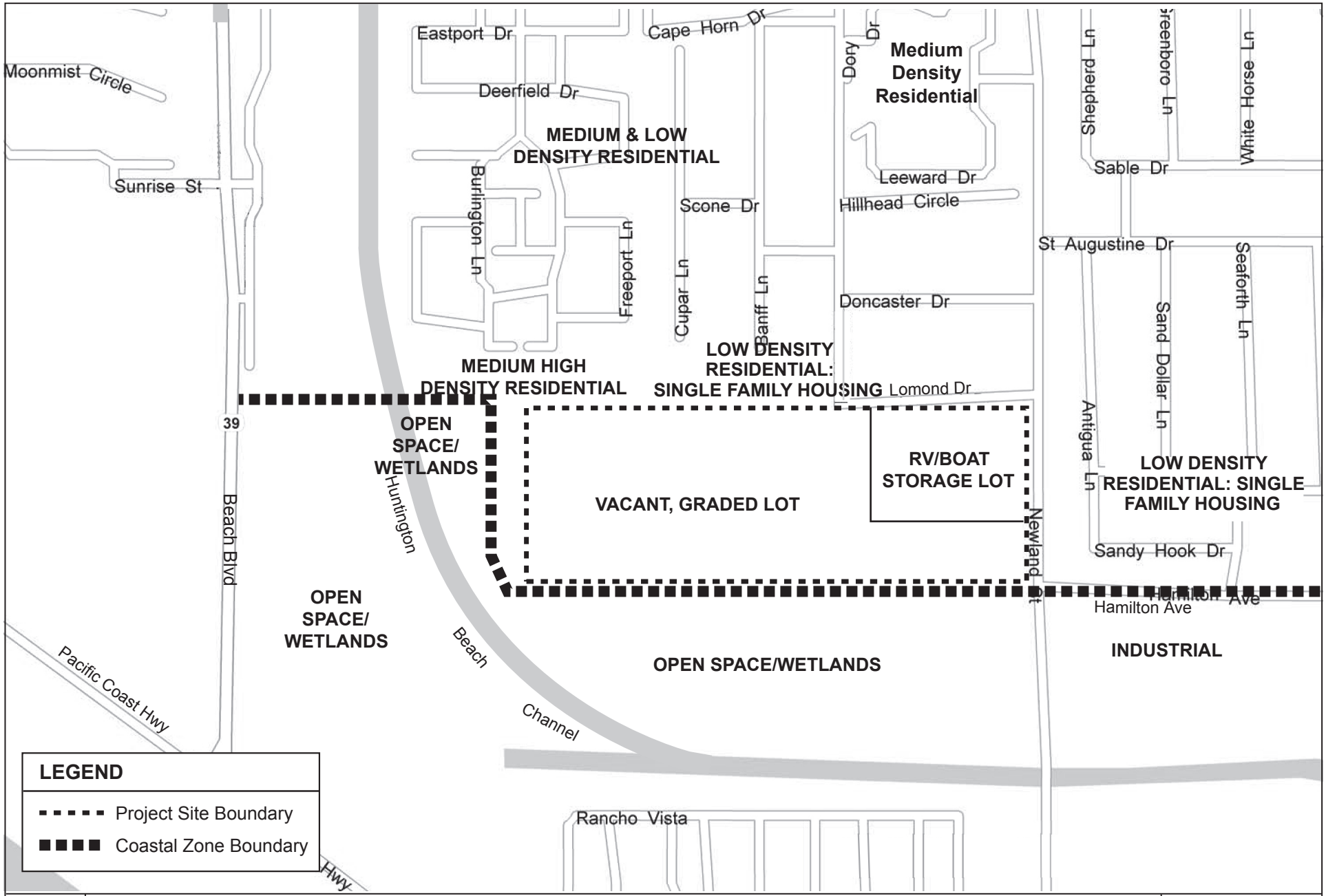

FIGURE **1**

Site and Surrounding Land Uses

Not to Scale

11034-00

***Sources*:** Microsoft Trips & Streets, 2004; EIP Associates, 2005

City of Huntington Beach

EIP ASSOCIATES

The vertical dispersion of air contaminants in the Basin is also affected by wind conditions. The combination of stagnant wind conditions and low inversions produces the greatest pollutant concentrations. On days of no inversion or high wind speeds, ambient air pollutant concentrations are the lowest. During periods of low inversions and low wind speeds, air pollutants generated in urbanized areas in the Basin are transported predominantly on-shore into Riverside and San Bernardino Counties. The Santa Ana winds, which are strong and dry north or northeasterly winds that occur during the fall and winter months, also disperse air contaminants in the Basin. The Santa Ana conditions tend to last for several days at a time.

Air Quality Background

Air pollutant emissions within the Basin are generated by stationary and mobile sources. Stationary sources can be divided into two major subcategories: point and area sources. Point sources are usually subject to a permit to operate from the South Coast Air Quality Management District (SCAQMD), occur at specific identified locations, and are usually associated with manufacturing and industry. Examples of point sources are boilers or combustion equipment that produce electricity or generate heat, such as heating, ventilation, and air conditioning (HVAC) units. Area sources are widely distributed and produce many small emissions, and they do not require permits to operate from the SCAQMD. Examples of area sources include residential and commercial water heaters, painting operations, portable generators, lawn mowers, agricultural fields, landfills, and consumer products, such as barbeque lighter fluid and hairspray, the area-wide use of which contributes to regional air pollution. Mobile sources refer to emissions from motor vehicles, including tailpipe and evaporative emissions, and are classified as either on-road or off-road. On-road sources are those that are legally operated on roadways and highways. Off-road sources include aircraft, ships, trains, racecars, and construction vehicles.

Mobile sources account for the majority of the air pollutant emissions within the Basin. Air pollutants can also be generated by the natural environment, such as when fine dust particles are pulled off the ground surface and suspended in the air during high winds.

Both the federal and state governments have established ambient air quality standards for outdoor concentrations of specific pollutants, referred to as "criteria pollutants," in order to protect public health. The national and state ambient air quality standards have been set at concentration levels to protect the most sensitive persons from illness or discomfort with a margin of safety. Applicable ambient air quality standards are identified later in this technical report. The SCAQMD is responsible for bringing air quality within the Basin into attainment with the national and state ambient air quality standards.

The criteria pollutants for which federal and state standards have been promulgated and that are most relevant to air quality planning and regulation in the Basin are ozone, carbon monoxide, fine suspended particulate matter, sulfur dioxide, and lead. In addition, toxic air contaminants are of concern in the Basin. Each of these is briefly described below.

- *Ozone (O_3)* is a gas that is formed when volatile organic compounds (VOCs) and nitrogen oxides (NO_x), both byproducts of internal combustion engine exhaust, undergo slow photochemical reactions in the presence of sunlight. Ozone concentrations are generally highest during the

summer months when direct sunlight, light wind, and warm temperature conditions are favorable to the formation of this pollutant.

- *Carbon Monoxide (CO)* is a colorless, odorless gas produced by the incomplete combustion of fuels. CO concentrations tend to be the highest during the winter morning, with little to no wind, when surface-based inversions trap the pollutant at ground levels. Because CO is emitted directly from internal combustion engines, unlike ozone, motor vehicles operating at slow speeds are the primary source of CO in the Basin. The highest ambient CO concentrations are generally found near congested transportation corridors and intersections.
- *Respirable Particulate Matter (PM_{10})* and *Fine Particulate Matter ($PM_{2.5}$)* consist of extremely small, suspended particles or droplets 10 microns and 2.5 microns or smaller in diameter, respectively. Some sources of particulate matter, like pollen and windstorms, are naturally occurring. However, in populated areas, most particulate matter is caused by road dust, diesel soot, combustion products, abrasion of tires and brakes, and construction activities.
- *Nitrogen dioxide (NO_2)* is a nitrogen oxide compound that is produced by the combustion of fossil fuels, such as in internal combustion engines (both gasoline and diesel powered), as well as point sources, especially power plants. Of the seven types of nitrogen oxide compounds, NO_2 is the most abundant in the atmosphere. As ambient concentrations of NO_2 are related to traffic density, commuters in heavy traffic may be exposed to higher concentrations of NO_2 than those indicated by regional monitors.
- *Sulfur dioxide (SO_2)* is a colorless, extremely irritating gas or liquid. It enters the atmosphere as a pollutant mainly as a result of burning high sulfur-content fuel oils and coal and from chemical processes occurring at chemical plants and refineries. When sulfur dioxide oxidizes in the atmosphere, it forms sulfates (SO_4). Collectively, these pollutants are referred to as sulfur oxides (SO_x).
- *Lead (Pb)* occurs in the atmosphere as particulate matter. The combustion of leaded gasoline is the primary source of airborne lead in the Basin. The use of leaded gasoline is no longer permitted for on-road motor vehicles, so the majority of such combustion emissions are associated with off-road vehicles such as race cars. Other sources of lead include the manufacturing and recycling of batteries, paint, ink, ceramics, ammunition, and the use of secondary lead smelters.
- *Toxic Air Contaminants* refer to a diverse group of air pollutants that are capable of causing chronic (i.e., of long duration) and acute (i.e., severe but of short duration) adverse effects on human health. They include both organic and inorganic chemical substances that may be emitted from a variety of common sources including gasoline stations, motor vehicles, dry cleaners, industrial operations, painting operations, and research and teaching facilities. Toxic air contaminants are different than "criteria" pollutants in that ambient air quality standards have not been established for them, largely because there are hundreds of air toxics and their effects on health tend to be local rather than regional.

Regional Air Quality

Measurements of ambient concentrations of the criteria pollutants are used by the United States Environmental Protection Agency (U.S. EPA) and the California Air Resources Board (ARB) to assess and classify the air quality of each air basin, county, or, in some cases, a specific urbanized area. The classification is determined by comparing actual monitoring data with national and state and federal standards. If a pollutant concentration in an area is lower than the standard, the area is classified as being in "attainment" in that area. If the pollutant exceeds the standard, the area is classified as a

"nonattainment" area. If there are not enough data available to determine whether the standard is exceeded in an area, the area is designated "unclassified."

The entire Basin is designated as a national-level extreme nonattainment area for ozone, meaning that national ambient air quality standards are not expected to be met for more than 17 years, and as a nonattainment area for CO and PM_{10}. The Basin is also a State-level nonattainment area for ozone, CO (Los Angeles County only), and PM_{10}. It is in attainment of both the national and State ambient air quality standards for SO_2, lead, and NO_2, which is a pure form of NO_x.

The SCAQMD divides the Basin into thirty-eight source receptor areas (SRAs) in which thirty-two monitoring stations operate to monitor the various concentrations of air pollutants in the region. The City of Huntington Beach is located within SRA 18, which covers the Northern Coastal Orange County area. The ARB also collects ambient air quality data through a network of air monitoring stations throughout the State. These data are summarized annually and are published in the ARB's California Air Quality Data Summaries. The Costa Mesa-Mesa Verde Drive monitoring station is the nearest monitoring station to the project site. This station currently monitors emission levels of ozone, CO, NO_2, and SO_2 but does not monitor the pollutant levels of PM_{10} and $PM_{2.5}$.

Table 1 (Summary of Ambient Air Quality in the Proposed Project Vicinity) identifies the national and State ambient air quality standards for the relevant air pollutants along with the ambient pollutant concentrations that have been measured at the Costa Mesa-Mesa Verde Drive monitoring station through the period of 2002 to 2004.

According to air quality data shown in Table 1, the national 1-hour ozone standard has not been exceeded over the last three years in SRA 18, while the State 1-hour ozone standard was exceeded a total of six days over the last three years. The national 8-hour ozone standard was exceeded a total of two days over the last three years. No national or State standards for CO, NO_2, or SO_2 have been exceeded over the last three years within SRA 18.

Local Air Quality

Within the project area, local emissions sources include stationary activities, such as space and water heating, landscape maintenance from leaf blowers and lawn mowers, consumer products, and mobile sources, primarily automobile and truck traffic. The AES Huntington Beach Generating Station is located approximately ½ mile southwest of the proposed project site, which is outside the ¼-mile radius that TACs are typically considered. Motor vehicles are the primary source of pollutants in the project site vicinity. Traffic-congested roadways and intersections have the potential to generate localized high levels of CO. Localized areas where ambient concentrations exceed national and/or state standards for CO are termed "CO hotspots." Section 9.l4 of the SCAQMD's CEQA Air Quality Handbook identifies CO as a localized problem requiring additional analysis when a project is likely to subject sensitive receptors to CO hotspots. The SCAQMD defines typical sensitive receptors as residences, schools, playgrounds, childcare centers, athletic facilities, long-term health care facilities, rehabilitation centers, convalescent centers, and retirement homes.

Table 1 Summary of Ambient Air Quality in the Proposed Project Vicinity			
	Year		
Air Pollutants Monitored Within SRA 18—Northern Coastal Orange County Area	*2002*	*2003*	*2004*
Ozone (O_3)			
Maximum 1-hour concentration measured	0.087 ppm[1]	0.107 ppm	0.104 ppm
Number of days exceeding national 0.12 ppm 1-hour standard	0	0	0
Number of days exceeding State 0.09 ppm 1-hour standard	0	4	2
Maximum 8-hour concentration measured	0.070 ppm	0.088 ppm	0.087 ppm
Number of days exceeding national 0.08 ppm 8-hour standard	0	1	1
Nitrogen Dioxide (NO_2)			
Maximum 1-hour concentration measured	0.106 ppm	0.107 ppm	0.097 ppm
Number of days exceeding State 0.25 ppm 1-hour standard	0	0	0
Annual average	0.018 ppm	0.018 ppm	0.016 ppm
Does measured annual average exceed national 0.0534 ppm annual average standard?	No	No	No
Carbon Monoxide (CO)			
Maximum 1-hour concentration measured	5 ppm	7 ppm	5 ppm
Number of days exceeding national 35.0 ppm 1-hour standard	0	0	0
Number of days exceeding State 20.0 ppm 1-hour standard	0	0	0
Maximum 8-hour concentration measured	4.29 ppm	5.90 ppm	4.07 ppm
Number of days exceeding national 9.5 ppm 8-hour standard	0	0	0
Number of days exceeding State 9.0 ppm 8-hour standard	0	0	0
Sulfur Dioxide (SO_2)			
Maximum 24-hour concentration measured	0.011 ppm	0.012 ppm	0.008 ppm
Number of days exceeding national 0.14 ppm 24-hour standard	0	0	0
Number of days exceeding State 0.04 ppm 24-hour standard	0	0	0

SOURCE: ARB 2005

PM_{10} and $PM_{2.5}$ concentrations were not measured in the Costa Mesa-Mesa Verde Drive monitoring station or in SRA 18.

1. ppm = parts by volume per million of air.
2. µg/m³ = micrograms per cubic meter.

The SCAQMD recommends the use of CALINE4, a dispersion model for predicting CO concentrations, as the preferred method of estimating pollutant concentrations at sensitive receptors near congested roadways and intersections. For each intersection analyzed, CALINE4 adds roadway-specific CO emissions calculated from peak hour turning volumes to ambient CO air concentrations. For this analysis, localized CO concentrations were calculated based on a simplified CALINE4 screening procedure developed by the Bay Area Air Quality Management District and accepted by the SCAQMD. The simplified model is intended as a screening analysis, which identifies a potential CO hotspot. This methodology assumes worst-case conditions and provides a screening of maximum, worst-case CO concentrations.

Maximum existing CO concentrations were calculated for the intersections evaluated in the project traffic report prepared by Urban Crossroads for the proposed project. The results of these calculations are presented in Table 2 (Existing Localized Carbon Monoxide Concentrations) for representative receptor locations at 25, 50, and 100 feet from each roadway. These distances were selected because they represent locations where a person may be living or working for one to eight hours at a time. The National 1-hour standard is 35.0 parts per million (ppm), and the State 1-hour standard is 20.0 ppm. The 8-hour National and State standards are 9.5 ppm and 9.1 ppm, respectively.

Table 2 Existing Localized Carbon Monoxide Concentrations

Intersection	CO Concentrations in Parts per Million[a,b]					
	25 Feet		50 Feet		100 Feet	
	1-Hour	8-Hour	1-Hour	8-Hour	1-Hour	8-Hour
Beach Boulevard and Atlanta Avenue	6.0	4.8	5.8	4.6	5.6	4.5
Beach Boulevard and Pacific View Avenue	5.6	4.5	5.5	4.4	5.4	4.3
Beach Boulevard and Pacific Coast Highway	6.6	5.2	6.3	5.0	6.0	4.7
Newland Street and Indianapolis Avenue	5.6	4.5	5.5	4.4	5.4	4.3
Newland Street and Atlanta Avenue	5.8	4.6	5.6	4.5	5.5	4.4
Newland Street and Lomond Drive	5.6	4.5	5.5	4.4	5.3	4.3
Newland Street and Hamilton Avenue	6.0	4.7	5.7	4.6	5.5	4.4
Newland Street and Pacific Coast Highway	6.5	5.1	6.2	4.9	5.9	4.7
Magnolia Street and Atlanta Avenue	5.8	4.7	5.7	4.5	5.5	4.4
Magnolia Street and Hamilton Avenue	5.8	4.6	5.6	4.5	5.5	4.4
Magnolia Street and Banning Avenue	5.3	4.3	5.3	4.3	5.2	4.2
Magnolia Street and Pacific Coast Highway	6.8	5.3	6.4	5.1	6.0	4.8
Bushard Street and Atlanta Avenue	5.7	4.6	5.6	4.5	5.4	4.4
Bushard Street and Hamilton Avenue	5.7	4.6	5.6	4.5	5.5	4.4

[a]. National 1-hour standard is 35.0 parts per million. State 1-hour standard is 20.0 parts per million.
[b]. National 8-hour standard is 9.5 parts per million. State 8-hour standard is 9.1 parts per million.

SOURCE: EIP Associates 2005. Calculation sheets are provided in Appendix A.

As shown in Table 2, under worst-case conditions, existing CO concentrations near the study-area do not exceed national or State 1-hour and 8-hour ambient air quality standards. Therefore, CO hotspots do not exist near these intersections.

Existing Site Emissions

The project site is currently vacant with the exception of the approximately 4.5-acre recreational vehicle and boat storage facility located at the northeast corner of the site. Although this facility is used for storage purposes, it has a temporary trailer onsite that serves as an administration office. As such, slight emissions associated with a potential HVAC unit serving the trailer may occur within the facility. Additionally, emissions associated with motor vehicles also occur periodically at the facility when vehicles transporting the recreational vehicles and boats arrive at and depart from the site. However, due to the periodic nature of these emissions and the short timeframe that these motor vehicles are present at the

facility, the emissions are not considered to be substantial. No emissions are currently generated at the remaining portions of the project site.

APPLICABLE REGULATIONS

South Coast Air Quality Management District

The SCAQMD is the agency principally responsible for comprehensive air pollution control in the Basin. To that end, the SCAQMD, a regional agency, works directly with the Southern California Association of Governments (SCAG), county transportation commissions, and local governments and cooperates actively with all federal and state government agencies. The SCAQMD develops rules and regulations, establishes permitting requirements for stationary sources, inspects emissions sources, and enforces such measures through educational programs or fines, when necessary.

The SCAQMD is directly responsible for reducing emissions from stationary (area and point), mobile, and indirect sources. It has responded to this requirement by preparing a sequence of Air Quality Management Plans (AQMPs). The most recent of these was adopted by the Governing Board of the SCAQMD on August 1, 2003, and updates and revises the previous 1997 AQMP. This AQMP, referred to as the 2003 AQMP, was prepared to comply with the federal and state Clean Air Acts and amendments, to accommodate growth, to reduce the high pollutant levels in the Basin, to meet federal and state ambient air quality standards, and to minimize the fiscal impact that pollution control measures have on the local economy. The purpose of the 2003 AQMP for the Basin is to set forth a comprehensive program that will lead this area into compliance with all federal and state air quality planning requirements. Compared with the 1997 AQMP, the 2003 AQMP utilizes revised emissions inventory projections that use 1997 as the base year, the ARB on-road motor vehicle emissions model EMFAC2002, and SCAG 2001 Regional Transportation Plan (RTP) forecast assumptions; updates the attainment demonstration for the federal standards for ozone and PM_{10}; replaces the 1997 attainment demonstration for the federal CO standard and provides a basis for a maintenance plan for CO for the future; and updates the maintenance plan for the federal NO_2 standard that the Basin has met since 1992. In terms of working towards ozone attainment, the 2003 AQMP builds upon the 1997 AQMP and 1999 Amendments to the Ozone SIP. In terms of PM10 attainment, the PM_{10} control strategy in the 1997 AQMP has been augmented by a number of additional PM_{10} control measures.

The new Plan also addresses several state and federal planning requirements and incorporates significant new scientific data, primarily in the form of updated emissions inventories, ambient measurements, new meteorological episodes, and new air quality modeling tools. Specifically, the 2003 AQMP is designed to satisfy the California Clean Air Act (CCAA) tri-annual update requirements and fulfill the District's commitment to update transportation emission budgets based on the latest approved motor vehicle emissions model and planning assumptions.

The 2003 AQMP control measures consist of (1) the District's Stationary and Mobile Source Control Measures, (2) State Control Measures proposed by the ARB, and (3) Transportation Control Measures provided by SCAG. Overall, there are twenty-eight stationary and twenty-one mobile source measures

that are defined under the 2003 AQMP. These measures primarily rely on the traditional command-and-control approach facilitated by market incentive programs as well as advanced technologies expected to be implemented by 2010. The proposed control measures in the 2003 AQMP are based on implementation of all feasible control measures through the application of available technologies and management practices, as well as advanced technologies and control methods. The basic principles used in designing the District's control strategy were to (1) meet at least the same overall remaining emissions target committed to in the 1997/1999 SIP; (2) replace long-term measures with more specific near-term measures, where feasible; and (3) develop new short-term control measures and long-term strategies to achieve the needed reductions for attainment demonstration. Principal control measures of the 2003 AQMP focus on adoption of new regulations or enhancement of existing 1997 AQMP regulations for stationary sources and implementation/facilitation of advanced transportation technologies (i.e., zero emission and alternative-fueled vehicles and infrastructure, fuel cell vehicles, heavy-duty electric and hybrid-electric vehicles, and both capital and non-capital transportation improvements). Capital improvements consist of high-occupancy vehicle (HOV) lanes; transit improvements; traffic flow improvements; park-and-ride and intermodal facilities; and urban freeway, bicycle, and pedestrian facilities. Noncapital improvements consist of rideshare matching and transportation demand management activities derived from the congestion management program.

Programs set forth in the 2003 AQMP require the cooperation of all levels of government: local, regional, state, and federal. Each level is represented in the Plan by the appropriate agency or jurisdiction that has the authority over specific emissions sources. Accordingly, each agency or jurisdiction is associated with specific planning and implementation responsibilities.

Although the SCAQMD is responsible for regional air quality planning efforts, it does not have the authority to directly regulate the air quality issues associated with plans and new development projects throughout the Basin. Instead, the SCAQMD has used its expertise and prepared the CEQA Air Quality Handbook to indirectly address these issues in accordance with the projections and programs of the AQMP. The purpose of the CEQA *Air Quality Handbook* is to assist Lead Agencies, as well as consultants, project proponents, and other interested parties, in evaluating potential air quality impacts of projects and plans proposed in the Basin. Specifically, the CEQA *Air Quality Handbook* explains the procedures that the SCAQMD recommends be followed during environmental review processes required by CEQA. The CEQA *Air Quality Handbook* provides direction on how to evaluate potential air quality impacts, how to determine whether these impacts are significant, and how to mitigate these impacts. The SCAQMD intends that by providing this guidance, the air quality impacts of plans and development proposals will be analyzed accurately and consistently throughout the Basin, and adverse impacts will be minimized.

City of Huntington Beach General Plan

Local jurisdictions, such as the City of Huntington Beach, have the authority and responsibility to reduce air pollution through their police power and decision-making authority. Specifically, the City is responsible for the assessment and mitigation of air emissions resulting from its land use decisions. The City of Huntington Beach is also responsible for the implementation of transportation control measures as outlined in the AQMP. Examples of such measures include bus turnouts, energy-efficient streetlights,

and synchronized traffic signals. In accordance with CEQA requirements and the CEQA review process, the City assesses the air quality impacts of new development projects, requires mitigation of potentially significant air quality impacts by conditioning discretionary permits, and monitors and enforces implementation of such mitigation.

In accordance with CEQA requirements, the City does not, however, have the expertise to develop plans, programs, procedures, and methodologies to ensure that air quality within the City and region will meet federal and state standards. Instead, the City relies on the expertise of the SCAQMD and utilizes the CEQA *Air Quality Handbook* as the guidance document for the environmental review of plans and development proposals within its jurisdiction.

METHODOLOGY

The analysis in this section focuses on the nature and magnitude of the change in the air quality environment due to implementation of the proposed project. Air pollutant emissions associated with the proposed project would result from operation of the proposed residential development and project-related traffic volumes. Construction activities would also generate emissions at the project site. The net increase in project site emissions generated by these activities and other secondary sources have been quantitatively estimated and compared to thresholds of significance recommended by the SCAQMD.

Construction Emissions

Construction emissions are calculated by estimating the types and number of pieces of equipment that would be used to surcharge, grade, and excavate the project site, construct the proposed residential development, and plant new landscaping within the project site. Construction emissions are analyzed according to the thresholds established by the SCAQMD. The construction activities associated with the proposed residential development at the project site would cause diesel emissions, and would generate emissions of dust. Construction equipment within the project site that would generate VOC and NO_x pollutants could include graders, dump trucks, and bulldozers. Some of this equipment would be used during grading activities as well as when structures are constructed on the project site. It is assumed that all construction equipment used would be diesel-powered.

Operational Emissions

Operational emissions associated with the proposed project are estimated using the URBEMIS 2002 computer model developed for the ARB and information provided in the traffic study prepared by Urban Crossroads for the proposed project. Operational emissions would be comprised of mobile source emissions and area source emissions. Mobile source emissions are generated by the increase in motor vehicle trips to and from the project site associated with operation of the proposed project. Area source emissions are generated by natural gas consumption for space and water heating, and landscape maintenance equipment. To determine if an air quality impact would occur, the increase in emissions was compared with the SCAQMD's recommended thresholds.

Localized CO Concentrations

Localized CO concentrations are calculated based on a simplified CALINE4 screening procedure developed by the Bay Area Air Quality Management District and utilized by the SCAQMD. The simplified model is intended as a screening analysis, which identifies a potential CO hotspot. This methodology assumes worst-case conditions and provides a screening of maximum, worst-case CO concentrations. The resulting emissions are compared with adopted national and state ambient air quality standards.

THRESHOLDS

Construction Emissions

The SCAQMD currently recommends that projects with construction-related emissions that exceed any of the following emissions thresholds should be considered significant. The SCAQMD also recommends that any construction-related emissions from individual development projects that exceed these thresholds be considered cumulatively considerable. These thresholds apply to individual development projects only; they do not apply to the emissions collectively generated by related projects:

- 550 pounds per day of CO
- 75 pounds per day of VOC
- 100 pounds per day of NO_x
- 150 pounds per day of SO_x
- 150 pounds per day of PM_{10}

Operational Emissions

The SCAQMD currently recommends that projects with operational emissions that exceed any of the following emissions thresholds should be considered significant. The SCAQMD also recommends that any operational emissions from individual projects that exceed these thresholds be considered cumulatively considerable. These thresholds apply to individual development projects only; they do not apply to the emissions collectively generated by related projects:

- 550 pounds per day of CO
- 55 pounds per day of VOC
- 55 pounds per day of NO_x
- 150 pounds per day of SO_x
- 150 pounds per day of PM_{10}

ANALYSIS

Construction Emissions

Construction activities associated with the proposed project occurring on the project site would generally involve the following stages: ground clearing and demolition of the existing recreational vehicle and boat

storage facility; site excavation, grading, and surcharge; and construction of the proposed residential development along with landscaping improvements.

Because of the construction time frame and the normal day-to-day variability in construction activities, it is difficult, if not impossible, to precisely quantify the daily emissions associated with each phase of the proposed construction activities. Nonetheless, Table 3 identifies daily emissions that are estimated to occur on peak construction days. These calculations assume that appropriate dust control measures would be implemented during each phase of development as required by SCAQMD Rule 403—Fugitive Dust, and that all other appropriate mitigation, such as routine equipment maintenance, has been used.

Table 3 Estimated Peak Daily Construction Emissions

Emissions Source	*Peak Day Emissions in Pounds per Day*				
	CO	*VOC*	*NO_x*	*SOx*	*PM_{10}*
Demolition Phase					
Construction Equipment	43.43	5.21	33.62	—	1.44
On-Road Vehicles	0.84	0.23	4.09	0.07	0.12
Fugitive Dust	—	—	—	—	1.33
Worker Trips	1.84	0.06	0.10	0.00	0.01
Maximum Daily Emissions	*46.11*	*5.50*	*37.81*	*0.07*	*2.90*
SCAQMD Thresholds	550.0	75.0	100.0	150.0	150.0
Significant Impact?	No	No	No	No	No
Site Excavation, Grading, and Surcharge Phase					
Construction Equipment	131.81	16.40	118.18	—	5.29
On-Road Vehicles	11.35	3.29	73.69	1.07	1.68
Fugitive Dust	—	—	—	—	13.20
Worker Trips	6.17	0.27	0.33	0.00	0.02
Maximum Daily Emissions	*149.33*	*19.96*	*192.20*	*1.07*	*20.19*
SCAQMD Thresholds	550.0	75.0	100.0	150.0	150.0
Significant Impact?	No	No	Yes	No	No
Construction Phase					
Construction Equipment	216.10	26.56	180.09	—	7.59
Worker Trips	38.97	1.82	1.98	0.02	0.22
Asphalt Paving	40.33	5.07	29.87	0.00	1.07
Architectural Coatings	—	70.23	—	—	—
Maximum Daily Emissions	*248.44*	*70.66*	*181.80*	*0.02*	*7.71*
SCAQMD Thresholds	550.0	75.0	100.0	150.0	150.0
Significant Impact?	No	No	Yes	No	No

SOURCE: EIP Associates, 2005. Calculation sheets are provided in Appendix A.

As shown, construction related daily emissions would exceed SCAQMD significance thresholds for NO_X during the site excavation, grading, and surcharge phase, as well as during the peak construction phase.

Operational Emissions

Operational emissions generated by both stationary and mobile sources would result from normal day-to-day activities on the project site after occupation. Stationary area source emissions would be generated by the consumption of natural gas for space and water heating devices, and the operation of landscape maintenance equipment. Mobile emissions would be generated by the motor vehicles traveling to and from the project site.

The analysis of daily operational emissions has been prepared utilizing the URBEMIS 2002 computer model recommended by the SCAQMD. The results of these calculations are presented in Table 4. As shown, the proposed project would not generate daily emissions that exceed the thresholds of significance recommended by the SCAQMD.

Table 4 Project Daily Operational Emissions

	Emissions in Pounds per Day				
Emissions Source	*CO*	*VOC*	*NOx*	*SOx*	*PM_{10}*
Water and Space Heating	0.65	0.12	1.54	0	0.00
Landscape Maintenance	1.50	0.24	0.01	0.00	0.00
Consumer Products	—	9.98	—	—	—
Architectural Coatings	—	3.28	—	—	—
Motor Vehicles	110.08	9.15	12.03	0.06	12.10
Maximum Daily Emissions	*110.73*	*22.53*	*13.56*	*0.06*	*12.10*
Thresholds (lb/day)	550.00	55.00	55.00	150.00	150.00
Significant Impact	No	No	No	No	No

SOURCE: EIP Associates 2005. Computer sheets are provided in Appendix A

Localized CO Concentrations

The simplified CALINE4 screening procedure was used to predict future CO concentrations at the study-area intersections in 2009 when the project would be operational. The results of these calculations are presented in Table 5. As shown, future CO concentrations near these intersections would not exceed national or State ambient air quality standards. Therefore, CO hotspots would not occur near these intersections in the future, and the contribution of project traffic-related CO at these intersections would be less than established thresholds.

Table 5 Year 2009 Localized Carbon Monoxide Concentrations						
	CO Concentrations in Parts per Million[a,b]					
	25 Feet		50 Feet		100 Feet	
Intersection	1-Hour	8-Hour	1-Hour	8-Hour	1-Hour	8-Hour
Beach Boulevard and Atlanta Avenue	7.2	5.6	6.8	5.3	6.4	5.0
Beach Boulevard and Pacific View Avenue	5.5	4.5	5.4	4.4	5.3	4.3
Beach Boulevard and Pacific Coast Highway	7.3	5.7	6.9	5.4	6.4	5.1
Newland Street and Indianapolis Avenue	5.5	4.4	5.4	4.3	5.3	4.3
Newland Street and Atlanta Avenue	5.8	4.6	5.6	4.5	5.5	4.4
Newland Street and Lomond Drive	5.7	4.6	5.5	4.5	5.4	4.3
Newland Street and Project Access	5.7	4.5	5.5	4.4	5.4	4.3
Newland Street and Hamilton Avenue	5.9	4.5	5.7	4.4	5.5	4.3
Newland Street and Pacific Coast Highway	6.7	4.7	6.4	4.5	6.0	4.4
Magnolia Street and Atlanta Avenue	5.7	5.3	5.6	5.0	5.4	4.8
Magnolia Street and Hamilton Avenue	5.7	4.5	5.6	4.5	5.4	4.4
Magnolia Street and Banning Avenue	5.3	4.5	5.2	4.5	5.2	4.4
Magnolia Street and Pacific Coast Highway	6.8	4.3	6.4	4.2	6.0	4.2
Bushard Street and Atlanta Avenue	5.6	5.3	5.5	5.1	5.4	4.8
Bushard Street and Hamilton Avenue	5.7	4.5	5.5	4.4	5.4	4.3

SOURCE: EIP Associates 2005. Calculation sheets are provided in Appendix A.

[a]. National 1-hour standard is 35.0 parts per million. State 1-hour standard is 20.0 parts per million.

[b]. National 8-hour standard is 9.5 parts per million. State 8-hour standard is 9.1 parts per million.

Objectionable Odors

Construction activities occurring in association with the proposed project would generate airborne odors associated with the operation of construction vehicles (i.e., diesel exhaust) and the application of interior and exterior architectural coatings. These emissions would only occur during daytime hours and would be isolated to the immediate vicinity of the construction site and activity. As such, they would not affect a substantial number of people.

Potential operational airborne odors could result from cooking activities associated with the new residential buildings. These odors would be similar to existing residential uses in the vicinity and would be confined to the immediate vicinity of the new buildings. The other potential source of odors would be new trash receptacles within the single-family developments. The receptacles would have lids and be emptied on a regular basis, before potentially substantial odors have a chance to develop. As a result, objectionable odors produced as a result of the proposed project are not expected to affect a substantial number of people.

City Requirements and Recommended Mitigation Measures

It is anticipated that the following standard City requirements (CR) would improve air quality emissions generated by construction activities associated with the proposed project.

- The name and phone number of an on-site field supervisor hired by the developer shall be submitted to the Departments of Planning and Public Works prior to issuance of grading permits. In addition, clearly visible signs shall be posted on the perimeter of the site every 250 feet indicating who shall be contacted for information regarding this development and any construction/grading-related concerns. This contact person shall be available immediately to address any concerns or issues raised by adjacent property owners during the construction activity. He/She will be responsible for ensuring compliance with the conditions herein, specifically, grading activities, truck routes, construction hours, noise, etc. Signs shall include the Applicant's contact number regarding grading and construction activities, and "1-800-CUTSMOG" in the event there are concerns regarding fugitive dust and compliance with SCAQMD Rule No. 403.
- The Applicant shall notify all property owners and tenants within 300 feet of the perimeter of the property of a tentative grading schedule at least 30 days prior to such grading.
- The Applicant shall demonstrate that the grading/erosion control plan will abide by the provisions of AQMD's Rule 403 as related to fugitive dust control, prior to issuance of grading permits.
- The construction disturbance area shall be kept as small as possible.
- Wind barriers shall be installed along the perimeter of the site and/or around areas being graded.
- Remediation operations, if required, shall be performed in stages concentrating in single areas at a time to minimize the impact of fugitive dust and noise on the surrounding areas.

In addition to the standard City requirements listed above, mitigation measures (MM) would be required to address project impacts. The following recommendations would address potential air quality impacts associated with construction activities, as described above.

MM-1 *The project developer(s) shall require by contract specifications that construction equipment engines will be maintained in good condition and in proper tune per manufacturer's specification for the duration of construction. Contract specification language shall be reviewed by the City prior to issuance of a grading permit.*

MM-2 *The project developer(s) shall require by contract specifications that construction-related equipment, including heavy-duty equipment, motor vehicles, and portable equipment, shall be turned off when not in use for more than five minutes. Contract specification language shall be reviewed by the City prior to issuance of a grading permit.*

MM-3 *The project developer(s) shall encourage contractors to utilize alternative fuel construction equipment (i.e., compressed natural gas, liquid petroleum gas, and unleaded gasoline) and low-emission diesel construction equipment to the extent that the equipment is readily available and cost effective. Contract specification language shall be reviewed by the City prior to issuance of a grading permit.*

MM-4 *The project developer(s) shall require by contract specifications that construction operations rely on the electricity infrastructure surrounding the construction sites rather than electrical generators powered by internal combustion engines to the extent feasible. Contract specification language shall be reviewed by the City prior to issuance of a grading permit.*

MM-5 *The project developer(s) shall implement dust control measures consistent with SCAQMD Rule 403—Fugitive Dust during the construction phases of new project development. Contract specification language shall be reviewed for inclusion of this language by the City prior to issuance of a grading permit. The following actions are currently recommended to implement Rule 403*

and have been quantified by the SCAQMD as being able to reduce dust generation between 30 and 85 percent depending on the source of the dust generation:

- *Apply water and/or approved nontoxic chemical soil stabilizers according to manufacturer's specification to all inactive construction areas (previously graded areas that have been inactive for 10 or more days)*
- *Replace ground cover in disturbed areas as quickly as possible*
- *Enclose, cover, water twice daily, or apply approved chemical soil binders to exposed piles with 5 percent or greater silt content*
- *Water trucks will be utilized on the site and shall be available to be used throughout the day during site grading to keep the soil damp enough to prevent dust being raised by the operations. Water active grading sites at least twice daily*
- *Suspend all excavating and grading operations when wind speeds (as instantaneous gusts) exceed 25 miles per hour over a 30-minute period*
- *All trucks hauling dirt, sand, soil, or other loose materials are to be covered or should maintain at least two feet of freeboard (i.e., minimum vertical distance between top of the load and the top of the trailer), in accordance with Section 23114 of the California Vehicle Code*
- *Sweep streets at the end of the day*
- *Install wheel washers where vehicles enter and exit unpaved roads onto paved roads, or wash off trucks and any equipment leaving the site each trip on a gravel surface to prevent dirt and dust from impacting the surrounding areas*
- *Apply water three times daily or chemical soil stabilizers according to manufacturers' specifications to all unpaved parking or staging areas or unpaved road surfaces*
- *Post and enforce traffic speed limits of 15 miles per hour or less on all unpaved surfaces*

While daily emissions during operation of the proposed project would not exceed SCAQMD thresholds of significance, the following mitigation measure is recommended to ensure that daily emissions during operation are minimized.

MM 6 *The project developer shall include in construction and sales contracts the following requirements or measures shown to be equally effective to reduce project-related stationary and area source emissions:*

- *Use solar or low-emission water heaters in the residential units*
- *Provide energy-efficient heating with automated controls in the residential units*
- *Use energy-efficient cooking appliances in the in the residential units*
- *If fire places are provided in new residential units, install the lowest-emitting fireplaces commercially available at the time of development*

Contract specification language shall be reviewed by the City prior to issuance of a grading permit.

CONCLUSIONS

Implementation of the proposed project could cause construction-related daily emissions to exceed SCAQMD significance thresholds for NO_X during the site excavation, grading, and surcharge phase, as well as during the peak construction phase. While appropriate mitigation measures would be implemented during project construction, the proposed project may still exceed established thresholds.

The proposed project would not exceed SCAQMD thresholds of significance for criteria air pollutants during operation.

Implementation of the proposed project will not result in the creation of CO hotspots in the project vicinity. Traffic generated by implementation of the proposed project would not create localized CO concentration in excess of national or state standards.

The proposed project is not expected to generate objectionable odors that will affect a substantial number of people. Construction activities occurring in association with the proposed project would generate airborne odors, but would only occur during daytime hours and would be isolated to the immediate vicinity of the construction site and activity. Operational airborne odors could result from cooking activities associated with the new residential buildings, which would be similar to existing residential uses in the vicinity and would be confined to the immediate vicinity of the new buildings. While new trash receptacles would be placed within project site, these receptacles would have lids and be emptied on a regular basis, before potentially substantial odors have a chance to develop. As a result, objectionable odors produced as a result of the proposed project are not expected to affect a substantial number of people.

Appendix Air Quality Data

URBEMIS 2002 For Windows 8.7.0

File Name: P:\Projects - All Users\11000-00+\11034-00 HB Newland St. Residential Project\EIP
P

Project Name: Newland Street Residential Project (11034-00) - Construction Emissions (Demolitio

Project Location: South Coast Air Basin (Los Angeles area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Pounds/Day - Summer)

CONSTRUCTION EMISSION ESTIMATES

*** 2006 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
TOTALS (lbs/day,unmitigated)	5.50	37.81	46.11	0.07	2.90	1.54	1.36

URBEMIS 2002 For Windows 8.7.0

File Name: P:\Projects - All Users\11000-00+\11034-00 HB Newland St. Residential Project\EIR
Project Name: Newland Street Residential Project (11034-00) - Construction Emissions (Demolitio
Project Location: South Coast Air Basin (Los Angeles area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Pounds/Day - Winter)

CONSTRUCTION EMISSION ESTIMATES

*** 2006 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
TOTALS (lbs/day,unmitigated)	5.50	37.81	46.11	0.07	2.90	1.54	1.36

URBEMIS 2002 For Windows 8.7.0

File Name: P:\Projects - All Users\11000-00+\11034-00 HB Newland St. Residential Project\EIR
Project Name: Newland Street Residential Project (11034-00) - Construction Emissions (Demolitio
Project Location: South Coast Air Basin (Los Angeles area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Tons/Year)

CONSTRUCTION EMISSION ESTIMATES

*** 2006 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
TOTALS (tpy, unmitigated)	0.06	0.41	0.51	0.00	0.03	0.02	0.01

URBEMIS 2002 For Windows 8.7.0

File Name: P:\Projects - All Users\11000-00+\11034-00 HB Newland St. Residential Project\EIR
Project Name: Newland Street Residential Project (11034-00) - Construction Emissions (Demolitic
Project Location: South Coast Air Basin (Los Angeles area) Asphal
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
(Pounds/Day - Winter)

Construction Start Month and Year: June, 2006
Construction Duration: 1
Total Land Use Area to be Developed: 23.1 acres
Maximum Acreage Disturbed Per Day: 2 acres
Single Family Units: 0 Multi-Family Units: 204
Retail/Office/Institutional/Industrial Square Footage: 0

CONSTRUCTION EMISSION ESTIMATES UNMITIGATED (lbs/day)

Source	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
*** 2006***							
Phase 1 - Demolition Emissions							
Fugitive Dust	-	-	-	-	1.33	-	1.33
Off-Road Diesel	5.21	33.62	43.43	-	1.44	1.44	0.00
On-Road Diesel	0.23	4.09	0.84	0.07	0.12	0.10	0.02
Worker Trips	0.06	0.10	1.84	0.00	0.01	0.00	0.01
Maximum lbs/day	5.50	37.81	46.11	0.07	2.90	1.54	1.36
Phase 2 - Site Grading Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Phase 3 - Building Construction							
Bldg Const Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
Bldg Const Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Arch Coatings Off-Gas	0.00	-	-	-	-	-	-
Arch Coatings Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Off-Gas	0.00	-	-	-	-	-	-
Asphalt Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
Asphalt On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Max lbs/day all phases	5.50	37.81	46.11	0.07	2.90	1.54	1.36

Phase 3 - Building Construction Assumptions: Phase Turned OFF
Start Month/Year for Phase 1: Jun '06
Phase 1 Duration: 1 months
Building Volume Total (cubic feet): 69840
Building Volume Daily (cubic feet): 3177.72
On-Road Truck Travel (VMT): 177
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
2	Off Highway Trucks	417	0.490	4.0
1	Scrapers	313	0.660	3.0
1	Tractor/Loaders/Backhoes	79	0.465	3.0

Changes made to the default values for Land Use Trip Percentages

The Trip Rate and/or Acreage values for Condominium/townhouse general
have changed from the defaults 6.9/12.75 to 5.86/12.75

Changes made to the default values for Construction

The user has overridden the Default Phase Lengths

URBEMIS 2002 For Windows 8.7.0

File Name: P:\Projects - All Users\11000-00+\11034-00 HB Newland St. Residential Project\EI
Project Name: Newland Street Residential Project (11034-00) - Construction Emissions (Demolitio
Project Location: South Coast Air Basin (Los Angeles area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
(Pounds/Day - Summer)

Construction Start Month and Year: June, 2006
Construction Duration: 1
Total Land Use Area to be Developed: 23.1 acres
Maximum Acreage Disturbed Per Day: 2 acres
Single Family Units: 0 Multi-Family Units: 204
Retail/Office/Institutional/Industrial Square Footage: 0

CONSTRUCTION EMISSION ESTIMATES UNMITIGATED (lbs/day)

Source	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
*** 2006***							
Phase 1 - Demolition Emissions							
Fugitive Dust	-	-	-	-	1.33	-	1.33
Off-Road Diesel	5.21	33.62	43.43	-	1.44	1.44	0.00
On-Road Diesel	0.23	4.09	0.84	0.07	0.12	0.10	0.02
Worker Trips	0.06	0.10	1.84	0.00	0.01	0.00	0.01
Maximum lbs/day	5.50	37.81	46.11	0.07	2.90	1.54	1.36
Phase 2 - Site Grading Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Phase 3 - Building Construction							
Bldg Const Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
Bldg Const Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Arch Coatings Off-Gas	0.00	-	-	-	-	-	-
Arch Coatings Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Off-Gas	0.00	-	-	-	-	-	-
Asphalt Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
Asphalt On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Max lbs/day all phases	5.50	37.81	46.11	0.07	2.90	1.54	1.36

Phase 3 - Building Construction Assumptions: Phase Turned OFF
Start Month/Year for Phase 1: Jun '06
Phase 1 Duration: 1 months
Building Volume Total (cubic feet): 69840
Building Volume Daily (cubic feet): 3177.72
On-Road Truck Travel (VMT): 177
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
2	Off Highway Trucks	417	0.490	4.0
1	Scrapers	313	0.660	3.0
1	Tractor/Loaders/Backhoes	79	0.465	3.0

Changes made to the default values for Land Use Trip Percentages

The Trip Rate and/or Acreage values for Condominium/townhouse general
have changed from the defaults 6.9/12.75 to 5.86/12.75

Changes made to the default values for Construction

The user has overridden the Default Phase Lengths

URBEMIS 2002 For Windows 8.7.0

File Name: P:\Projects - All Users\11000-00+\11034-00 HB Newland St. Residential Project\EIR
Project Name: Newland Street Residential Project (11034-00) - Construction Emissions (Demolitic
Project Location: South Coast Air Basin (Los Angeles area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
(Tons/Year)

Construction Start Month and Year: June, 2006
Construction Duration: 1
Total Land Use Area to be Developed: 23.1 acres
Maximum Acreage Disturbed Per Day: 2 acres
Single Family Units: 0 Multi-Family Units: 204
Retail/Office/Institutional/Industrial Square Footage: 0

CONSTRUCTION EMISSION ESTIMATES UNMITIGATED (tons/year)

Source	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
*** 2006***							
Phase 1 - Demolition Emissions							
Fugitive Dust	-	-	-	-	0.01	-	0.01
Off-Road Diesel	0.06	0.37	0.48	-	0.02	0.02	0.00
On-Road Diesel	0.00	0.04	0.01	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.02	0.00	0.00	0.00	0.00
Total tons/year	0.06	0.41	0.51	0.00	0.03	0.02	0.01
Phase 2 - Site Grading Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total tons/year	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Phase 3 - Building Construction							
Bldg Const Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
Bldg Const Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Arch Coatings Off-Gas	0.00	-	-	-	-	-	-
Arch Coatings Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Off-Gas	0.00	-	-	-	-	-	-
Asphalt Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
Asphalt On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total tons/year	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total all phases tons/yr	0.06	0.41	0.51	0.00	0.03	0.02	0.01

Phase 3 - Building Construction Assumptions: Phase Turned OFF
Start Month/Year for Phase 1: Jun '06
Phase 1 Duration: 1 months
Building Volume Total (cubic feet): 69840
Building Volume Daily (cubic feet): 3177.72
On-Road Truck Travel (VMT): 177
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
2	Off Highway Trucks	417	0.490	4.0
1	Scrapers	313	0.660	3.0
1	Tractor/Loaders/Backhoes	79	0.465	3.0

Changes made to the default values for Land Use Trip Percentages

The Trip Rate and/or Acreage values for Condominium/townhouse general
have changed from the defaults 6.9/12.75 to 5.86/12.75

Changes made to the default values for Construction

The user has overridden the Default Phase Lengths

URBEMIS 2002 For Windows 8.7.0

File Name: P:\Projects - All Users\11000-00+\11034-00 HB Newland St. Residential Project\EIR
Ai

Project Name: Newland Street Residential Project (11034-00) - Construction Emissions (Soil Impo
Project Location: South Coast Air Basin (Los Angeles area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Pounds/Day - Summer)

CONSTRUCTION EMISSION ESTIMATES

*** 2006 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
TOTALS (lbs/day,unmitigated)	19.96	192.20	145.65	1.07	26.99	6.71	20.28
TOTALS (lbs/day, mitigated)	19.96	192.20	145.65	1.07	9.98	6.71	3.27

*** 2007 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
TOTALS (lbs/day,unmitigated)	19.71	179.46	149.33	0.12	26.31	6.03	20.28
TOTALS (lbs/day, mitigated)	19.71	179.46	149.33	0.12	9.30	6.03	3.27

URBEMIS 2002 For Windows 8.7.0

File Name: P:\Projects - All Users\11000-00+\11034-00 HB Newland St. Residential Project\EIR
Air Quali

Project Name: Newland Street Residential Project (11034-00) - Construction Emissions (Soil Impo
Project Location: South Coast Air Basin (Los Angeles area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Pounds/Day - Winter)

CONSTRUCTION EMISSION ESTIMATES

*** 2006 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
TOTALS (lbs/day,unmitigated)	19.96	192.20	145.65	1.07	26.99	6.71	20.28
TOTALS (lbs/day, mitigated)	19.96	192.20	145.65	1.07	9.98	6.71	3.27

*** 2007 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
TOTALS (lbs/day,unmitigated)	19.71	179.46	149.33	0.12	26.31	6.03	20.28
TOTALS (lbs/day, mitigated)	19.71	179.46	149.33	0.12	9.30	6.03	3.27

URBEMIS 2002 For Windows 8.7.0

File Name: P:\Projects - All Users\11000-00+\11034-00 HB Newland St. Residential Project\EIR

Air Quali

Project Name: Newland Street Residential Project (11034-00) - Construction Emissions (Soil Imp
Project Location: South Coast Air Basin (Los Angeles area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Tons/Year)

CONSTRUCTION EMISSION ESTIMATES

*** 2006 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
TOTALS (tpy, unmitigated)	1.53	14.18	11.20	0.08	2.08	0.52	1.56
TOTALS (tpy, mitigated)	1.53	14.18	11.20	0.08	0.77	0.52	0.25

*** 2007 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
TOTALS (tpy, unmitigated)	0.65	5.92	4.92	0.00	0.87	0.20	0.67
TOTALS (tpy, mitigated)	0.65	5.92	4.92	0.00	0.31	0.20	0.11

URBEMIS 2002 For Windows 8.7.0

File Name: P:\Projects - All Users\11000-00+\11034-00 HB Newland St. Residential Project\EIR

Project Name: Newland Street Residential Project (11034-00) - Construction Emissions (Soil Impo
Project Location: South Coast Air Basin (Los Angeles area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
(Pounds/Day - Winter)

Construction Start Month and Year: June, 2006
Construction Duration: 10
Total Land Use Area to be Developed: 23.1 acres
Maximum Acreage Disturbed Per Day: 2 acres
Single Family Units: 0 Multi-Family Units: 204
Retail/Office/Institutional/Industrial Square Footage: 0

CONSTRUCTION EMISSION ESTIMATES UNMITIGATED (lbs/day)

Source	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
*** 2006***							
Phase 1 - Demolition Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Phase 2 - Site Grading Emissions							
Fugitive Dust	-	-	-	-	20.00	-	20.00
Off-Road Diesel	16.40	118.18	127.17	-	5.29	5.29	0.00
On-Road Diesel	3.29	73.69	12.25	1.07	1.68	1.41	0.27
Worker Trips	0.27	0.33	6.23	0.00	0.02	0.01	0.01
Maximum lbs/day	19.96	192.20	145.65	1.07	26.99	6.71	20.28
Phase 3 - Building Construction							
Bldg Const Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
Bldg Const Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Arch Coatings Off-Gas	0.00	-	-	-	-	-	-
Arch Coatings Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Off-Gas	0.00	-	-	-	-	-	-
Asphalt Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
Asphalt On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Max lbs/day all phases	19.96	192.20	145.65	1.07	26.99	6.71	20.28
*** 2007***							
Phase 1 - Demolition Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Phase 2 - Site Grading Emissions							
Fugitive Dust	-	-	-	-	20.00	-	20.00
Off-Road Diesel	16.40	111.78	131.81	-	4.73	4.73	0.00
On-Road Diesel	3.05	67.36	11.35	0.12	1.56	1.29	0.27
Worker Trips	0.26	0.32	6.17	0.00	0.02	0.01	0.01
Maximum lbs/day	19.71	179.46	149.33	0.12	26.31	6.03	20.28
Phase 3 - Building Construction							
Bldg Const Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
Bldg Const Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Arch Coatings Off-Gas	0.00	-	-	-	-	-	-
Arch Coatings Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Off-Gas	0.00	-	-	-	-	-	-
Asphalt Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
Asphalt On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Max lbs/day all phases	19.71	179.46	149.33	0.12	26.31	6.03	20.28

Phase 3 - Building Construction Assumptions: Phase Turned OFF

Phase 2 - Site Grading Assumptions
Start Month/Year for Phase 2: Jun '06
Phase 2 Duration: 10 months
On-Road Truck Travel (VMT): 2572
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Off Highway Trucks	350	0.490	4.0
3	Other Equipment	200	0.620	4.0
2	Rubber Tired Dozers	352	0.590	4.0
1	Rubber Tired Loaders	165	0.465	4.0
4	Scrapers	313	0.660	4.0

CONSTRUCTION EMISSION ESTIMATES MITIGATED (lbs/day)

Source	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
*** 2006***							
Phase 1 - Demolition Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Phase 2 - Site Grading Emissions							
Fugitive Dust	-	-	-	-	2.99	-	2.99
Off-Road Diesel	16.40	118.18	127.17	-	5.29	5.29	0.00
On-Road Diesel	3.29	73.69	12.25	1.07	1.68	1.41	0.27
Worker Trips	0.27	0.33	6.23	0.00	0.02	0.01	0.01
Maximum lbs/day	19.96	192.20	145.65	1.07	9.98	6.71	3.27
Phase 3 - Building Construction							
Bldg Const Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
Bldg Const Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Arch Coatings Off-Gas	0.00	-	-	-	-	-	-
Arch Coatings Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Off-Gas	0.00	-	-	-	-	-	-
Asphalt Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
Asphalt On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Max lbs/day all phases	19.96	192.20	145.65	1.07	9.98	6.71	3.27
*** 2007***							
Phase 1 - Demolition Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Phase 2 - Site Grading Emissions							
Fugitive Dust	-	-	-	-	2.99	-	2.99
Off-Road Diesel	16.40	111.78	131.81	-	4.73	4.73	0.00
On-Road Diesel	3.05	67.36	11.35	0.12	1.56	1.29	0.27
Worker Trips	0.26	0.32	6.17	0.00	0.02	0.01	0.01
Maximum lbs/day	19.71	179.46	149.33	0.12	9.30	6.03	3.27
Phase 3 - Building Construction							
Bldg Const Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
Bldg Const Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Arch Coatings Off-Gas	0.00	-	-	-	-	-	-
Arch Coatings Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Off-Gas	0.00	-	-	-	-	-	-
Asphalt Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
Asphalt On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Max lbs/day all phases	19.71	179.46	149.33	0.12	9.30	6.03	3.27

Construction-Related Mitigation Measures

Phase 2: Soil Disturbance: Apply soil stabilizers to inactive areas
Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 30.0%)
Phase 2: Soil Disturbance: Replace ground cover in disturbed areas quickly
Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 15.0%)
Phase 2: Soil Disturbance: Water exposed surfaces - 2x daily
Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 34.0%)
Phase 2: Stockpiles: Cover all stock piles with tarps
Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 9.5%)
Phase 2: Unpaved Roads: Water all haul roads 2x daily
Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 30.0%)
Phase 2: Unpaved Roads: Reduce speed on unpaved roads to < 15 mph
Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 40.0%)
Phase 3 - Building Construction Assumptions: Phase Turned OFF

Phase 2 - Site Grading Assumptions
Start Month/Year for Phase 2: Jun '06
Phase 2 Duration: 10 months
On-Road Truck Travel (VMT): 2572
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Off Highway Trucks	350	0.490	4.0
3	Other Equipment	200	0.620	4.0
2	Rubber Tired Dozers	352	0.590	4.0
1	Rubber Tired Loaders	165	0.465	4.0
4	Scrapers	313	0.660	4.0

Changes made to the default values for Land Use Trip Percentages

The Trip Rate and/or Acreage values for Condominium/townhouse general
have changed from the defaults 6.9/12.75 to 5.86/12.75

Changes made to the default values for Construction

The user has overridden the Default Phase Lengths
Site Grading Truck Haul Capacity (yds3) changed from 20 to 13
Site Grading Miles/Round Trip changed from 20 to 40
Phase 2 mitigation measure Soil Disturbance: Apply soil stabilizers to inactive areas
has been changed from off to on.
Phase 2 mitigation measure Soil Disturbance: Replace ground cover in disturbed areas quickly
has been changed from off to on.
Phase 2 mitigation measure Soil Disturbance: Water exposed surfaces - 2x daily
has been changed from off to on.
Phase 2 mitigation measure Stockpiles: Cover all stock piles with tarps
has been changed from off to on.
Phase 2 mitigation measure Unpaved Roads: Water all haul roads 2x daily
has been changed from off to on.
Phase 2 mitigation measure Unpaved Roads: Reduce speed on unpaved roads to < 15 mph
has been changed from off to on.

URBEMIS 2002 For Windows 8.7.0

File Name: P:\Projects - All Users\11000-00+\11034-00 HB Newland St. Residential Project\EI

Project Name: Newland Street Residential Project (11034-00) - Construction Emissions (Soil Impo
Project Location: South Coast Air Basin (Los Angeles area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
(Pounds/Day - Summer)

Construction Start Month and Year: June, 2006
Construction Duration: 10
Total Land Use Area to be Developed: 23.1 acres
Maximum Acreage Disturbed Per Day: 2 acres
Single Family Units: 0 Multi-Family Units: 204
Retail/Office/Institutional/Industrial Square Footage: 0

CONSTRUCTION EMISSION ESTIMATES UNMITIGATED (lbs/day)

Source	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
*** 2006***							
Phase 1 - Demolition Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Phase 2 - Site Grading Emissions							
Fugitive Dust	-	-	-	-	20.00	-	20.00
Off-Road Diesel	16.40	118.18	127.17	-	5.29	5.29	0.00
On-Road Diesel	3.29	73.69	12.25	1.07	1.68	1.41	0.27
Worker Trips	0.27	0.33	6.23	0.00	0.02	0.01	0.01
Maximum lbs/day	19.96	192.20	145.65	1.07	26.99	6.71	20.28
Phase 3 - Building Construction							
Bldg Const Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
Bldg Const Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Arch Coatings Off-Gas	0.00	-	-	-	-	-	-
Arch Coatings Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Off-Gas	0.00	-	-	-	-	-	-
Asphalt Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
Asphalt On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Max lbs/day all phases	19.96	192.20	145.65	1.07	26.99	6.71	20.28
*** 2007***							
Phase 1 - Demolition Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Phase 2 - Site Grading Emissions							
Fugitive Dust	-	-	-	-	20.00	-	20.00
Off-Road Diesel	16.40	111.78	131.81	-	4.73	4.73	0.00
On-Road Diesel	3.05	67.36	11.35	0.12	1.56	1.29	0.27
Worker Trips	0.26	0.32	6.17	0.00	0.02	0.01	0.01
Maximum lbs/day	19.71	179.46	149.33	0.12	26.31	6.03	20.28
Phase 3 - Building Construction							
Bldg Const Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
Bldg Const Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Arch Coatings Off-Gas	0.00	-	-	-	-	-	-
Arch Coatings Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Off-Gas	0.00	-	-	-	-	-	-
Asphalt Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
Asphalt On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Max lbs/day all phases	19.71	179.46	149.33	0.12	26.31	6.03	20.28

Phase 3 - Building Construction Assumptions: Phase Turned OFF

Phase 2 - Site Grading Assumptions
Start Month/Year for Phase 2: Jun '06
Phase 2 Duration: 10 months
On-Road Truck Travel (VMT): 2572
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Off Highway Trucks	350	0.490	4.0
3	Other Equipment	200	0.620	4.0
2	Rubber Tired Dozers	352	0.590	4.0
1	Rubber Tired Loaders	165	0.465	4.0
4	Scrapers	313	0.660	4.0

CONSTRUCTION EMISSION ESTIMATES MITIGATED (lbs/day)

Source	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
*** 2006***							
Phase 1 - Demolition Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Phase 2 - Site Grading Emissions							
Fugitive Dust	-	-	-	-	2.99	-	2.99
Off-Road Diesel	16.40	118.18	127.17	-	5.29	5.29	0.00
On-Road Diesel	3.29	73.69	12.25	1.07	1.68	1.41	0.27
Worker Trips	0.27	0.33	6.23	0.00	0.02	0.01	0.01
Maximum lbs/day	19.96	192.20	145.65	1.07	9.98	6.71	3.27
Phase 3 - Building Construction							
Bldg Const Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
Bldg Const Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Arch Coatings Off-Gas	0.00	-	-	-	-	-	-
Arch Coatings Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Off-Gas	0.00	-	-	-	-	-	-
Asphalt Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
Asphalt On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Max lbs/day all phases	19.96	192.20	145.65	1.07	9.98	6.71	3.27
*** 2007***							
Phase 1 - Demolition Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Phase 2 - Site Grading Emissions							
Fugitive Dust	-	-	-	-	2.99	-	2.99
Off-Road Diesel	16.40	111.78	131.81	-	4.73	4.73	0.00
On-Road Diesel	3.05	67.36	11.35	0.12	1.56	1.29	0.27
Worker Trips	0.26	0.32	6.17	0.00	0.02	0.01	0.01
Maximum lbs/day	19.71	179.46	149.33	0.12	9.30	6.03	3.27
Phase 3 - Building Construction							
Bldg Const Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
Bldg Const Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Arch Coatings Off-Gas	0.00	-	-	-	-	-	-
Arch Coatings Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Off-Gas	0.00	-	-	-	-	-	-
Asphalt Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
Asphalt On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Max lbs/day all phases	19.71	179.46	149.33	0.12	9.30	6.03	3.27

Construction-Related Mitigation Measures

Phase 2: Soil Disturbance: Apply soil stabilizers to inactive areas
Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 30.0%)
Phase 2: Soil Disturbance: Replace ground cover in disturbed areas quickly
Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 15.0%)
Phase 2: Soil Disturbance: Water exposed surfaces - 2x daily
Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 34.0%)
Phase 2: Stockpiles: Cover all stock piles with tarps
Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 9.5%)
Phase 2: Unpaved Roads: Water all haul roads 2x daily
Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 30.0%)
Phase 2: Unpaved Roads: Reduce speed on unpaved roads to < 15 mph
Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 40.0%)
Phase 3 - Building Construction Assumptions: Phase Turned OFF

Phase 2 - Site Grading Assumptions
Start Month/Year for Phase 2: Jun '06
Phase 2 Duration: 10 months
On-Road Truck Travel (VMT): 2572
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Off Highway Trucks	350	0.490	4.0
3	Other Equipment	200	0.620	4.0
2	Rubber Tired Dozers	352	0.590	4.0
1	Rubber Tired Loaders	165	0.465	4.0
4	Scrapers	313	0.660	4.0

Changes made to the default values for Land Use Trip Percentages

The Trip Rate and/or Acreage values for Condominium/townhouse general
have changed from the defaults 6.9/12.75 to 5.86/12.75

Changes made to the default values for Construction

The user has overridden the Default Phase Lengths
Site Grading Truck Haul Capacity (yds3) changed from 20 to 13
Site Grading Miles/Round Trip changed from 20 to 40
Phase 2 mitigation measure Soil Disturbance: Apply soil stabilizers to inactive areas
has been changed from off to on.
Phase 2 mitigation measure Soil Disturbance: Replace ground cover in disturbed areas quickly
has been changed from off to on.
Phase 2 mitigation measure Soil Disturbance: Water exposed surfaces - 2x daily
has been changed from off to on.
Phase 2 mitigation measure Stockpiles: Cover all stock piles with tarps
has been changed from off to on.
Phase 2 mitigation measure Unpaved Roads: Water all haul roads 2x daily
has been changed from off to on.
Phase 2 mitigation measure Unpaved Roads: Reduce speed on unpaved roads to < 15 mph
has been changed from off to on.

URBEMIS 2002 For Windows 8.7.0

File Name: P:\Projects - All Users\11000-00+\11034-00 HB Newland St. Residential Project\EIR

Project Name: Newland Street Residential Project (11034-00) - Construction Emissions (Soil Impo
Project Location: South Coast Air Basin (Los Angeles area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
(Tons/Year)

Construction Start Month and Year: June, 2006
Construction Duration: 10
Total Land Use Area to be Developed: 23.1 acres
Maximum Acreage Disturbed Per Day: 2 acres
Single Family Units: 0 Multi-Family Units: 204
Retail/Office/Institutional/Industrial Square Footage: 0

CONSTRUCTION EMISSION ESTIMATES UNMITIGATED (tons/year)

Source	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
*** 2006***							
Phase 1 - Demolition Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total tons/year	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Phase 2 - Site Grading Emissions							
Fugitive Dust	-	-	-	-	1.54	-	1.54
Off-Road Diesel	1.26	9.10	9.79	-	0.41	0.41	0.00
On-Road Diesel	0.25	5.06	0.94	0.08	0.13	0.11	0.02
Worker Trips	0.02	0.02	0.47	0.00	0.00	0.00	0.00
Total tons/year	1.53	14.18	11.20	0.08	2.08	0.52	1.56
Phase 3 - Building Construction							
Bldg Const Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
Bldg Const Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Arch Coatings Off-Gas	0.00	-	-	-	-	-	-
Arch Coatings Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Off-Gas	0.00	-	-	-	-	-	-
Asphalt Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
Asphalt On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total tons/year	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total all phases tons/yr	1.53	14.18	11.20	0.08	2.08	0.52	1.56
*** 2007***							
Phase 1 - Demolition Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total tons/year	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Phase 2 - Site Grading Emissions							
Fugitive Dust	-	-	-	-	0.66	-	0.66
Off-Road Diesel	0.54	3.69	4.35	-	0.16	0.16	0.00
On-Road Diesel	0.10	2.22	0.37	0.00	0.05	0.04	0.01
Worker Trips	0.01	0.01	0.20	0.00	0.00	0.00	0.00
Total tons/year	0.65	5.92	4.92	0.00	0.87	0.20	0.67
Phase 3 - Building Construction							
Bldg Const Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
Bldg Const Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Arch Coatings Off-Gas	0.00	-	-	-	-	-	-
Arch Coatings Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Off-Gas	0.00	-	-	-	-	-	-
Asphalt Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
Asphalt On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total tons/year	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total all phases tons/yr	0.65	5.92	4.92	0.00	0.87	0.20	0.67

Phase 3 - Building Construction Assumptions: Phase Turned OFF

Phase 2 - Site Grading Assumptions
Start Month/Year for Phase 2: Jun '06
Phase 2 Duration: 10 months
On-Road Truck Travel (VMT): 2572
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Off Highway Trucks	350	0.490	4.0
3	Other Equipment	200	0.620	4.0
2	Rubber Tired Dozers	352	0.590	4.0
1	Rubber Tired Loaders	165	0.465	4.0
4	Scrapers	313	0.660	4.0

CONSTRUCTION EMISSION ESTIMATES MITIGATED (tons/year)

Source	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
*** 2006***							
Phase 1 - Demolition Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total tons/year	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Phase 2 - Site Grading Emissions							
Fugitive Dust	-	-	-	-	0.23	-	0.23
Off-Road Diesel	1.26	9.10	9.79	-	0.41	0.41	0.00
On-Road Diesel	0.25	5.06	0.94	0.08	0.13	0.11	0.02
Worker Trips	0.02	0.02	0.47	0.00	0.00	0.00	0.00
Total tons/year	1.53	14.18	11.20	0.08	0.77	0.52	0.25
Phase 3 - Building Construction							
Bldg Const Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
Bldg Const Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Arch Coatings Off-Gas	0.00	-	-	-	-	-	-
Arch Coatings Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Off-Gas	0.00	-	-	-	-	-	-
Asphalt Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
Asphalt On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total tons/year	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total all phases tons/yr	1.53	14.18	11.20	0.08	0.77	0.52	0.25
*** 2007***							
Phase 1 - Demolition Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total tons/year	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Phase 2 - Site Grading Emissions							
Fugitive Dust	-	-	-	-	0.10	-	0.10
Off-Road Diesel	0.54	3.69	4.35	-	0.16	0.16	0.00
On-Road Diesel	0.10	2.22	0.37	0.00	0.05	0.04	0.01
Worker Trips	0.01	0.01	0.20	0.00	0.00	0.00	0.00
Total tons/year	0.65	5.92	4.92	0.00	0.31	0.20	0.11
Phase 3 - Building Construction							
Bldg Const Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
Bldg Const Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Arch Coatings Off-Gas	0.00	-	-	-	-	-	-
Arch Coatings Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Off-Gas	0.00	-	-	-	-	-	-
Asphalt Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
Asphalt On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total tons/year	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total all phases tons/yr	0.65	5.92	4.92	0.00	0.31	0.20	0.11

Construction-Related Mitigation Measures

Phase 2: Soil Disturbance: Apply soil stabilizers to inactive areas
Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 30.0%)
Phase 2: Soil Disturbance: Replace ground cover in disturbed areas quickly
Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 15.0%)
Phase 2: Soil Disturbance: Water exposed surfaces - 2x daily
Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 34.0%)
Phase 2: Stockpiles: Cover all stock piles with tarps
Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 9.5%)
Phase 2: Unpaved Roads: Water all haul roads 2x daily
Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 30.0%)
Phase 2: Unpaved Roads: Reduce speed on unpaved roads to < 15 mph
Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 40.0%)
Phase 3 - Building Construction Assumptions: Phase Turned OFF

Phase 2 - Site Grading Assumptions
Start Month/Year for Phase 2: Jun '06
Phase 2 Duration: 10 months
On-Road Truck Travel (VMT): 2572
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Off Highway Trucks	350	0.490	4.0
3	Other Equipment	200	0.620	4.0
2	Rubber Tired Dozers	352	0.590	4.0
1	Rubber Tired Loaders	165	0.465	4.0
4	Scrapers	313	0.660	4.0

Changes made to the default values for Land Use Trip Percentages

The Trip Rate and/or Acreage values for Condominium/townhouse general
have changed from the defaults 6.9/12.75 to 5.86/12.75

Changes made to the default values for Construction

The user has overridden the Default Phase Lengths
Site Grading Truck Haul Capacity (yds3) changed from 20 to 13
Site Grading Miles/Round Trip changed from 20 to 40
Phase 2 mitigation measure Soil Disturbance: Apply soil stabilizers to inactive areas
has been changed from off to on.
Phase 2 mitigation measure Soil Disturbance: Replace ground cover in disturbed areas quickly
has been changed from off to on.
Phase 2 mitigation measure Soil Disturbance: Water exposed surfaces - 2x daily
has been changed from off to on.
Phase 2 mitigation measure Stockpiles: Cover all stock piles with tarps
has been changed from off to on.
Phase 2 mitigation measure Unpaved Roads: Water all haul roads 2x daily
has been changed from off to on.
Phase 2 mitigation measure Unpaved Roads: Reduce speed on unpaved roads to < 15 mph
has been changed from off to on.

URBEMIS 2002 For Windows 8.7.0

File Name: P:\Projects - All Users\11000-00+\11034-00 HB Newland St. Residential Project\EIR

Project Name: Newland Street Residential Project (11034-00) - Construction Emissions (Utilities

Project Location: South Coast Air Basin (Los Angeles area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Pounds/Day - Summer)

CONSTRUCTION EMISSION ESTIMATES

*** 2006 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
TOTALS (lbs/day,unmitigated)	27.96	181.80	246.30	0.02	7.71	7.63	0.08

*** 2007 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
TOTALS (lbs/day,unmitigated)	197.28	176.56	248.44	0.02	6.95	6.87	0.08

*** 2008 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
TOTALS (lbs/day,unmitigated)	5.09	29.23	40.65	0.00	0.97	0.96	0.01

URBEMIS 2002 For Windows 8.7.0

File Name: P:\Projects - All Users\11000-00+\11034-00 HB Newland St. Residential Project\EIR

Project Name: Newland Street Residential Project (11034-00) - Construction Emissions (Utilities

Project Location: South Coast Air Basin (Los Angeles area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Pounds/Day - Winter)

CONSTRUCTION EMISSION ESTIMATES

*** 2006 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
TOTALS (lbs/day,unmitigated)	27.96	181.80	246.30	0.02	7.71	7.63	0.08

*** 2007 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
TOTALS (lbs/day,unmitigated)	197.28	176.56	248.44	0.02	6.95	6.87	0.08

*** 2008 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
TOTALS (lbs/day,unmitigated)	5.09	29.23	40.65	0.00	0.97	0.96	0.01

URBEMIS 2002 For Windows 8.7.0

File Name: P:\Projects - All Users\11000-00+\11034-00 HB Newland St. Residential Project\EIR

Project Name: Newland Street Residential Project (11034-00) - Construction Emissions (Utilities

Project Location: South Coast Air Basin (Los Angeles area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Tons/Year)

CONSTRUCTION EMISSION ESTIMATES

*** 2006 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
TOTALS (tpy, unmitigated)	2.15	14.00	18.89	0.00	0.59	0.58	0.01

*** 2007 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
TOTALS (tpy, unmitigated)	7.15	17.81	25.13	0.00	0.70	0.69	0.01

*** 2008 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
TOTALS (tpy, unmitigated)	0.05	0.32	0.44	0.00	0.01	0.01	0.00

URBEMIS 2002 For Windows 8.7.0

File Name: P:\Projects - All Users\11000-00+\11034-00 HB Newland St. Residential Project\EI
Project Name: Newland Street Residential Project (11034-00) - Construction Emissions (Utilitie
Project Location: South Coast Air Basin (Los Angeles area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
(Pounds/Day - Winter)

Construction Start Month and Year: June, 2006
Construction Duration: 20
Total Land Use Area to be Developed: 0 acres
Maximum Acreage Disturbed Per Day: 0 acres
Single Family Units: 0 Multi-Family Units: 204
Retail/Office/Institutional/Industrial Square Footage: 0

CONSTRUCTION EMISSION ESTIMATES UNMITIGATED (lbs/day)

Source	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
*** 2006***							
Phase 1 - Demolition Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Phase 2 - Site Grading Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Phase 3 - Building Construction							
Bldg Const Off-Road Diesel	26.56	180.09	213.63	-	7.59	7.59	0.00
Bldg Const Worker Trips	1.40	1.71	32.68	0.02	0.13	0.05	0.08
Arch Coatings Off-Gas	0.00	-	-	-	-	-	-
Arch Coatings Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Off-Gas	0.00	-	-	-	-	-	-
Asphalt Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
Asphalt On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	27.96	181.80	246.30	0.02	7.71	7.63	0.08
Max lbs/day all phases	27.96	181.80	246.30	0.02	7.71	7.63	0.08
*** 2007***							
Phase 1 - Demolition Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Phase 2 - Site Grading Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Phase 3 - Building Construction							
Bldg Const Off-Road Diesel	26.56	174.87	216.10	-	6.83	6.83	0.00
Bldg Const Worker Trips	1.36	1.69	32.34	0.02	0.13	0.05	0.08
Arch Coatings Off-Gas	196.85	-	-	-	-	-	-
Arch Coatings Worker Trips	0.43	0.25	5.27	0.00	0.08	0.00	0.08
Asphalt Off-Gas	0.29	-	-	-	-	-	-
Asphalt Off-Road Diesel	4.72	28.71	40.11	-	1.04	1.04	0.00
Asphalt On-Road Diesel	0.06	1.16	0.22	0.00	0.03	0.03	0.00
Asphalt Worker Trips	0.03	0.02	0.36	0.00	0.01	0.00	0.01
Maximum lbs/day	197.28	176.56	248.44	0.02	6.95	6.87	0.08
Max lbs/day all phases	197.28	176.56	248.44	0.02	6.95	6.87	0.08
*** 2008***							

Phase 1 - Demolition Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Phase 2 - Site Grading Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Phase 3 - Building Construction							
Bldg Const Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
Bldg Const Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Arch Coatings Off-Gas	0.00	-	-	-	-	-	-
Arch Coatings Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Off-Gas	0.29	-	-	-	-	-	-
Asphalt Off-Road Diesel	4.72	28.16	40.11	-	0.94	0.94	0.00
Asphalt On-Road Diesel	0.06	1.06	0.20	0.00	0.02	0.02	0.00
Asphalt Worker Trips	0.03	0.02	0.33	0.00	0.01	0.00	0.01
Maximum lbs/day	5.09	29.23	40.65	0.00	0.97	0.96	0.01
Max lbs/day all phases	5.09	29.23	40.65	0.00	0.97	0.96	0.01

Phase 2 - Site Grading Assumptions: Phase Turned OFF

Phase 3 - Building Construction Assumptions
Start Month/Year for Phase 3: Jun '06
Phase 3 Duration: 20 months
Start Month/Year for SubPhase Building: Jun '06
SubPhase Building Duration: 16 months
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
2	Excavators	180	0.580	4.0
9	Off Highway Trucks	350	0.490	4.0
6	Other Equipment	200	0.620	4.0
3	Rough Terrain Forklifts	94	0.475	4.0
4	Skid Steer Loaders	62	0.515	4.0
7	Tractor/Loaders/Backhoes	79	0.465	4.0

Start Month/Year for SubPhase Architectural Coatings: Oct '07
SubPhase Architectural Coatings Duration: 2 months
Start Month/Year for SubPhase Asphalt: Dec '07
SubPhase Asphalt Duration: 2 months
Acres to be Paved: 4.82
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
2	Off Highway Trucks	417	0.490	4.0
1	Pavers	132	0.590	4.0
1	Rollers	114	0.430	4.0

Changes made to the default values for Land Use Trip Percentages

The Trip Rate and/or Acreage values for Condominium/townhouse general
have changed from the defaults 6.9/12.75 to 5.86/12.75

Changes made to the default values for Construction

The user has overridden the Default Phase Lengths

URBEMIS 2002 For Windows 8.7.0

File Name: P:\Projects - All Users\11000-00+\11034-00 HB Newland St. Residential Project\EIR
Project Name: Newland Street Residential Project (11034-00) - Construction Emissions (Utilities
Project Location: South Coast Air Basin (Los Angeles area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
(Pounds/Day - Summer)

Construction Start Month and Year: June, 2006
Construction Duration: 20
Total Land Use Area to be Developed: 0 acres
Maximum Acreage Disturbed Per Day: 0 acres
Single Family Units: 0 Multi-Family Units: 204
Retail/Office/Institutional/Industrial Square Footage: 0

CONSTRUCTION EMISSION ESTIMATES UNMITIGATED (lbs/day)

Source	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
*** 2006***							
Phase 1 - Demolition Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Phase 2 - Site Grading Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Phase 3 - Building Construction							
Bldg Const Off-Road Diesel	26.56	180.09	213.63	-	7.59	7.59	0.00
Bldg Const Worker Trips	1.40	1.71	32.68	0.02	0.13	0.05	0.08
Arch Coatings Off-Gas	0.00	-	-	-	-	-	-
Arch Coatings Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Off-Gas	0.00	-	-	-	-	-	-
Asphalt Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
Asphalt On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	27.96	181.80	246.30	0.02	7.71	7.63	0.08
Max lbs/day all phases	27.96	181.80	246.30	0.02	7.71	7.63	0.08
*** 2007***							
Phase 1 - Demolition Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Phase 2 - Site Grading Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Phase 3 - Building Construction							
Bldg Const Off-Road Diesel	26.56	174.87	216.10	-	6.83	6.83	0.00
Bldg Const Worker Trips	1.36	1.69	32.34	0.02	0.13	0.05	0.08
Arch Coatings Off-Gas	196.85	-	-	-	-	-	-
Arch Coatings Worker Trips	0.43	0.25	5.27	0.00	0.08	0.00	0.08
Asphalt Off-Gas	0.29	-	-	-	-	-	-
Asphalt Off-Road Diesel	4.72	28.71	40.11	-	1.04	1.04	0.00
Asphalt On-Road Diesel	0.06	1.16	0.22	0.00	0.03	0.03	0.00
Asphalt Worker Trips	0.03	0.02	0.36	0.00	0.01	0.00	0.01
Maximum lbs/day	197.28	176.56	248.44	0.02	6.95	6.87	0.08
Max lbs/day all phases	197.28	176.56	248.44	0.02	6.95	6.87	0.08
*** 2008***							

Phase 1 - Demolition Emissions

Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Phase 2 - Site Grading Emissions

Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Phase 3 - Building Construction

Bldg Const Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
Bldg Const Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Arch Coatings Off-Gas	0.00	-	-	-	-	-	-
Arch Coatings Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Off-Gas	0.29	-	-	-	-	-	-
Asphalt Off-Road Diesel	4.72	28.16	40.11	-	0.94	0.94	0.00
Asphalt On-Road Diesel	0.06	1.06	0.20	0.00	0.02	0.02	0.00
Asphalt Worker Trips	0.03	0.02	0.33	0.00	0.01	0.00	0.01
Maximum lbs/day	5.09	29.23	40.65	0.00	0.97	0.96	0.01
Max lbs/day all phases	5.09	29.23	40.65	0.00	0.97	0.96	0.01

Phase 2 - Site Grading Assumptions: Phase Turned OFF

Phase 3 - Building Construction Assumptions
Start Month/Year for Phase 3: Jun '06
Phase 3 Duration: 20 months
Start Month/Year for SubPhase Building: Jun '06
SubPhase Building Duration: 16 months
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
2	Excavators	180	0.580	4.0
9	Off Highway Trucks	350	0.490	4.0
6	Other Equipment	200	0.620	4.0
3	Rough Terrain Forklifts	94	0.475	4.0
4	Skid Steer Loaders	62	0.515	4.0
7	Tractor/Loaders/Backhoes	79	0.465	4.0

Start Month/Year for SubPhase Architectural Coatings: Oct '07
SubPhase Architectural Coatings Duration: 2 months
Start Month/Year for SubPhase Asphalt: Dec '07
SubPhase Asphalt Duration: 2 months
Acres to be Paved: 4.82
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
2	Off Highway Trucks	417	0.490	4.0
1	Pavers	132	0.590	4.0
1	Rollers	114	0.430	4.0

Changes made to the default values for Land Use Trip Percentages

The Trip Rate and/or Acreage values for Condominium/townhouse general
have changed from the defaults 6.9/12.75 to 5.86/12.75

Changes made to the default values for Construction

The user has overridden the Default Phase Lengths

URBEMIS 2002 For Windows 8.7.0

File Name: P:\Projects - All Users\11000-00+\11034-00 HB Newland St. Residential Project\EIR
Project Name: Newland Street Residential Project (11034-00) - Construction Emissions (Utilities
Project Location: South Coast Air Basin (Los Angeles area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
(Tons/Year)

Construction Start Month and Year: June, 2006
Construction Duration: 20
Total Land Use Area to be Developed: 0 acres
Maximum Acreage Disturbed Per Day: 0 acres
Single Family Units: 0 Multi-Family Units: 204
Retail/Office/Institutional/Industrial Square Footage: 0

CONSTRUCTION EMISSION ESTIMATES UNMITIGATED (tons/year)

Source	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
*** 2006***							
Phase 1 - Demolition Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total tons/year	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Phase 2 - Site Grading Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total tons/year	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Phase 3 - Building Construction							
Bldg Const Off-Road Diesel	2.05	13.87	16.45	-	0.58	0.58	0.00
Bldg Const Worker Trips	0.10	0.13	2.44	0.00	0.01	0.00	0.01
Arch Coatings Off-Gas	0.00	-	-	-	-	-	-
Arch Coatings Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Off-Gas	0.00	-	-	-	-	-	-
Asphalt Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
Asphalt On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total tons/year	2.15	14.00	18.89	0.00	0.59	0.58	0.01
Total all phases tons/yr	2.15	14.00	18.89	0.00	0.59	0.58	0.01
*** 2007***							
Phase 1 - Demolition Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total tons/year	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Phase 2 - Site Grading Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total tons/year	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Phase 3 - Building Construction							
Bldg Const Off-Road Diesel	2.63	17.31	21.39	-	0.68	0.68	0.00
Bldg Const Worker Trips	0.13	0.16	3.18	0.00	0.01	0.00	0.01
Arch Coatings Off-Gas	4.33	-	-	-	-	-	-
Arch Coatings Worker Trips	0.01	0.01	0.12	0.00	0.00	0.00	0.00
Asphalt Off-Gas	0.00	-	-	-	-	-	-
Asphalt Off-Road Diesel	0.05	0.32	0.44	-	0.01	0.01	0.00
Asphalt On-Road Diesel	0.00	0.01	0.00	0.00	0.00	0.00	0.00
Asphalt Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total tons/year	7.15	17.81	25.13	0.00	0.70	0.69	0.01
Total all phases tons/yr	7.15	17.81	25.13	0.00	0.70	0.69	0.01
*** 2008***							

Phase 1 - Demolition Emissions

Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total tons/year	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Phase 2 - Site Grading Emissions

Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total tons/year	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Phase 3 - Building Construction

Bldg Const Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
Bldg Const Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Arch Coatings Off-Gas	0.00	-	-	-	-	-	-
Arch Coatings Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Off-Gas	0.00	-	-	-	-	-	-
Asphalt Off-Road Diesel	0.05	0.31	0.44	-	0.01	0.01	0.00
Asphalt On-Road Diesel	0.00	0.01	0.00	0.00	0.00	0.00	0.00
Asphalt Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total tons/year	0.05	0.32	0.44	0.00	0.01	0.01	0.00
Total all phases tons/yr	0.05	0.32	0.44	0.00	0.01	0.01	0.00

Phase 2 - Site Grading Assumptions: Phase Turned OFF

Phase 3 - Building Construction Assumptions
Start Month/Year for Phase 3: Jun '06
Phase 3 Duration: 20 months
Start Month/Year for SubPhase Building: Jun '06
SubPhase Building Duration: 16 months
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
2	Excavators	180	0.580	4.0
9	Off Highway Trucks	350	0.490	4.0
6	Other Equipment	200	0.620	4.0
3	Rough Terrain Forklifts	94	0.475	4.0
4	Skid Steer Loaders	62	0.515	4.0
7	Tractor/Loaders/Backhoes	79	0.465	4.0

Start Month/Year for SubPhase Architectural Coatings: Oct '07
SubPhase Architectural Coatings Duration: 2 months
Start Month/Year for SubPhase Asphalt: Dec '07
SubPhase Asphalt Duration: 2 months
Acres to be Paved: 4.82
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
2	Off Highway Trucks	417	0.490	4.0
1	Pavers	132	0.590	4.0
1	Rollers	114	0.430	4.0

Changes made to the default values for Land Use Trip Percentages

The Trip Rate and/or Acreage values for Condominium/townhouse general
have changed from the defaults 6.9/12.75 to 5.86/12.75

Changes made to the default values for Construction

The user has overridden the Default Phase Lengths

URBEMIS 2002 For Windows 8.7.0

File Name: P:\Projects - All Users\11000-00+\11034-00 HB Newland St. Residential Project\EIR

Project Name: Newland Street Residential Project (11034-00) - Construction Emissions (Utilities

Project Location: South Coast Air Basin (Los Angeles area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Pounds/Day - Summer)

CONSTRUCTION EMISSION ESTIMATES

*** 2006 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
TOTALS (lbs/day,unmitigated)	27.96	181.80	246.30	0.02	7.71	7.63	0.08

*** 2007 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
TOTALS (lbs/day,unmitigated)	70.66	176.56	248.44	0.02	6.95	6.87	0.08

*** 2008 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
TOTALS (lbs/day,unmitigated)	5.09	29.23	40.65	0.00	0.97	0.96	0.01

URBEMIS 2002 For Windows 8.7.0

File Name: P:\Projects - All Users\11000-00+\11034-00 HB Newland St. Residential Project\EIR

Project Name: Newland Street Residential Project (11034-00) - Construction Emissions (Utilities

Project Location: South Coast Air Basin (Los Angeles area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Pounds/Day - Winter)

CONSTRUCTION EMISSION ESTIMATES

*** 2006 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
TOTALS (lbs/day,unmitigated)	27.96	181.80	246.30	0.02	7.71	7.63	0.08

*** 2007 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
TOTALS (lbs/day,unmitigated)	70.66	176.56	248.44	0.02	6.95	6.87	0.08

*** 2008 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
TOTALS (lbs/day,unmitigated)	5.09	29.23	40.65	0.00	0.97	0.96	0.01

URBEMIS 2002 For Windows 8.7.0

File Name: P:\Projects - All Users\11000-00+\11034-00 HB Newland St. Residential Project\EI

Project Name: Newland Street Residential Project (11034-00) - Construction Emissions (Utilitie

Project Location: South Coast Air Basin (Los Angeles area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Tons/Year)

CONSTRUCTION EMISSION ESTIMATES

*** 2006 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
TOTALS (tpy, unmitigated)	2.15	14.00	18.89	0.00	0.59	0.58	0.01

*** 2007 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
TOTALS (tpy, unmitigated)	4.36	17.81	25.13	0.00	0.70	0.69	0.01

*** 2008 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
TOTALS (tpy, unmitigated)	0.05	0.32	0.44	0.00	0.01	0.01	0.00

URBEMIS 2002 For Windows 8.7.0

File Name: P:\Projects - All Users\11000-00+\11034-00 HB Newland St. Residential Project\EI

Project Name: Newland Street Residential Project (11034-00) - Construction Emissions (Utilitie
Home

Project Location: South Coast Air Basin (Los Angeles area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
(Pounds/Day - Winter)

Construction Start Month and Year: June, 2006
Construction Duration: 20
Total Land Use Area to be Developed: 0 acres
Maximum Acreage Disturbed Per Day: 0 acres
Single Family Units: 0 Multi-Family Units: 204
Retail/Office/Institutional/Industrial Square Footage: 0

CONSTRUCTION EMISSION ESTIMATES UNMITIGATED (lbs/day)

Source	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
*** 2006***							
Phase 1 - Demolition Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Phase 2 - Site Grading Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Phase 3 - Building Construction							
Bldg Const Off-Road Diesel	26.56	180.09	213.63	-	7.59	7.59	0.00
Bldg Const Worker Trips	1.40	1.71	32.68	0.02	0.13	0.05	0.08
Arch Coatings Off-Gas	0.00	-	-	-	-	-	-
Arch Coatings Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Off-Gas	0.00	-	-	-	-	-	-
Asphalt Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
Asphalt On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	27.96	181.80	246.30	0.02	7.71	7.63	0.08
Max lbs/day all phases	27.96	181.80	246.30	0.02	7.71	7.63	0.08
*** 2007***							
Phase 1 - Demolition Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Phase 2 - Site Grading Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Phase 3 - Building Construction							
Bldg Const Off-Road Diesel	26.56	174.87	216.10	-	6.83	6.83	0.00
Bldg Const Worker Trips	1.36	1.69	32.34	0.02	0.13	0.05	0.08
Arch Coatings Off-Gas	70.23	-	-	-	-	-	-
Arch Coatings Worker Trips	0.43	0.25	5.27	0.00	0.08	0.00	0.08
Asphalt Off-Gas	0.29	-	-	-	-	-	-
Asphalt Off-Road Diesel	4.72	28.71	40.11	-	1.04	1.04	0.00
Asphalt On-Road Diesel	0.06	1.16	0.22	0.00	0.03	0.03	0.00
Asphalt Worker Trips	0.03	0.02	0.36	0.00	0.01	0.00	0.01
Maximum lbs/day	70.66	176.56	248.44	0.02	6.95	6.87	0.08
Max lbs/day all phases	70.66	176.56	248.44	0.02	6.95	6.87	0.08
*** 2008***							

Phase 1 - Demolition Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Phase 2 - Site Grading Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Phase 3 - Building Construction							
Bldg Const Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
Bldg Const Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Arch Coatings Off-Gas	0.00	-	-	-	-	-	-
Arch Coatings Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Off-Gas	0.29	-	-	-	-	-	-
Asphalt Off-Road Diesel	4.72	28.16	40.11	-	0.94	0.94	0.00
Asphalt On-Road Diesel	0.06	1.06	0.20	0.00	0.02	0.02	0.00
Asphalt Worker Trips	0.03	0.02	0.33	0.00	0.01	0.00	0.01
Maximum lbs/day	5.09	29.23	40.65	0.00	0.97	0.96	0.01
Max lbs/day all phases	5.09	29.23	40.65	0.00	0.97	0.96	0.01

Phase 2 - Site Grading Assumptions: Phase Turned OFF

Phase 3 - Building Construction Assumptions
Start Month/Year for Phase 3: Jun '06
Phase 3 Duration: 20 months
Start Month/Year for SubPhase Building: Jun '06
SubPhase Building Duration: 16 months
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
2	Excavators	180	0.580	4.0
9	Off Highway Trucks	350	0.490	4.0
6	Other Equipment	200	0.620	4.0
3	Rough Terrain Forklifts	94	0.475	4.0
4	Skid Steer Loaders	62	0.515	4.0
7	Tractor/Loaders/Backhoes	79	0.465	4.0

Start Month/Year for SubPhase Architectural Coatings: Oct '07
SubPhase Architectural Coatings Duration: 2 months
Start Month/Year for SubPhase Asphalt: Dec '07
SubPhase Asphalt Duration: 2 months
Acres to be Paved: 4.82
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
2	Off Highway Trucks	417	0.490	4.0
1	Pavers	132	0.590	4.0
1	Rollers	114	0.430	4.0

Changes made to the default values for Land Use Trip Percentages

The Trip Rate and/or Acreage values for Condominium/townhouse general
have changed from the defaults 6.9/12.75 to 5.86/12.75

Changes made to the default values for Construction

The user has overridden the Default Phase Lengths
Architectural Coatings: # ROG/ft2 (residential) changed from 0.0185 to 0.0066
Architectural Coatings: # ROG/ft2 (non-res) changed from 0.0185 to 0.0066

URBEMIS 2002 For Windows 8.7.0

File Name: P:\Projects - All Users\11000-00+\11034-00 HB Newland St. Residential Project\EIR

Project Name: Newland Street Residential Project (11034-00) - Construction Emissions (Utilities

Project Location: South Coast Air Basin (Los Angeles area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
(Pounds/Day - Summer)

Construction Start Month and Year: June, 2006
Construction Duration: 20
Total Land Use Area to be Developed: 0 acres
Maximum Acreage Disturbed Per Day: 0 acres
Single Family Units: 0 Multi-Family Units: 204
Retail/Office/Institutional/Industrial Square Footage: 0

CONSTRUCTION EMISSION ESTIMATES UNMITIGATED (lbs/day)

Source	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
*** 2006***							
Phase 1 - Demolition Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Phase 2 - Site Grading Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Phase 3 - Building Construction							
Bldg Const Off-Road Diesel	26.56	180.09	213.63	-	7.59	7.59	0.00
Bldg Const Worker Trips	1.40	1.71	32.68	0.02	0.13	0.05	0.08
Arch Coatings Off-Gas	0.00	-	-	-	-	-	-
Arch Coatings Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Off-Gas	0.00	-	-	-	-	-	-
Asphalt Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
Asphalt On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	27.96	181.80	246.30	0.02	7.71	7.63	0.08
Max lbs/day all phases	27.96	181.80	246.30	0.02	7.71	7.63	0.08
*** 2007***							
Phase 1 - Demolition Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Phase 2 - Site Grading Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Phase 3 - Building Construction							
Bldg Const Off-Road Diesel	26.56	174.87	216.10	-	6.83	6.83	0.00
Bldg Const Worker Trips	1.36	1.69	32.34	0.02	0.13	0.05	0.08
Arch Coatings Off-Gas	70.23	-	-	-	-	-	-
Arch Coatings Worker Trips	0.43	0.25	5.27	0.00	0.08	0.00	0.08
Asphalt Off-Gas	0.29	-	-	-	-	-	-
Asphalt Off-Road Diesel	4.72	28.71	40.11	-	1.04	1.04	0.00
Asphalt On-Road Diesel	0.06	1.16	0.22	0.00	0.03	0.03	0.00
Asphalt Worker Trips	0.03	0.02	0.36	0.00	0.01	0.00	0.01
Maximum lbs/day	70.66	176.56	248.44	0.02	6.95	6.87	0.08
Max lbs/day all phases	70.66	176.56	248.44	0.02	6.95	6.87	0.08
*** 2008***							

Phase 1 - Demolition Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Phase 2 - Site Grading Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Phase 3 - Building Construction							
Bldg Const Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
Bldg Const Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Arch Coatings Off-Gas	0.00	-	-	-	-	-	-
Arch Coatings Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Off-Gas	0.29	-	-	-	-	-	-
Asphalt Off-Road Diesel	4.72	28.16	40.11	-	0.94	0.94	0.00
Asphalt On-Road Diesel	0.06	1.06	0.20	0.00	0.02	0.02	0.00
Asphalt Worker Trips	0.03	0.02	0.33	0.00	0.01	0.00	0.01
Maximum lbs/day	5.09	29.23	40.65	0.00	0.97	0.96	0.01
Max lbs/day all phases	5.09	29.23	40.65	0.00	0.97	0.96	0.01

Phase 2 - Site Grading Assumptions: Phase Turned OFF

Phase 3 - Building Construction Assumptions
Start Month/Year for Phase 3: Jun '06
Phase 3 Duration: 20 months
Start Month/Year for SubPhase Building: Jun '06
SubPhase Building Duration: 16 months
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
2	Excavators	180	0.580	4.0
9	Off Highway Trucks	350	0.490	4.0
6	Other Equipment	200	0.620	4.0
3	Rough Terrain Forklifts	94	0.475	4.0
4	Skid Steer Loaders	62	0.515	4.0
7	Tractor/Loaders/Backhoes	79	0.465	4.0

Start Month/Year for SubPhase Architectural Coatings: Oct '07
SubPhase Architectural Coatings Duration: 2 months
Start Month/Year for SubPhase Asphalt: Dec '07
SubPhase Asphalt Duration: 2 months
Acres to be Paved: 4.82
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
2	Off Highway Trucks	417	0.490	4.0
1	Pavers	132	0.590	4.0
1	Rollers	114	0.430	4.0

Changes made to the default values for Land Use Trip Percentages

The Trip Rate and/or Acreage values for Condominium/townhouse general
have changed from the defaults 6.9/12.75 to 5.86/12.75

Changes made to the default values for Construction

The user has overridden the Default Phase Lengths
Architectural Coatings: # ROG/ft2 (residential) changed from 0.0185 to 0.0066
Architectural Coatings: # ROG/ft2 (non-res) changed from 0.0185 to 0.0066

URBEMIS 2002 For Windows 8.7.0

File Name: P:\Projects - All Users\11000-00+\11034-00 HB Newland St. Residential Project\EIR

Project Name: Newland Street Residential Project (11034-00) - Construction Emissions (Utilities

Project Location: South Coast Air Basin (Los Angeles area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
(Tons/Year)

Construction Start Month and Year: June, 2006
Construction Duration: 20
Total Land Use Area to be Developed: 0 acres
Maximum Acreage Disturbed Per Day: 0 acres
Single Family Units: 0 Multi-Family Units: 204
Retail/Office/Institutional/Industrial Square Footage: 0

CONSTRUCTION EMISSION ESTIMATES UNMITIGATED (tons/year)

Source	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
*** 2006***							
Phase 1 - Demolition Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total tons/year	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Phase 2 - Site Grading Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total tons/year	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Phase 3 - Building Construction							
Bldg Const Off-Road Diesel	2.05	13.87	16.45	-	0.58	0.58	0.00
Bldg Const Worker Trips	0.10	0.13	2.44	0.00	0.01	0.00	0.01
Arch Coatings Off-Gas	0.00	-	-	-	-	-	-
Arch Coatings Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Off-Gas	0.00	-	-	-	-	-	-
Asphalt Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
Asphalt On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total tons/year	2.15	14.00	18.89	0.00	0.59	0.58	0.01
Total all phases tons/yr	2.15	14.00	18.89	0.00	0.59	0.58	0.01
*** 2007***							
Phase 1 - Demolition Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total tons/year	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Phase 2 - Site Grading Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total tons/year	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Phase 3 - Building Construction							
Bldg Const Off-Road Diesel	2.63	17.31	21.39	-	0.68	0.68	0.00
Bldg Const Worker Trips	0.13	0.16	3.18	0.00	0.01	0.00	0.01
Arch Coatings Off-Gas	1.54	-	-	-	-	-	-
Arch Coatings Worker Trips	0.01	0.01	0.12	0.00	0.00	0.00	0.00
Asphalt Off-Gas	0.00	-	-	-	-	-	-
Asphalt Off-Road Diesel	0.05	0.32	0.44	-	0.01	0.01	0.00
Asphalt On-Road Diesel	0.00	0.01	0.00	0.00	0.00	0.00	0.00
Asphalt Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total tons/year	4.36	17.81	25.13	0.00	0.70	0.69	0.01
Total all phases tons/yr	4.36	17.81	25.13	0.00	0.70	0.69	0.01
*** 2008***							

Phase 1 - Demolition Emissions

Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total tons/year	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Phase 2 - Site Grading Emissions

Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total tons/year	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Phase 3 - Building Construction

Bldg Const Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
Bldg Const Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Arch Coatings Off-Gas	0.00	-	-	-	-	-	-
Arch Coatings Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Off-Gas	0.00	-	-	-	-	-	-
Asphalt Off-Road Diesel	0.05	0.31	0.44	-	0.01	0.01	0.00
Asphalt On-Road Diesel	0.00	0.01	0.00	0.00	0.00	0.00	0.00
Asphalt Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total tons/year	0.05	0.32	0.44	0.00	0.01	0.01	0.00
Total all phases tons/yr	0.05	0.32	0.44	0.00	0.01	0.01	0.00

Phase 2 - Site Grading Assumptions: Phase Turned OFF

Phase 3 - Building Construction Assumptions
Start Month/Year for Phase 3: Jun '06
Phase 3 Duration: 20 months
Start Month/Year for SubPhase Building: Jun '06
SubPhase Building Duration: 16 months
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
2	Excavators	180	0.580	4.0
9	Off Highway Trucks	350	0.490	4.0
6	Other Equipment	200	0.620	4.0
3	Rough Terrain Forklifts	94	0.475	4.0
4	Skid Steer Loaders	62	0.515	4.0
7	Tractor/Loaders/Backhoes	79	0.465	4.0

Start Month/Year for SubPhase Architectural Coatings: Oct '07
SubPhase Architectural Coatings Duration: 2 months
Start Month/Year for SubPhase Asphalt: Dec '07
SubPhase Asphalt Duration: 2 months
Acres to be Paved: 4.82
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
2	Off Highway Trucks	417	0.490	4.0
1	Pavers	132	0.590	4.0
1	Rollers	114	0.430	4.0

Changes made to the default values for Land Use Trip Percentages

The Trip Rate and/or Acreage values for Condominium/townhouse general
have changed from the defaults 6.9/12.75 to 5.86/12.75

Changes made to the default values for Construction

The user has overridden the Default Phase Lengths
Architectural Coatings: # ROG/ft2 (residential) changed from 0.0185 to 0.0066
Architectural Coatings: # ROG/ft2 (non-res) changed from 0.0185 to 0.0066

URBEMIS 2002 For Windows 8.7.0

File Name: P:\Projects - All Users\11000-00+\11034-00 HB Newland St. Residential Project\EIR

Project Name: Newland Street Residential Project (11034-00) - Operational Emissions
Project Location: South Coast Air Basin (Los Angeles area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Pounds/Day - Summer)

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	13.62	1.55	2.16	0.00	0.01

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	8.80	9.06	95.33	0.06	12.10

SUM OF AREA AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	22.42	10.61	97.49	0.06	12.11

URBEMIS 2002 For Windows 8.7.0

File Name: P:\Projects - All Users\11000-00+\11034-00 HB Newland St. Residential Project\EIF
Project Name: Newland Street Residential Project (11034-00) - Operational Emissions
Project Location: South Coast Air Basin (Los Angeles area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Pounds/Day - Winter)

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	13.38	1.54	0.65	0.00	0.00

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	9.15	12.03	110.08	0.06	12.10

SUM OF AREA AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	22.53	13.56	110.73	0.06	12.10

URBEMIS 2002 For Windows 8.7.0

File Name: P:\Projects - All Users\11000-00+\11034-00 HB Newland St. Residential Project\EIR

Project Name: Newland Street Residential Project (11034-00) - Operational Emissions
Project Location: South Coast Air Basin (Los Angeles area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Tons/Year)

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (tpy, unmitigated)	2.30	0.28	0.25	0.00	0.00

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (tpy, unmitigated)	1.63	1.83	18.30	0.01	2.21

SUM OF AREA AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (tpy, unmitigated)	3.92	2.12	18.55	0.01	2.21

URBEMIS 2002 For Windows 8.7.0

File Name: P:\Projects - All Users\11000-00+\11034-00 HB Newland St. Residential Project\EIR

Project Name: Newland Street Residential Project (11034-00) - Operational Emissions
Project Location: South Coast Air Basin (Los Angeles area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
(Pounds/Day - Winter)

AREA SOURCE EMISSION ESTIMATES (Winter Pounds per Day, Unmitigated)

Source	ROG	NOx	CO	SO2	PM10
Natural Gas	0.12	1.54	0.65	0	0.00
Hearth	0.00	0.00	0.00	0.00	0.00
Landscaping - No winter emissions					
Consumer Prdcts	9.98	-	-	-	-
Architectural Coatings	3.28	-	-	-	-
TOTALS(lbs/day,unmitigated)	13.38	1.54	0.65	0.00	0.00

UNMITIGATED OPERATIONAL EMISSIONS

	ROG	NOx	CO	SO2	PM10
Condo/townhouse general	9.13	12.00	109.83	0.06	12.07
City park	0.02	0.03	0.25	0.00	0.03
TOTAL EMISSIONS (lbs/day)	9.15	12.03	110.08	0.06	12.10

Does not include correction for passby trips.
Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2009 Temperature (F): 50 Season: Winter

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

Unit Type	Acreage	Trip Rate	No. Units	Total Trips
Condo/townhouse general	12.75	5.86 trips/dwelling unit	204.00	1,195.44
City park		1.59 trips/acres	2.00	3.18
		Sum of Total Trips		1,198.62
		Total Vehicle Miles Traveled		8,016.34

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	60.87	1.30	98.40	0.30
Light Truck < 3,750 lbs	16.74	2.60	95.40	2.00
Light Truck 3,751- 5,750	17.85	1.20	98.10	0.70
Med Truck 5,751- 8,500	0.61	1.40	95.90	2.70
Lite-Heavy 8,501-10,000	0.09	0.00	81.80	18.20
Lite-Heavy 10,001-14,000	0.02	0.00	66.70	33.30
Med-Heavy 14,001-33,000	0.08	0.00	20.00	80.00
Heavy-Heavy 33,001-60,000	0.07	0.00	11.10	88.90
Line Haul > 60,000 lbs	0.00	0.00	0.00	100.00
Urban Bus	0.22	0.00	50.00	50.00
Motorcycle	1.79	75.00	25.00	0.00
School Bus	0.11	0.00	0.00	100.00
Motor Home	1.55	7.10	85.70	7.20

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	11.5	4.9	6.0	10.3	5.5	5.5
Rural Trip Length (miles)	11.5	4.9	6.0	10.3	5.5	5.5
Trip Speeds (mph)	35.0	40.0	40.0	40.0	40.0	40.0
% of Trips - Residential	20.0	37.0	43.0			

% of Trips - Commercial (by land use)

City park	5.0	2.5	92.5

Changes made to the default values for Land Use Trip Percentages

The Trip Rate and/or Acreage values for Condominium/townhouse general
have changed from the defaults 6.9/12.75 to 5.86/12.75

Changes made to the default values for Area

The hearth option switch changed from on to off.
The landscape year changed from 2005 to 2006.

Changes made to the default values for Operations

The light auto percentage changed from 54.9 to 60.87.
The light truck < 3750 lbs percentage changed from 15.1 to 16.74.
The light truck 3751-5750 percentage changed from 16.1 to 17.85.
The med truck 5751-8500 percentage changed from 7.3 to 0.61.
The lite-heavy truck 8501-10000 percentage changed from 1.1 to 0.09.
The lite-heavy truck 10001-14000 percentage changed from 0.3 to 0.02.
The med-heavy truck 14001-33000 percentage changed from 1.0 to 0.08.
The heavy-heavy truck 33001-60000 percentage changed from 0.9 to 0.07.
The urban bus percentage changed from 0.2 to 0.22.
The motorcycle percentage changed from 1.6 to 1.79.
The school bus percentage changed from 0.1 to 0.11.
The motorhome percentage changed from 1.4 to 1.55.
The operational emission year changed from 2005 to 2009.
The operational winter selection item changed from 3 to 2.
The operational summer temperature changed from 90 to 75.
The operational summer selection item changed from 8 to 5.

URBEMIS 2002 For Windows 8.7.0

File Name: P:\Projects - All Users\11000-00+\11034-00 HB Newland St. Residential Project\EI
Project Name: Newland Street Residential Project (11034-00) - Operational Emissions
Project Location: South Coast Air Basin (Los Angeles area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
(Pounds/Day - Summer)

AREA SOURCE EMISSION ESTIMATES (Summer Pounds per Day, Unmitigated)

Source	ROG	NOx	CO	SO2	PM10
Natural Gas	0.12	1.54	0.65	0	0.00
Hearth - No summer emissions					
Landscaping	0.24	0.01	1.50	0.00	0.00
Consumer Prdcts	9.98	-	-	-	-
Architectural Coatings	3.28	-	-	-	-
TOTALS(lbs/day,unmitigated)	13.62	1.55	2.16	0.00	0.01

UNMITIGATED OPERATIONAL EMISSIONS

	ROG	NOx	CO	SO2	PM10
Condo/townhouse general	8.77	9.04	95.12	0.06	12.07
City park	0.03	0.02	0.21	0.00	0.03
TOTAL EMISSIONS (lbs/day)	8.80	9.06	95.33	0.06	12.10

Does not include correction for passby trips.
Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2009 Temperature (F): 75 Season: Summer

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

Unit Type	Acreage	Trip Rate	No. Units	Total Trips
Condo/townhouse general	12.75	5.86 trips/dwelling unit	204.00	1,195.44
City park		1.59 trips/acres	2.00	3.18
		Sum of Total Trips		1,198.62
		Total Vehicle Miles Traveled		8,016.34

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	60.87	1.30	98.40	0.30
Light Truck < 3,750 lbs	16.74	2.60	95.40	2.00
Light Truck 3,751- 5,750	17.85	1.20	98.10	0.70
Med Truck 5,751- 8,500	0.61	1.40	95.90	2.70
Lite-Heavy 8,501-10,000	0.09	0.00	81.80	18.20
Lite-Heavy 10,001-14,000	0.02	0.00	66.70	33.30
Med-Heavy 14,001-33,000	0.08	0.00	20.00	80.00
Heavy-Heavy 33,001-60,000	0.07	0.00	11.10	88.90
Line Haul > 60,000 lbs	0.00	0.00	0.00	100.00
Urban Bus	0.22	0.00	50.00	50.00
Motorcycle	1.79	75.00	25.00	0.00
School Bus	0.11	0.00	0.00	100.00
Motor Home	1.55	7.10	85.70	7.20

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	11.5	4.9	6.0	10.3	5.5	5.5
Rural Trip Length (miles)	11.5	4.9	6.0	10.3	5.5	5.5
Trip Speeds (mph)	35.0	40.0	40.0	40.0	40.0	40.0
% of Trips - Residential	20.0	37.0	43.0			

% of Trips - Commercial (by land use)

City park	5.0	2.5	92.5

Changes made to the default values for Land Use Trip Percentages

The Trip Rate and/or Acreage values for Condominium/townhouse general
have changed from the defaults 6.9/12.75 to 5.86/12.75

Changes made to the default values for Area

The hearth option switch changed from on to off.
The landscape year changed from 2005 to 2006.

Changes made to the default values for Operations

The light auto percentage changed from 54.9 to 60.87.
The light truck < 3750 lbs percentage changed from 15.1 to 16.74.
The light truck 3751-5750 percentage changed from 16.1 to 17.85.
The med truck 5751-8500 percentage changed from 7.3 to 0.61.
The lite-heavy truck 8501-10000 percentage changed from 1.1 to 0.09.
The lite-heavy truck 10001-14000 percentage changed from 0.3 to 0.02.
The med-heavy truck 14001-33000 percentage changed from 1.0 to 0.08.
The heavy-heavy truck 33001-60000 percentage changed from 0.9 to 0.07.
The urban bus percentage changed from 0.2 to 0.22.
The motorcycle percentage changed from 1.6 to 1.79.
The school bus percentage changed from 0.1 to 0.11.
The motorhome percentage changed from 1.4 to 1.55.
The operational emission year changed from 2005 to 2009.
The operational winter selection item changed from 3 to 2.
The operational summer temperature changed from 90 to 75.
The operational summer selection item changed from 8 to 5.

URBEMIS 2002 For Windows 8.7.0

File Name: P:\Projects - All Users\11000-00+\11034-00 HB Newland St. Residential Project\EIR

Project Name: Newland Street Residential Project (11034-00) - Operational Emissions
Project Location: South Coast Air Basin (Los Angeles area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
(Tons/Year)

AREA SOURCE EMISSION ESTIMATES (Tons per Year, Unmitigated)

Source	ROG	NOx	CO	SO2	PM10
Natural Gas	0.02	0.28	0.12	0.00	0.00
Hearth	0.00	0.00	0.00	0.00	0.00
Landscaping	0.02	0.00	0.14	0.00	0.00
Consumer Prdcts	1.82	-	-	-	-
Architectural Coatings	0.43	-	-	-	-
TOTALS (tpy, unmitigated)	2.30	0.28	0.25	0.00	0.00

UNMITIGATED OPERATIONAL EMISSIONS

	ROG	NOx	CO	SO2	PM10
Condo/townhouse general	1.62	1.83	18.25	0.01	2.20
City park	0.01	0.00	0.04	0.00	0.01
TOTAL EMISSIONS (tons/yr)	1.63	1.83	18.30	0.01	2.21

Does not include correction for passby trips.
Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2009 Season: Annual

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

Unit Type	Acreage	Trip Rate	No. Units	Total Trips
Condo/townhouse general	12.75	5.86 trips/dwelling unit	204.00	1,195.44
City park		1.59 trips/acres	2.00	3.18
		Sum of Total Trips		1,198.62
		Total Vehicle Miles Traveled		8,016.34

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	60.87	1.30	98.40	0.30
Light Truck < 3,750 lbs	16.74	2.60	95.40	2.00
Light Truck 3,751- 5,750	17.85	1.20	98.10	0.70
Med Truck 5,751- 8,500	0.61	1.40	95.90	2.70
Lite-Heavy 8,501-10,000	0.09	0.00	81.80	18.20
Lite-Heavy 10,001-14,000	0.02	0.00	66.70	33.30
Med-Heavy 14,001-33,000	0.08	0.00	20.00	80.00
Heavy-Heavy 33,001-60,000	0.07	0.00	11.10	88.90
Line Haul > 60,000 lbs	0.00	0.00	0.00	100.00
Urban Bus	0.22	0.00	50.00	50.00
Motorcycle	1.79	75.00	25.00	0.00
School Bus	0.11	0.00	0.00	100.00
Motor Home	1.55	7.10	85.70	7.20

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	11.5	4.9	6.0	10.3	5.5	5.5
Rural Trip Length (miles)	11.5	4.9	6.0	10.3	5.5	5.5
Trip Speeds (mph)	35.0	40.0	40.0	40.0	40.0	40.0
% of Trips - Residential	20.0	37.0	43.0			

% of Trips - Commercial (by land use)

City park	5.0	2.5	92.5

Changes made to the default values for Land Use Trip Percentages

The Trip Rate and/or Acreage values for Condominium/townhouse general
have changed from the defaults 6.9/12.75 to 5.86/12.75

Changes made to the default values for Area

The hearth option switch changed from on to off.
The landscape year changed from 2005 to 2006.

Changes made to the default values for Operations

The light auto percentage changed from 54.9 to 60.87.
The light truck < 3750 lbs percentage changed from 15.1 to 16.74.
The light truck 3751-5750 percentage changed from 16.1 to 17.85.
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The motorcycle percentage changed from 1.6 to 1.79.
The school bus percentage changed from 0.1 to 0.11.
The motorhome percentage changed from 1.4 to 1.55.
The operational emission year changed from 2005 to 2009.
The operational winter selection item changed from 3 to 2.
The operational summer temperature changed from 90 to 75.
The operational summer selection item changed from 8 to 5.

EXPLANATION OF CHANGES MADE TO DEFAULT SETTINGS IN URBEMIS 2002

Project Number: Huntington Beach - Newland Street Residential Project
Project Name: 11034-00

The following pages include the printed results of the air pollutant emissions modeling for one of the land use components of the proposed project. The air emissions modeling was conducted using the URBEMIS 2002 for Windows computer program developed for the Yolo-Solano Air Quality Management District in May 2003. URBEMIS 2002 is programmed with EMFAC 2002 emission factors developed by the California Air Resources Board.

As part of this analysis, changes have been made to several of the default values programmed into URBEMIS 2002. These changes were made to more accurately reflect the nature of the proposed land use. Each of these changes are discussed below.

Vehicle Trip Rates

The default vehicle trip rate values were changed to be consistent with the traffic impact analysis prepared for the project.

Vehicle Fleet Mix

URBEMIS 2002 is programmed with the following state-wide average vehicle fleet mix:

State-Wide Vehicle Type	Total	
Automobiles	54.9%	
Light-Duty Trucks <3,750 pounds	15.1%	
Light-Duty Trucks 3,751-5,750 pounds	16.1%	
Medium-Duty Trucks 5,751-8,500 pounds	7.3%	
Light-Heavy-Duty Trucks 8,501-10,000 pounds	1.1%	
Light-Heavy-Duty Trucks 10,001-14,000 pounds	0.3%	10.60% Total Trucks
Medium-Heavy-Duty Trucks 14,001-33,000 pounds	1.0%	
Heavy-Heavy-Duty Trucks 33,001-60,000 pounds	0.9%	
Line-Haul Vehicles	0.0%	
Urban Buses	0.2%	
Motorcycles	1.6%	
School Buses	0.1%	
Motor Homes	1.4%	

However, this state-wide average fleet mix is not appropriate for the majority of land use analyses. The project land use assessed in this analysis is identified below along with the total percentage of trucks (medium and heavy) that are expected for this land use. The following vehicle mix was calculated based on the percentage of trucks associated with this land use. The percentage of trucks for each land use were determined from the 3rd, 4th, 5th, and 6th Editions of the ITE Trip Generation manual.

ITE Code	Project Land Use:	Truck %	ADT	Truck #
230	Residential Condo	0.88%	1,195	11
411	City Park	0.44%	3	0
0			0	0
0			0	0
0			0	0
0			0	0
0			0	0
0			0	0
0			0	0
0			0	0
0			0	0
0			0	0
		Project Totals:	1,198	11
		Project Truck %:	0.88%	

Vehicle Type	Total	
Automobiles	60.87%	
Light-Duty Trucks <3,750 pounds	16.74%	
Light-Duty Trucks 3,751-5,750 pounds	17.85%	
Medium-Duty Trucks 5,751-8,500 pounds	0.61%	
Light-Heavy-Duty Trucks 8,501-10,000 pounds	0.09%	
Light-Heavy-Duty Trucks 10,001-14,000 pounds	0.02%	0.88% Total Trucks
Medium-Heavy-Duty Trucks 14,001-33,000 pounds	0.08%	
Heavy-Heavy-Duty Trucks 33,001-60,000 pounds	0.07%	
Line-Haul Vehicles	0.00%	
Urban Buses	0.22%	
Motorcycles	1.77%	
School Buses	0.11%	
Motor Homes	1.55%	

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Number: 11034-00
Project Title: Newland Street Residential Project

Background Information

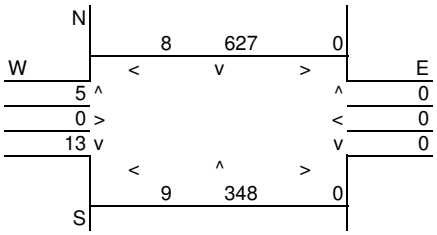
Nearest Air Monitoring Station measuring CO:	Costa Mesa-Mesa Verde Drive
Background 1-hour CO Concentration (ppm):	0.0
Background 8-hour CO Concentration (ppm):	4.1
Persistence Factor:	0.7
Analysis Year:	2005

Roadway Data

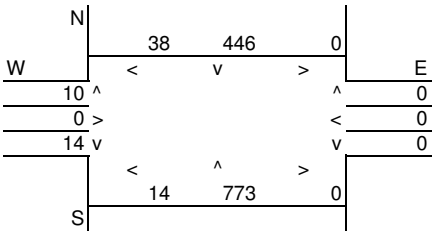
Intersection: Newland Street and Lomond Drive
Analysis Condition: Existing Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	Newland Street	At Grade	4	20	20
East-West Roadway:	Lomond Drive	At Grade	2	5	5

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	997	N-S Road:	1,267
E-W Road:	35	E-W Road:	76

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

Roadway	A_1 Reference CO Concentrations 25 Feet	A_2 50 Feet	A_3 100 Feet	B Traffic Volume	C Emission Factors[2]	Estimated CO Concentrations 25 Feet	50 Feet	100 Feet
A.M. Peak Traffic Hour								
North-South Road	7.0	5.4	3.8	997	6.93	0.48	0.37	0.26
East-West Road	2.7	2.2	1.7	35	12.26	0.01	0.01	0.01
P.M. Peak Traffic Hour								
North-South Road	7.0	5.4	3.8	1,267	6.93	0.61	0.47	0.33
East-West Road	2.7	2.2	1.7	76	12.26	0.03	0.02	0.02

[1] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).
[2] Emission factors from EMFAC2002 (2003).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentrati

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
25 Feet from Roadway Edge	0.5	0.6	4.5
50 Feet from Roadway Edge	0.4	0.5	4.4
100 Feet from Roadway Edge	0.3	0.3	4.3

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Number: 11034-00
Project Title: Newland Street Residential Project

Background Information

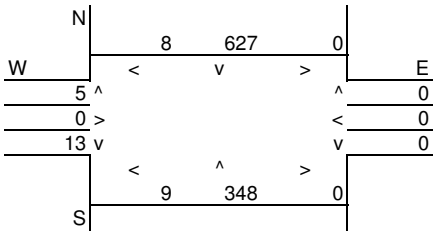
Nearest Air Monitoring Station measuring CO:	Costa Mesa-Mesa Verde Drive
Background 1-hour CO Concentration (ppm):	0.0
Background 8-hour CO Concentration (ppm):	4.1
Persistence Factor:	0.7
Analysis Year:	2005

Roadway Data

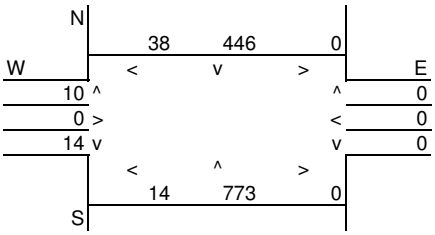
Intersection: Newland Street and Lomond Drive
Analysis Condition: Existing Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	Newland Street	At Grade	4	20	20
East-West Roadway:	Lomond Drive	At Grade	2	5	5

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	997	N-S Road:	1,267
E-W Road:	35	E-W Road:	76

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

Roadway	A_1 Reference CO Concentrations 25 Feet	A_2 50 Feet	A_3 100 Feet	B Traffic Volume	C Emission Factors[2]	Estimated CO Concentrations 25 Feet	50 Feet	100 Feet
A.M. Peak Traffic Hour								
North-South Road	7.0	5.4	3.8	997	6.93	0.48	0.37	0.26
East-West Road	2.7	2.2	1.7	35	12.26	0.01	0.01	0.01
P.M. Peak Traffic Hour								
North-South Road	7.0	5.4	3.8	1,267	6.93	0.61	0.47	0.33
East-West Road	2.7	2.2	1.7	76	12.26	0.03	0.02	0.02

[1] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).
[2] Emission factors from EMFAC2002 (2003).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration[2]

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
25 Feet from Roadway Edge	0.5	0.6	4.5
50 Feet from Roadway Edge	0.4	0.5	4.4
100 Feet from Roadway Edge	0.3	0.3	4.3

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Number: 11034-00
Project Title: Newland Street Residential Project

Background Information

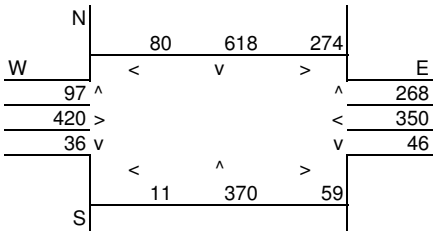
Nearest Air Monitoring Station measuring CO:	Costa Mesa-Mesa Verde Drive
Background 1-hour CO Concentration (ppm):	0.0
Background 8-hour CO Concentration (ppm):	4.1
Persistence Factor:	0.7
Analysis Year:	2005

Roadway Data

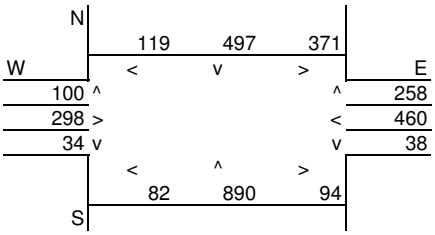
Intersection: Beach Boulevard and Atlanta Avenue
Analysis Condition: Existing Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	Beach Boulevard	At Grade	8	25	25
East-West Roadway:	Atlanta Avenue	At Grade	8	20	20

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	1,707	N-S Road:	2,235
E-W Road:	1,417	E-W Road:	1,519

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

Roadway	A_1 Reference CO Concentrations 25 Feet	A_2 50 Feet	A_3 100 Feet	B Traffic Volume	C Emission Factors[2]	Estimated CO Concentrations 25 Feet	50 Feet	100 Feet
A.M. Peak Traffic Hour								
North-South Road	5.7	4.6	3.4	1,707	6.10	0.59	0.48	0.35
East-West Road	2.2	1.9	1.6	1,417	6.93	0.22	0.19	0.16
P.M. Peak Traffic Hour								
North-South Road	5.7	4.6	3.4	2,235	6.10	0.78	0.63	0.46
East-West Road	2.2	1.9	1.6	1,519	6.93	0.23	0.20	0.17

[1] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).
[2] Emission factors from EMFAC2002 (2003).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration[2]

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
25 Feet from Roadway Edge	0.8	1.0	4.8
50 Feet from Roadway Edge	0.7	0.8	4.6
100 Feet from Roadway Edge	0.5	0.6	4.5

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Number: 11034-00
Project Title: Newland Street Residential Project

Background Information

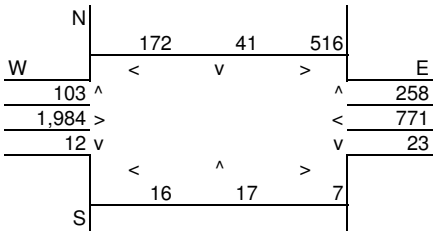
Nearest Air Monitoring Station measuring CO:	Costa Mesa-Mesa Verde Drive
Background 1-hour CO Concentration (ppm):	0.0
Background 8-hour CO Concentration (ppm):	4.1
Persistence Factor:	0.7
Analysis Year:	2005

Roadway Data

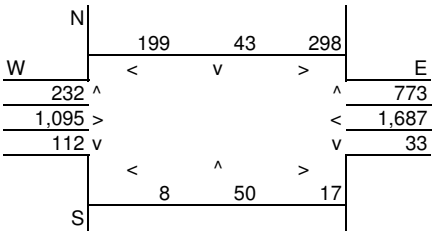
Intersection: Beach Boulevard and Pacific Coast Highway
Analysis Condition: Existing Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	Beach Boulevard	At Grade	8	25	25
East-West Roadway:	Pacific Coast Highway	At Grade	8	25	25

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	1,107	N-S Road:	1,595
E-W Road:	3,559	E-W Road:	3,903

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

Roadway	A_1 Reference CO Concentrations 25 Feet	A_2 50 Feet	A_3 100 Feet	B Traffic Volume	C Emission Factors[2]	Estimated CO Concentrations 25 Feet	50 Feet	100 Feet
A.M. Peak Traffic Hour								
North-South Road	2.2	1.9	1.6	1,107	6.10	0.15	0.13	0.11
East-West Road	5.7	4.6	3.4	3,559	6.10	1.24	1.00	0.74
P.M. Peak Traffic Hour								
North-South Road	2.2	1.9	1.6	1,595	6.10	0.21	0.18	0.16
East-West Road	5.7	4.6	3.4	3,903	6.10	1.36	1.10	0.81

[1] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).
[2] Emission factors from EMFAC2002 (2003).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration[2]

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
25 Feet from Roadway Edge	1.4	1.6	5.2
50 Feet from Roadway Edge	1.1	1.3	5.0
100 Feet from Roadway Edge	0.8	1.0	4.7

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Number: 11034-00
Project Title: Newland Street Residential Project

Background Information

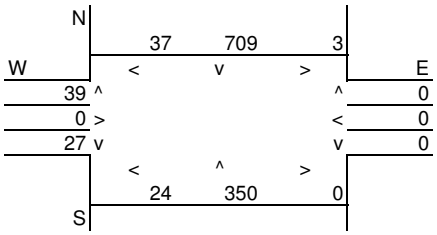
Nearest Air Monitoring Station measuring CO:	Costa Mesa-Mesa Verde Drive
Background 1-hour CO Concentration (ppm):	0.0
Background 8-hour CO Concentration (ppm):	4.1
Persistence Factor:	0.7
Analysis Year:	2005

Roadway Data

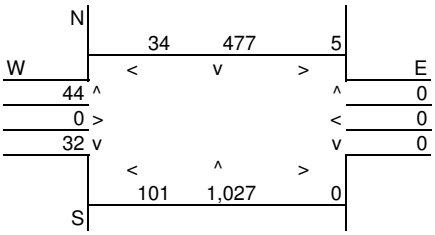
Intersection: Beach Boulevard and Pacific View Avenue
Analysis Condition: Existing Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	Beach Boulevard	At Grade	8	25	25
East-West Roadway:	Pacific View Avenue	At Grade	2	20	20

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	1,138	N-S Road:	1,637
E-W Road:	127	E-W Road:	211

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

Roadway	A_1 Reference CO Concentrations 25 Feet	A_2 50 Feet	A_3 100 Feet	B Traffic Volume	C Emission Factors[2]	Estimated CO Concentrations 25 Feet	50 Feet	100 Feet
A.M. Peak Traffic Hour								
North-South Road	5.7	4.6	3.4	1,138	6.10	0.40	0.32	0.24
East-West Road	2.7	2.2	1.7	127	6.93	0.02	0.02	0.01
P.M. Peak Traffic Hour								
North-South Road	5.7	4.6	3.4	1,637	6.10	0.57	0.46	0.34
East-West Road	2.7	2.2	1.7	211	6.93	0.04	0.03	0.02

[1] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).
[2] Emission factors from EMFAC2002 (2003).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration[2]

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
25 Feet from Roadway Edge	0.4	0.6	4.5
50 Feet from Roadway Edge	0.3	0.5	4.4
100 Feet from Roadway Edge	0.3	0.4	4.3

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Number: 11034-00
Project Title: Newland Street Residential Project

Background Information

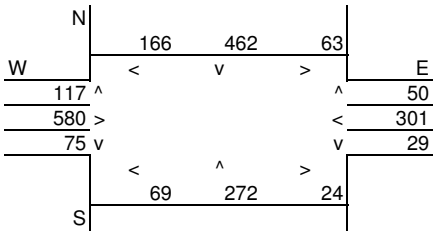
Nearest Air Monitoring Station measuring CO:	Costa Mesa-Mesa Verde Drive
Background 1-hour CO Concentration (ppm):	0.0
Background 8-hour CO Concentration (ppm):	4.1
Persistence Factor:	0.7
Analysis Year:	2005

Roadway Data

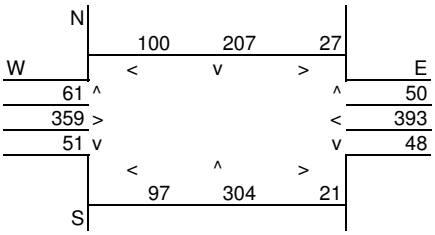
Intersection: Bushard Street and Atlanta Avenue
Analysis Condition: Existing Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	Bushard Street	At Grade	6	20	20
East-West Roadway:	Atlanta Avenue	At Grade	8	20	20

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	1,130	N-S Road:	749
E-W Road:	1,308	E-W Road:	1,061

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

Roadway	A_1 Reference CO Concentrations 25 Feet	A_2 50 Feet	A_3 100 Feet	B Traffic Volume	C Emission Factors[2]	Estimated CO Concentrations 25 Feet	50 Feet	100 Feet
A.M. Peak Traffic Hour								
North-South Road	2.3	2.0	1.7	1,130	6.93	0.18	0.16	0.13
East-West Road	5.7	4.6	3.4	1,308	6.93	0.52	0.42	0.31
P.M. Peak Traffic Hour								
North-South Road	2.3	2.0	1.7	749	6.93	0.12	0.10	0.09
East-West Road	5.7	4.6	3.4	1,061	6.93	0.42	0.34	0.25

[1] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).
[2] Emission factors from EMFAC2002 (2003).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration[2]

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
25 Feet from Roadway Edge	0.7	0.5	4.6
50 Feet from Roadway Edge	0.6	0.4	4.5
100 Feet from Roadway Edge	0.4	0.3	4.4

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Number: 11034-00
Project Title: Newland Street Residential Project

Background Information

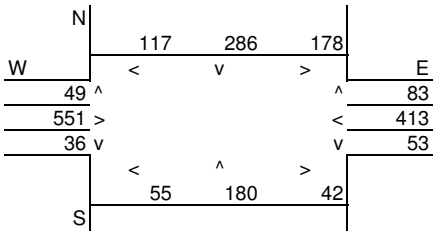
Nearest Air Monitoring Station measuring CO:	Costa Mesa-Mesa Verde Drive
Background 1-hour CO Concentration (ppm):	0.0
Background 8-hour CO Concentration (ppm):	4.1
Persistence Factor:	0.7
Analysis Year:	2005

Roadway Data

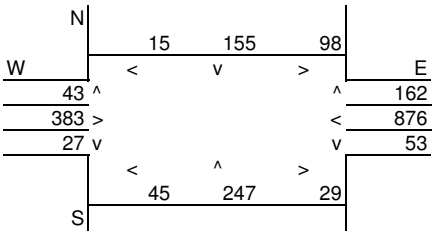
Intersection: Bushard Street and Hamilton Avenue
Analysis Condition: Existing Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	Bushard Street	At Grade	6	20	20
East-West Roadway:	Hamilton Avenue	At Grade	8	20	20

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	893	N-S Road:	720
E-W Road:	1,320	E-W Road:	1,601

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

Roadway	A_1 Reference CO Concentrations 25 Feet	A_2 50 Feet	A_3 100 Feet	B Traffic Volume	C Emission Factors[2]	Estimated CO Concentrations 25 Feet	50 Feet	100 Feet
A.M. Peak Traffic Hour								
North-South Road	2.3	2.0	1.7	893	6.93	0.14	0.12	0.11
East-West Road	5.7	4.6	3.4	1,320	6.93	0.52	0.42	0.31
P.M. Peak Traffic Hour								
North-South Road	2.3	2.0	1.7	720	6.93	0.11	0.10	0.08
East-West Road	5.7	4.6	3.4	1,601	6.93	0.63	0.51	0.38

[1] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).
[2] Emission factors from EMFAC2002 (2003).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration[2]

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
25 Feet from Roadway Edge	0.7	0.7	4.6
50 Feet from Roadway Edge	0.5	0.6	4.5
100 Feet from Roadway Edge	0.4	0.5	4.4

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Number: 11034-00
Project Title: Newland Street Residential Project

Background Information

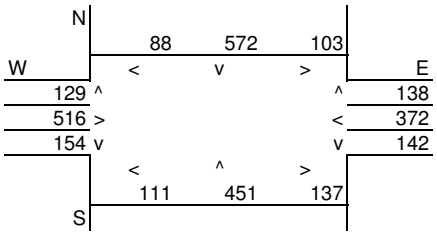
Nearest Air Monitoring Station measuring CO:	Costa Mesa-Mesa Verde Drive
Background 1-hour CO Concentration (ppm):	0.0
Background 8-hour CO Concentration (ppm):	4.1
Persistence Factor:	0.7
Analysis Year:	2005

Roadway Data

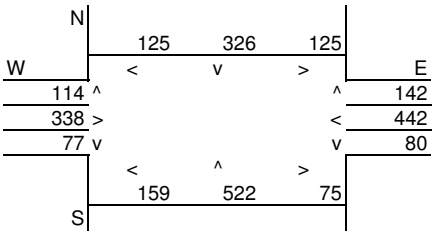
Intersection: Magnolia Street and Atlanta Avenue
Analysis Condition: Existing Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	Magnolia Street	At Grade	8	20	20
East-West Roadway:	Atlanta Avenue	At Grade	8	20	20

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	1,567	N-S Road:	1,354
E-W Road:	1,408	E-W Road:	1,255

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

Roadway	A_1 Reference CO Concentrations 25 Feet	A_2 50 Feet	A_3 100 Feet	B Traffic Volume	C Emission Factors[2]	Estimated CO Concentrations 25 Feet	50 Feet	100 Feet
A.M. Peak Traffic Hour								
North-South Road	5.7	4.6	3.4	1,567	6.93	0.62	0.50	0.37
East-West Road	2.2	1.9	1.6	1,408	6.93	0.21	0.19	0.16
P.M. Peak Traffic Hour								
North-South Road	5.7	4.6	3.4	1,354	6.93	0.54	0.43	0.32
East-West Road	2.2	1.9	1.6	1,255	6.93	0.19	0.17	0.14

[1] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).
[2] Emission factors from EMFAC2002 (2003).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration[2]

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
25 Feet from Roadway Edge	0.8	0.7	4.7
50 Feet from Roadway Edge	0.7	0.6	4.5
100 Feet from Roadway Edge	0.5	0.5	4.4

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Number: 11034-00
Project Title: Newland Street Residential Project

Background Information

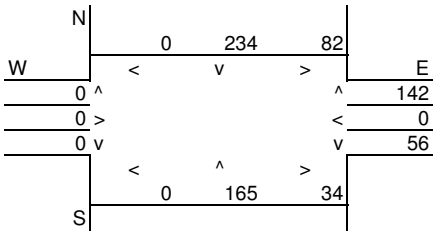
Nearest Air Monitoring Station measuring CO:	Costa Mesa-Mesa Verde Drive
Background 1-hour CO Concentration (ppm):	0.0
Background 8-hour CO Concentration (ppm):	4.1
Persistence Factor:	0.7
Analysis Year:	2005

Roadway Data

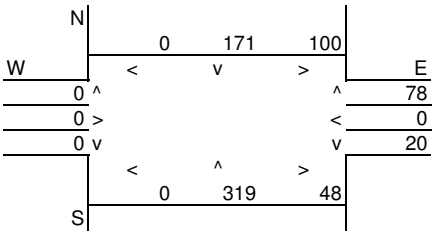
Intersection: Magnolia Street and Banning Avenue
Analysis Condition: Existing Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	Magnolia Street	At Grade	6	20	20
East-West Roadway:	Banning Avenue	At Grade	4	15	15

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	623	N-S Road:	668
E-W Road:	314	E-W Road:	246

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

Roadway	A_1 Reference CO Concentrations 25 Feet	A_2 50 Feet	A_3 100 Feet	B Traffic Volume	C Emission Factors[2]	Estimated CO Concentrations 25 Feet	50 Feet	100 Feet
A.M. Peak Traffic Hour								
North-South Road	6.1	4.9	3.5	623	6.93	0.26	0.21	0.15
East-West Road	2.6	2.2	1.7	314	8.10	0.07	0.06	0.04
P.M. Peak Traffic Hour								
North-South Road	6.1	4.9	3.5	668	6.93	0.28	0.23	0.16
East-West Road	2.6	2.2	1.7	246	8.10	0.05	0.04	0.03

[1] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).
[2] Emission factors from EMFAC2002 (2003).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration[2]

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
25 Feet from Roadway Edge	0.3	0.3	4.3
50 Feet from Roadway Edge	0.3	0.3	4.3
100 Feet from Roadway Edge	0.2	0.2	4.2

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Number: 11034-00
Project Title: Newland Street Residential Project

Background Information

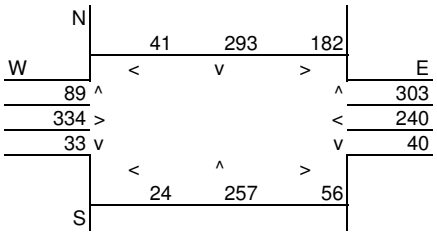
Nearest Air Monitoring Station measuring CO:	Costa Mesa-Mesa Verde Drive
Background 1-hour CO Concentration (ppm):	0.0
Background 8-hour CO Concentration (ppm):	4.1
Persistence Factor:	0.7
Analysis Year:	2005

Roadway Data

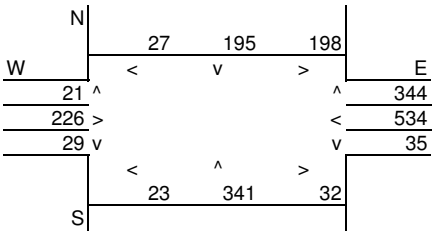
Intersection: Magnolia Street and Hamilton Avenue
Analysis Condition: Existing Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	Magnolia Street	At Grade	8	20	20
East-West Roadway:	Hamilton Avenue	At Grade	6	20	20

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	1,165	N-S Road:	1,126
E-W Road:	1,155	E-W Road:	1,369

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

Roadway	A_1 Reference CO Concentrations 25 Feet	A_2 50 Feet	A_3 100 Feet	B Traffic Volume	C Emission Factors[2]	Estimated CO Concentrations 25 Feet	50 Feet	100 Feet
A.M. Peak Traffic Hour								
North-South Road	5.7	4.6	3.4	1,165	6.93	0.46	0.37	0.27
East-West Road	2.3	2.0	1.7	1,155	6.93	0.18	0.16	0.14
P.M. Peak Traffic Hour								
North-South Road	2.2	1.9	1.6	1,126	6.93	0.17	0.15	0.12
East-West Road	6.1	4.9	3.5	1,369	6.93	0.58	0.47	0.33

[1] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).
[2] Emission factors from EMFAC2002 (2003).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration[2]

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
25 Feet from Roadway Edge	0.6	0.8	4.6
50 Feet from Roadway Edge	0.5	0.6	4.5
100 Feet from Roadway Edge	0.4	0.5	4.4

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Number: 11034-00
Project Title: Newland Street Residential Project

Background Information

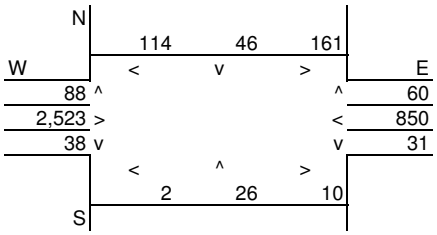
Nearest Air Monitoring Station measuring CO:	Costa Mesa-Mesa Verde Drive
Background 1-hour CO Concentration (ppm):	0.0
Background 8-hour CO Concentration (ppm):	4.1
Persistence Factor:	0.7
Analysis Year:	2005

Roadway Data

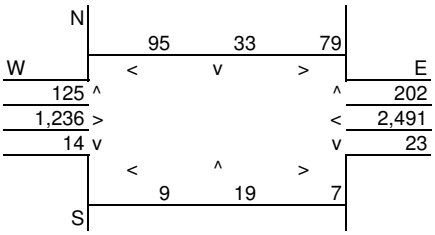
Intersection: Magnolia Street and Pacific Coast Highway
Analysis Condition: Existing Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	Magnolia Street	At Grade	6	20	20
East-West Roadway:	Pacific Coast Highway	At Grade	4	25	25

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	495	N-S Road:	553
E-W Road:	3,635	E-W Road:	4,038

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

Roadway	A_1 Reference CO Concentrations 25 Feet	A_2 50 Feet	A_3 100 Feet	B Traffic Volume	C Emission Factors[2]	Estimated CO Concentrations 25 Feet	50 Feet	100 Feet
A.M. Peak Traffic Hour								
North-South Road	2.3	2.0	1.7	495	6.93	0.08	0.07	0.06
East-West Road	7.0	5.4	3.8	3,635	6.10	1.55	1.20	0.84
P.M. Peak Traffic Hour								
North-South Road	2.3	2.0	1.7	553	6.93	0.09	0.08	0.07
East-West Road	7.0	5.4	3.8	4,038	6.10	1.72	1.33	0.94

[1] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).
[2] Emission factors from EMFAC2002 (2003).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration[2]

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
25 Feet from Roadway Edge	1.6	1.8	5.3
50 Feet from Roadway Edge	1.3	1.4	5.1
100 Feet from Roadway Edge	0.9	1.0	4.8

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Number: 11034-00
Project Title: Newland Street Residential Project

Background Information

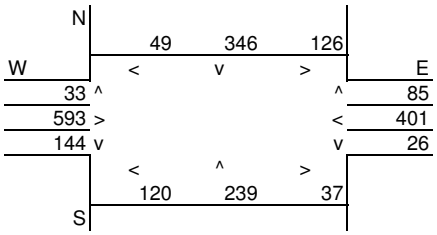
Nearest Air Monitoring Station measuring CO:	Costa Mesa-Mesa Verde Drive
Background 1-hour CO Concentration (ppm):	0.0
Background 8-hour CO Concentration (ppm):	4.1
Persistence Factor:	0.7
Analysis Year:	2005

Roadway Data

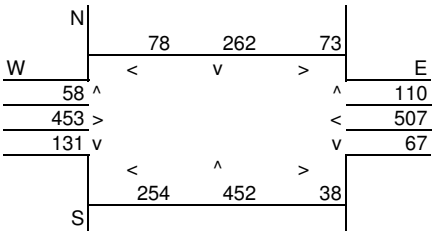
Intersection: Newland Street and Atlanta Avenue
Analysis Condition: Existing Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	Newland Street	At Grade	8	20	20
East-West Roadway:	Atlanta Avenue	At Grade	8	20	20

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	912	N-S Road:	1,204
E-W Road:	1,340	E-W Road:	1,481

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

Roadway	A_1 Reference CO Concentrations 25 Feet	A_2 50 Feet	A_3 100 Feet	B Traffic Volume	C Emission Factors[2]	Estimated CO Concentrations 25 Feet	50 Feet	100 Feet
A.M. Peak Traffic Hour								
North-South Road	2.2	1.9	1.6	912	6.93	0.14	0.12	0.10
East-West Road	5.7	4.6	3.4	1,340	6.93	0.53	0.43	0.32
P.M. Peak Traffic Hour								
North-South Road	2.2	1.9	1.6	1,204	6.93	0.18	0.16	0.13
East-West Road	5.7	4.6	3.4	1,481	6.93	0.59	0.47	0.35

[1] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).
[2] Emission factors from EMFAC2002 (2003).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration[2]

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
25 Feet from Roadway Edge	0.7	0.8	4.6
50 Feet from Roadway Edge	0.5	0.6	4.5
100 Feet from Roadway Edge	0.4	0.5	4.4

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Number: 11034-00
Project Title: Newland Street Residential Project

Background Information

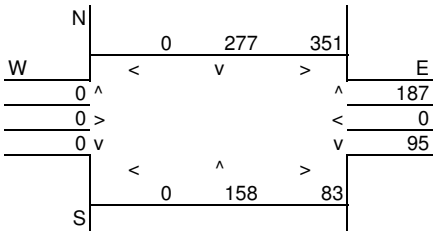
Nearest Air Monitoring Station measuring CO:	Costa Mesa-Mesa Verde Drive
Background 1-hour CO Concentration (ppm):	0.0
Background 8-hour CO Concentration (ppm):	4.1
Persistence Factor:	0.7
Analysis Year:	2005

Roadway Data

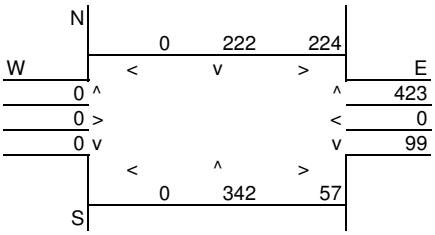
Intersection: Newland Street and Hamilton Avenue
Analysis Condition: Existing Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	Newland Street	At Grade	4	10	15
East-West Roadway:	Hamilton Avenue	At Grade	2	5	5

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	973	N-S Road:	1,211
E-W Road:	716	E-W Road:	803

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

Roadway	A_1 Reference CO Concentrations 25 Feet	A_2 50 Feet	A_3 100 Feet	B Traffic Volume	C Emission Factors[2]	Estimated CO Concentrations 25 Feet	50 Feet	100 Feet
A.M. Peak Traffic Hour								
North-South Road	7.0	5.4	3.8	973	9.74	0.66	0.51	0.36
East-West Road	2.7	2.2	1.7	716	12.26	0.24	0.19	0.15
P.M. Peak Traffic Hour								
North-South Road	7.0	5.4	3.8	1,211	8.10	0.69	0.53	0.37
East-West Road	2.7	2.2	1.7	803	12.26	0.27	0.22	0.17

[1] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).
[2] Emission factors from EMFAC2002 (2003).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration[2]

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
25 Feet from Roadway Edge	0.9	1.0	4.7
50 Feet from Roadway Edge	0.7	0.7	4.6
100 Feet from Roadway Edge	0.5	0.5	4.4

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Number: 11034-00
Project Title: Newland Street Residential Project

Background Information

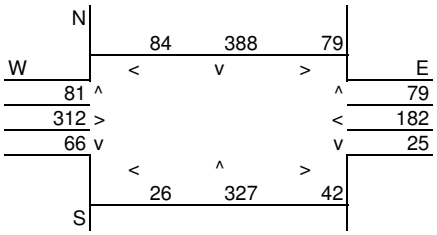
Nearest Air Monitoring Station measuring CO:	Costa Mesa-Mesa Verde Drive
Background 1-hour CO Concentration (ppm):	0.0
Background 8-hour CO Concentration (ppm):	4.1
Persistence Factor:	0.7
Analysis Year:	2005

Roadway Data

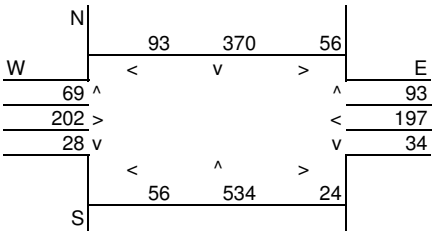
Intersection: Newland Street and Indianapolis Avenue
Analysis Condition: Existing Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	Newland Street	At Grade	8	20	20
East-West Roadway:	Indianapolis Avenue	At Grade	8	20	20

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	1,038	N-S Road:	1,215
E-W Road:	751	E-W Road:	645

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

Roadway	A_1 Reference CO Concentrations 25 Feet	A_2 50 Feet	A_3 100 Feet	B Traffic Volume	C Emission Factors[2]	Estimated CO Concentrations 25 Feet	50 Feet	100 Feet
A.M. Peak Traffic Hour								
North-South Road	5.7	4.6	3.4	1,038	6.93	0.41	0.33	0.24
East-West Road	2.2	1.9	1.6	751	6.93	0.11	0.10	0.08
P.M. Peak Traffic Hour								
North-South Road	5.7	4.6	3.4	1,215	6.93	0.48	0.39	0.29
East-West Road	2.2	1.9	1.6	645	6.93	0.10	0.08	0.07

[1] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).
[2] Emission factors from EMFAC2002 (2003).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration[2]

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
25 Feet from Roadway Edge	0.5	0.6	4.5
50 Feet from Roadway Edge	0.4	0.5	4.4
100 Feet from Roadway Edge	0.3	0.4	4.3

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Number: 11034-00
Project Title: Newland Street Residential Project

Background Information

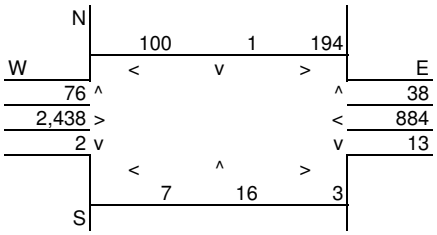
Nearest Air Monitoring Station measuring CO:	Costa Mesa-Mesa Verde Drive
Background 1-hour CO Concentration (ppm):	0.0
Background 8-hour CO Concentration (ppm):	4.1
Persistence Factor:	0.7
Analysis Year:	2005

Roadway Data

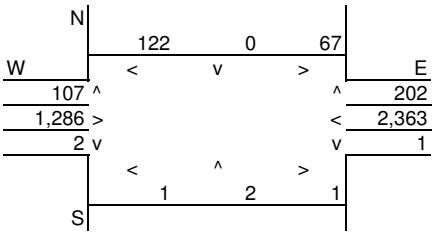
Intersection: Newland Street and Pacific Coast Highway
Analysis Condition: Existing Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	Newland Street	At Grade	4	15	15
East-West Roadway:	Pacific Coast Highway	At Grade	8	25	25

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	425	N-S Road:	500
E-W Road:	3,570	E-W Road:	3,920

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

Roadway	A_1 Reference CO Concentrations 25 Feet	A_2 50 Feet	A_3 100 Feet	B Traffic Volume	C Emission Factors[2]	Estimated CO Concentrations 25 Feet	50 Feet	100 Feet
A.M. Peak Traffic Hour								
North-South Road	2.6	2.2	1.7	425	8.10	0.09	0.08	0.06
East-West Road	5.7	4.6	3.4	3,570	6.10	1.24	1.00	0.74
P.M. Peak Traffic Hour								
North-South Road	2.6	2.2	1.7	500	8.10	0.11	0.09	0.07
East-West Road	5.7	4.6	3.4	3,920	6.10	1.36	1.10	0.81

[1] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).
[2] Emission factors from EMFAC2002 (2003).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration[2]

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
25 Feet from Roadway Edge	1.3	1.5	5.1
50 Feet from Roadway Edge	1.1	1.2	4.9
100 Feet from Roadway Edge	0.8	0.9	4.7

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Number: 11034-00
Project Title: Newland Street Residential Project

Background Information

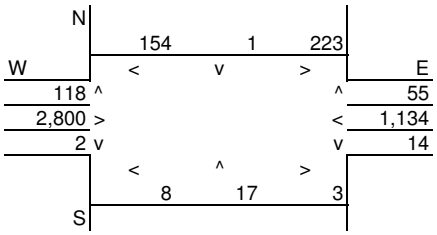
Nearest Air Monitoring Station measuring CO:	Costa Mesa-Mesa Verde Drive
Background 1-hour CO Concentration (ppm):	0.0
Background 8-hour CO Concentration (ppm):	4.1
Persistence Factor:	0.7
Analysis Year:	2009

Roadway Data

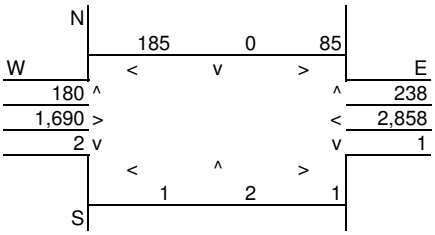
Intersection: Newland Street and Pacific Coast Highway
Analysis Condition: Year 2009 Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	Newland Street	At Grade	4	20	15
East-West Roadway:	Pacific Coast Highway	At Grade	8	25	15

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	568	N-S Road:	690
E-W Road:	4,229	E-W Road:	4,916

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

Roadway	A_1 Reference CO Concentrations 25 Feet	A_2 50 Feet	A_3 100 Feet	B Traffic Volume	C Emission Factors[2]	Estimated CO Concentrations 25 Feet	50 Feet	100 Feet
A.M. Peak Traffic Hour								
North-South Road	2.6	2.2	1.7	568	4.97	0.07	0.06	0.05
East-West Road	5.7	4.6	3.4	4,229	4.40	1.06	0.85	0.63
P.M. Peak Traffic Hour								
North-South Road	2.6	2.2	1.7	690	5.78	0.10	0.09	0.07
East-West Road	5.7	4.6	3.4	4,916	5.78	1.62	1.31	0.97

[1] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).
[2] Emission factors from EMFAC2002 (2003).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration[2]

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
25 Feet from Roadway Edge	1.1	1.7	5.3
50 Feet from Roadway Edge	0.9	1.4	5.0
100 Feet from Roadway Edge	0.7	1.0	4.8

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Number: 11034-00
Project Title: Newland Street Residential Project

Background Information

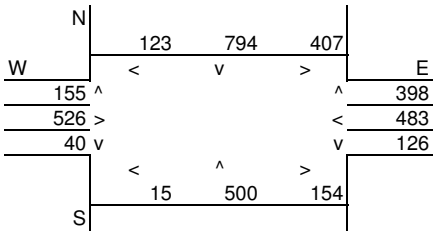
Nearest Air Monitoring Station measuring CO:	Costa Mesa-Mesa Verde Drive
Background 1-hour CO Concentration (ppm):	0.0
Background 8-hour CO Concentration (ppm):	4.1
Persistence Factor:	0.7
Analysis Year:	2009

Roadway Data

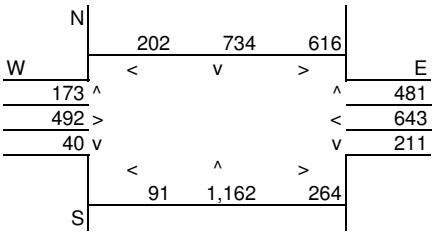
Intersection: Beach Boulevard and Atlanta Avenue
Analysis Condition: Year 2009 Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	Beach Boulevard	At Grade	8	25	5
East-West Roadway:	Atlanta Avenue	At Grade	8	20	5

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	2,377	N-S Road:	3,368
E-W Road:	2,094	E-W Road:	2,707

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

Roadway	A_1 Reference CO Concentrations 25 Feet	A_2 50 Feet	A_3 100 Feet	B Traffic Volume	C Emission Factors[2]	Estimated CO Concentrations 25 Feet	50 Feet	100 Feet
A.M. Peak Traffic Hour								
North-South Road	5.7	4.6	3.4	2,377	4.40	0.60	0.48	0.36
East-West Road	2.2	1.9	1.6	2,094	4.97	0.23	0.20	0.17
P.M. Peak Traffic Hour								
North-South Road	5.7	4.6	3.4	3,368	8.61	1.65	1.33	0.99
East-West Road	2.2	1.9	1.6	2,707	8.61	0.51	0.44	0.37

[1] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).
[2] Emission factors from EMFAC2002 (2003).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration[2]

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
25 Feet from Roadway Edge	0.8	2.2	5.6
50 Feet from Roadway Edge	0.7	1.8	5.3
100 Feet from Roadway Edge	0.5	1.4	5.0

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Number: 11034-00
Project Title: Newland Street Residential Project

Background Information

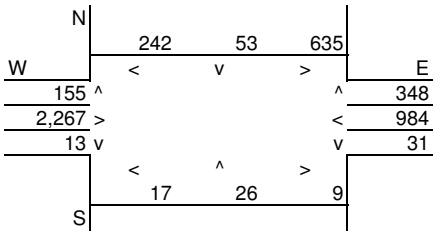
Nearest Air Monitoring Station measuring CO:	Costa Mesa-Mesa Verde Drive
Background 1-hour CO Concentration (ppm):	0.0
Background 8-hour CO Concentration (ppm):	4.1
Persistence Factor:	0.7
Analysis Year:	2009

Roadway Data

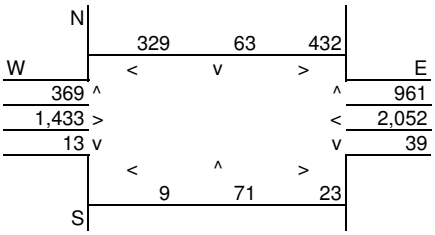
Intersection: Beach Boulevard and Pacific Coast Highway
Analysis Condition: Year 2009 Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	Beach Boulevard	At Grade	8	25	10
East-West Roadway:	Pacific Coast Highway	At Grade	8	25	10

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	1,459	N-S Road:	2,225
E-W Road:	4,274	E-W Road:	4,940

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

Roadway	A_1 Reference CO Concentrations 25 Feet	A_2 50 Feet	A_3 100 Feet	B Traffic Volume	C Emission Factors[2]	Estimated CO Concentrations 25 Feet	50 Feet	100 Feet
A.M. Peak Traffic Hour								
North-South Road	2.2	1.9	1.6	1,459	4.40	0.14	0.12	0.10
East-West Road	5.7	4.6	3.4	4,274	4.40	1.07	0.86	0.64
P.M. Peak Traffic Hour								
North-South Road	2.2	1.9	1.6	2,225	6.92	0.34	0.29	0.25
East-West Road	5.7	4.6	3.4	4,940	6.92	1.95	1.57	1.16

[1] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).
[2] Emission factors from EMFAC2002 (2003).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration[2]

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
25 Feet from Roadway Edge	1.2	2.3	5.7
50 Feet from Roadway Edge	1.0	1.9	5.4
100 Feet from Roadway Edge	0.7	1.4	5.1

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Number: 11034-00
Project Title: Newland Street Residential Project

Background Information

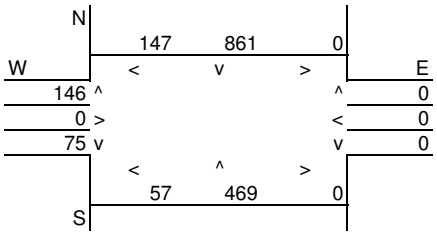
Nearest Air Monitoring Station measuring CO:	Costa Mesa-Mesa Verde Drive
Background 1-hour CO Concentration (ppm):	0.0
Background 8-hour CO Concentration (ppm):	4.1
Persistence Factor:	0.7
Analysis Year:	2009

Roadway Data

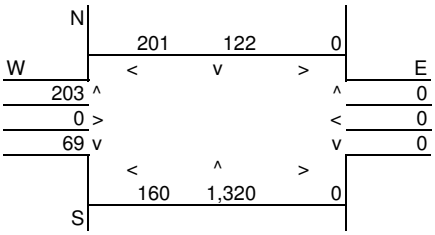
Intersection: Beach Boulevard and Pacific View Avenue
Analysis Condition: Year 2009 Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	Beach Boulevard	At Grade	8	25	25
East-West Roadway:	Pacific View Avenue	At Grade	2	20	20

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	1,623	N-S Road:	1,846
E-W Road:	425	E-W Road:	633

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

Roadway	A_1 Reference CO Concentrations 25 Feet	A_2 50 Feet	A_3 100 Feet	B Traffic Volume	C Emission Factors[2]	Estimated CO Concentrations 25 Feet	50 Feet	100 Feet
A.M. Peak Traffic Hour								
North-South Road	5.7	4.6	3.4	1,623	4.40	0.41	0.33	0.24
East-West Road	2.7	2.2	1.7	425	4.97	0.06	0.05	0.04
P.M. Peak Traffic Hour								
North-South Road	5.7	4.6	3.4	1,846	4.40	0.46	0.37	0.28
East-West Road	2.7	2.2	1.7	633	4.97	0.09	0.07	0.05

[1] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).
[2] Emission factors from EMFAC2002 (2003).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration[2]

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
25 Feet from Roadway Edge	0.5	0.5	4.5
50 Feet from Roadway Edge	0.4	0.4	4.4
100 Feet from Roadway Edge	0.3	0.3	4.3

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Number: 11034-00
Project Title: Newland Street Residential Project

Background Information

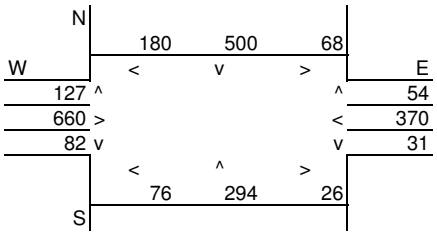
Nearest Air Monitoring Station measuring CO:	Costa Mesa-Mesa Verde Drive
Background 1-hour CO Concentration (ppm):	0.0
Background 8-hour CO Concentration (ppm):	4.1
Persistence Factor:	0.7
Analysis Year:	2009

Roadway Data

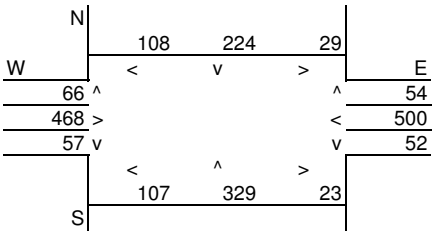
Intersection: Bushard Street and Atlanta Avenue
Analysis Condition: Year 2009 Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	Bushard Street	At Grade	6	20	20
East-West Roadway:	Atlanta Avenue	At Grade	8	20	20

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	1,223	N-S Road:	810
E-W Road:	1,495	E-W Road:	1,306

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

Roadway	A_1 Reference CO Concentrations 25 Feet	A_2 50 Feet	A_3 100 Feet	B Traffic Volume	C Emission Factors[2]	Estimated CO Concentrations 25 Feet	50 Feet	100 Feet
A.M. Peak Traffic Hour								
North-South Road	2.3	2.0	1.7	1,223	4.97	0.14	0.12	0.10
East-West Road	5.7	4.6	3.4	1,495	4.97	0.42	0.34	0.25
P.M. Peak Traffic Hour								
North-South Road	2.3	2.0	1.7	810	4.97	0.09	0.08	0.07
East-West Road	5.7	4.6	3.4	1,306	4.97	0.37	0.30	0.22

[1] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).
[2] Emission factors from EMFAC2002 (2003).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration[2]

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
25 Feet from Roadway Edge	0.6	0.5	4.5
50 Feet from Roadway Edge	0.5	0.4	4.4
100 Feet from Roadway Edge	0.4	0.3	4.3

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Number: 11034-00
Project Title: Newland Street Residential Project

Background Information

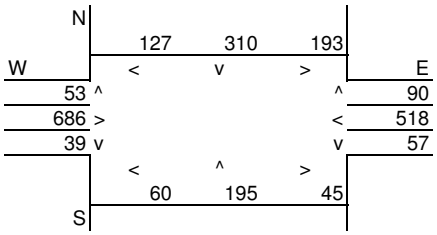
Nearest Air Monitoring Station measuring CO:	Costa Mesa-Mesa Verde Drive
Background 1-hour CO Concentration (ppm):	0.0
Background 8-hour CO Concentration (ppm):	4.1
Persistence Factor:	0.7
Analysis Year:	2009

Roadway Data

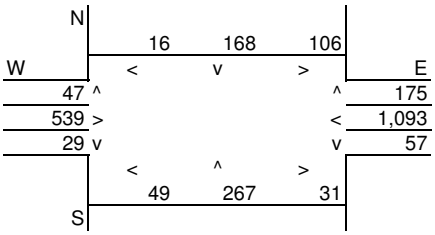
Intersection: Bushard Street and Hamilton Avenue
Analysis Condition: Year 2009 Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	Bushard Street	At Grade	6	20	20
East-West Roadway:	Hamilton Avenue	At Grade	8	20	20

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	968	N-S Road:	779
E-W Road:	1,589	E-W Road:	2,001

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

Roadway	A_1 Reference CO Concentrations 25 Feet	A_2 50 Feet	A_3 100 Feet	B Traffic Volume	C Emission Factors[2]	Estimated CO Concentrations 25 Feet	50 Feet	100 Feet
A.M. Peak Traffic Hour								
North-South Road	2.3	2.0	1.7	968	4.97	0.11	0.10	0.08
East-West Road	5.7	4.6	3.4	1,589	4.97	0.45	0.36	0.27
P.M. Peak Traffic Hour								
North-South Road	2.3	2.0	1.7	779	4.97	0.09	0.08	0.07
East-West Road	5.7	4.6	3.4	2,001	4.97	0.57	0.46	0.34

[1] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).
[2] Emission factors from EMFAC2002 (2003).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration[2]

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
25 Feet from Roadway Edge	0.6	0.7	4.5
50 Feet from Roadway Edge	0.5	0.5	4.4
100 Feet from Roadway Edge	0.4	0.4	4.4

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Number: 11034-00
Project Title: Newland Street Residential Project

Background Information

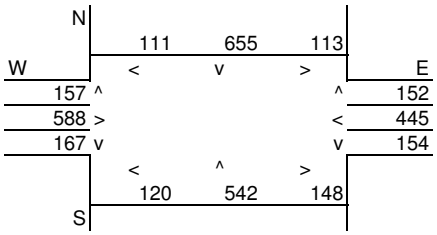
Nearest Air Monitoring Station measuring CO:	Costa Mesa-Mesa Verde Drive
Background 1-hour CO Concentration (ppm):	0.0
Background 8-hour CO Concentration (ppm):	4.1
Persistence Factor:	0.7
Analysis Year:	2009

Roadway Data

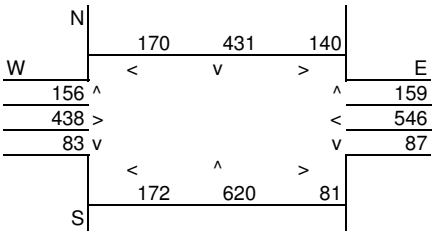
Intersection: Magnolia Street and Atlanta Avenue
Analysis Condition: Year 2009 Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	Magnolia Street	At Grade	8	20	20
East-West Roadway:	Atlanta Avenue	At Grade	8	20	20

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	1,786	N-S Road:	1,676
E-W Road:	1,600	E-W Road:	1,565

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

Roadway	A_1 Reference CO Concentrations 25 Feet	A_2 50 Feet	A_3 100 Feet	B Traffic Volume	C Emission Factors[2]	Estimated CO Concentrations 25 Feet	50 Feet	100 Feet
A.M. Peak Traffic Hour								
North-South Road	5.7	4.6	3.4	1,786	4.97	0.51	0.41	0.30
East-West Road	2.2	1.9	1.6	1,600	4.97	0.18	0.15	0.13
P.M. Peak Traffic Hour								
North-South Road	5.7	4.6	3.4	1,676	4.97	0.48	0.38	0.28
East-West Road	2.2	1.9	1.6	1,565	4.97	0.17	0.15	0.12

[1] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).
[2] Emission factors from EMFAC2002 (2003).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration[2]

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
25 Feet from Roadway Edge	0.7	0.6	4.5
50 Feet from Roadway Edge	0.6	0.5	4.5
100 Feet from Roadway Edge	0.4	0.4	4.4

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Number: 11034-00
Project Title: Newland Street Residential Project

Background Information

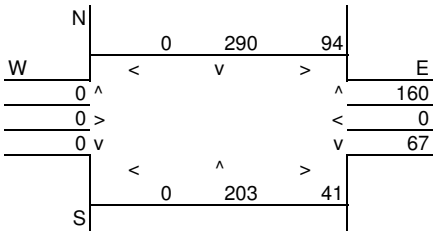
Nearest Air Monitoring Station measuring CO:	Costa Mesa-Mesa Verde Drive
Background 1-hour CO Concentration (ppm):	0.0
Background 8-hour CO Concentration (ppm):	4.1
Persistence Factor:	0.7
Analysis Year:	2009

Roadway Data

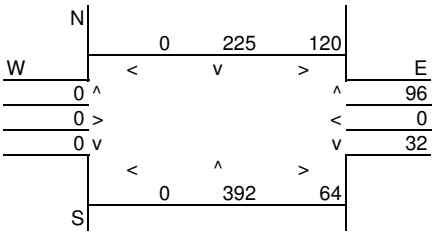
Intersection: Magnolia Street and Banning Avenue
Analysis Condition: Year 2009 Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	Magnolia Street	At Grade	6	20	20
East-West Roadway:	Banning Avenue	At Grade	4	15	15

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	747	N-S Road:	833
E-W Road:	362	E-W Road:	312

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

Roadway	A_1 Reference CO Concentrations 25 Feet	A_2 50 Feet	A_3 100 Feet	B Traffic Volume	C Emission Factors[2]	Estimated CO Concentrations 25 Feet	50 Feet	100 Feet
A.M. Peak Traffic Hour								
North-South Road	6.1	4.9	3.5	747	4.97	0.23	0.18	0.13
East-West Road	2.6	2.2	1.7	362	5.78	0.05	0.05	0.04
P.M. Peak Traffic Hour								
North-South Road	6.1	4.9	3.5	833	4.97	0.25	0.20	0.15
East-West Road	2.6	2.2	1.7	312	5.78	0.05	0.04	0.03

[1] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).
[2] Emission factors from EMFAC2002 (2003).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration[2]

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
25 Feet from Roadway Edge	0.3	0.3	4.3
50 Feet from Roadway Edge	0.2	0.2	4.2
100 Feet from Roadway Edge	0.2	0.2	4.2

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Number: 11034-00
Project Title: Newland Street Residential Project

Background Information

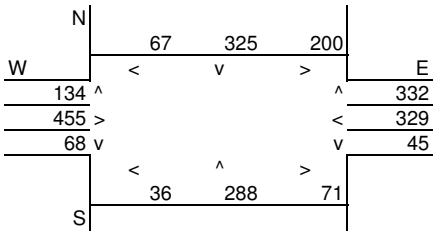
Nearest Air Monitoring Station measuring CO:	Costa Mesa-Mesa Verde Drive
Background 1-hour CO Concentration (ppm):	0.0
Background 8-hour CO Concentration (ppm):	4.1
Persistence Factor:	0.7
Analysis Year:	2009

Roadway Data

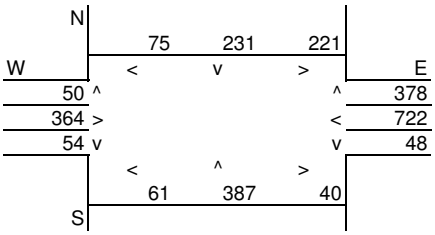
Intersection: Magnolia Street and Hamilton Avenue
Analysis Condition: Year 2009 Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	Magnolia Street	At Grade	8	20	20
East-West Roadway:	Hamilton Avenue	At Grade	6	20	20

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	1,346	N-S Road:	1,342
E-W Road:	1,432	E-W Road:	1,773

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

Roadway	A_1 Reference CO Concentrations 25 Feet	A_2 50 Feet	A_3 100 Feet	B Traffic Volume	C Emission Factors[2]	Estimated CO Concentrations 25 Feet	50 Feet	100 Feet
A.M. Peak Traffic Hour								
North-South Road	2.2	1.9	1.6	1,346	4.97	0.15	0.13	0.11
East-West Road	6.1	4.9	3.5	1,432	4.97	0.43	0.35	0.25
P.M. Peak Traffic Hour								
North-South Road	2.2	1.9	1.6	1,342	4.97	0.15	0.13	0.11
East-West Road	6.1	4.9	3.5	1,773	4.97	0.54	0.43	0.31

[1] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).
[2] Emission factors from EMFAC2002 (2003).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration[2]

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
25 Feet from Roadway Edge	0.6	0.7	4.5
50 Feet from Roadway Edge	0.5	0.6	4.5
100 Feet from Roadway Edge	0.4	0.4	4.4

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Number: 11034-00
Project Title: Newland Street Residential Project

Background Information

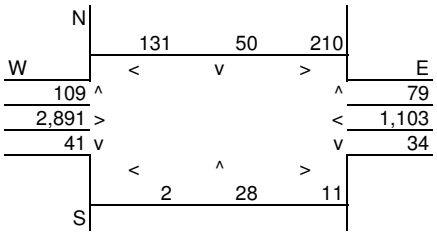
Nearest Air Monitoring Station measuring CO:	Costa Mesa-Mesa Verde Drive
Background 1-hour CO Concentration (ppm):	0.0
Background 8-hour CO Concentration (ppm):	4.1
Persistence Factor:	0.7
Analysis Year:	2009

Roadway Data

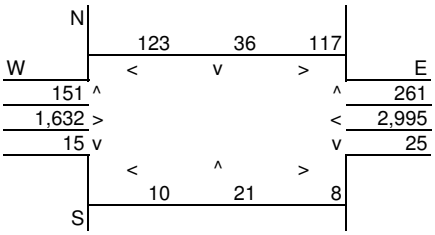
Intersection: Magnolia Street and Pacific Coast Highway
Analysis Condition: Year 2009 Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	Magnolia Street	At Grade	6	20	15
East-West Roadway:	Pacific Coast Highway	At Grade	8	25	15

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	607	N-S Road:	709
E-W Road:	4,328	E-W Road:	5,038

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

Roadway	A_1 Reference CO Concentrations 25 Feet	A_2 50 Feet	A_3 100 Feet	B Traffic Volume	C Emission Factors[2]	Estimated CO Concentrations 25 Feet	50 Feet	100 Feet
A.M. Peak Traffic Hour								
North-South Road	2.3	2.0	1.7	607	4.97	0.07	0.06	0.05
East-West Road	5.7	4.6	3.4	4,328	4.40	1.08	0.87	0.65
P.M. Peak Traffic Hour								
North-South Road	2.3	2.0	1.7	709	5.78	0.09	0.08	0.07
East-West Road	5.7	4.6	3.4	5,038	5.78	1.66	1.34	0.99

[1] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).
[2] Emission factors from EMFAC2002 (2003).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration[2]

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
25 Feet from Roadway Edge	1.2	1.8	5.3
50 Feet from Roadway Edge	0.9	1.4	5.1
100 Feet from Roadway Edge	0.7	1.1	4.8

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Number: 11034-00
Project Title: Newland Street Residential Project

Background Information

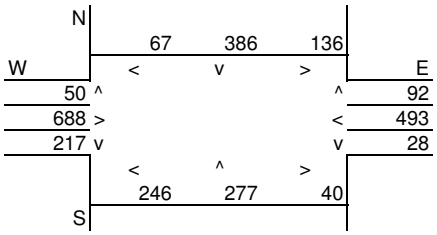
Nearest Air Monitoring Station measuring CO:	Costa Mesa-Mesa Verde Drive
Background 1-hour CO Concentration (ppm):	0.0
Background 8-hour CO Concentration (ppm):	4.1
Persistence Factor:	0.7
Analysis Year:	2009

Roadway Data

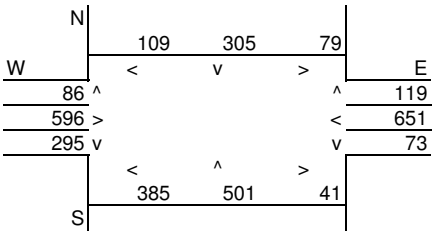
Intersection: Newland Street and Atlanta Avenue
Analysis Condition: Year 2009 Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	Newland Street	At Grade	8	20	20
East-West Roadway:	Atlanta Avenue	At Grade	8	20	20

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	1,194	N-S Road:	1,600
E-W Road:	1,761	E-W Road:	2,122

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

Roadway	A_1 Reference CO Concentrations 25 Feet	A_2 50 Feet	A_3 100 Feet	B Traffic Volume	C Emission Factors[2]	Estimated CO Concentrations 25 Feet	50 Feet	100 Feet
A.M. Peak Traffic Hour								
North-South Road	2.2	1.9	1.6	1,194	4.97	0.13	0.11	0.10
East-West Road	5.7	4.6	3.4	1,761	4.97	0.50	0.40	0.30
P.M. Peak Traffic Hour								
North-South Road	2.2	1.9	1.6	1,600	4.97	0.18	0.15	0.13
East-West Road	5.7	4.6	3.4	2,122	4.97	0.60	0.49	0.36

[1] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).
[2] Emission factors from EMFAC2002 (2003).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration[2]

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
25 Feet from Roadway Edge	0.6	0.8	4.6
50 Feet from Roadway Edge	0.5	0.6	4.5
100 Feet from Roadway Edge	0.4	0.5	4.4

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Number: 11034-00
Project Title: Newland Street Residential Project

Background Information

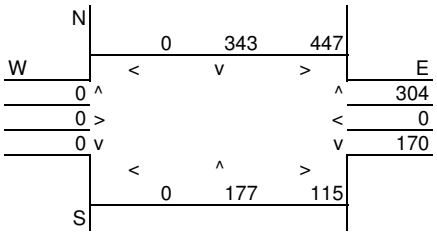
Nearest Air Monitoring Station measuring CO:	Costa Mesa-Mesa Verde Drive
Background 1-hour CO Concentration (ppm):	0.0
Background 8-hour CO Concentration (ppm):	4.1
Persistence Factor:	0.7
Analysis Year:	2009

Roadway Data

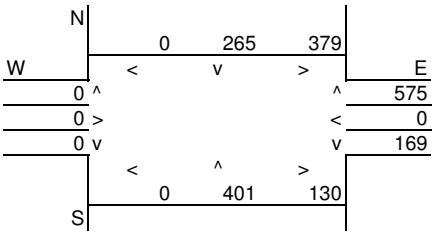
Intersection: Newland Street and Hamilton Avenue
Analysis Condition: Year 2009 Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	Newland Street	At Grade	4	20	15
East-West Roadway:	Hamilton Avenue	At Grade	2	15	15

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	1,271	N-S Road:	1,620
E-W Road:	1,036	E-W Road:	1,253

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

Roadway	A_1 Reference CO Concentrations 25 Feet	A_2 50 Feet	A_3 100 Feet	B Traffic Volume	C Emission Factors[2]	Estimated CO Concentrations 25 Feet	50 Feet	100 Feet
A.M. Peak Traffic Hour								
North-South Road	7.0	5.4	3.8	1,271	4.97	0.44	0.34	0.24
East-West Road	2.7	2.2	1.7	1,036	5.78	0.16	0.13	0.10
P.M. Peak Traffic Hour								
North-South Road	7.0	5.4	3.8	1,620	5.78	0.65	0.51	0.36
East-West Road	2.7	2.2	1.7	1,253	5.78	0.20	0.16	0.12

[1] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).
[2] Emission factors from EMFAC2002 (2003).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration[2]

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
25 Feet from Roadway Edge	0.6	0.9	4.7
50 Feet from Roadway Edge	0.5	0.7	4.5
100 Feet from Roadway Edge	0.3	0.5	4.4

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Number: 11034-00
Project Title: Newland Street Residential Project

Background Information

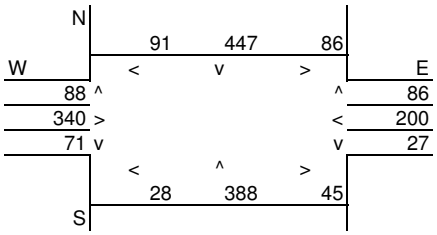
Nearest Air Monitoring Station measuring CO:	Costa Mesa-Mesa Verde Drive
Background 1-hour CO Concentration (ppm):	0.0
Background 8-hour CO Concentration (ppm):	4.1
Persistence Factor:	0.7
Analysis Year:	2009

Roadway Data

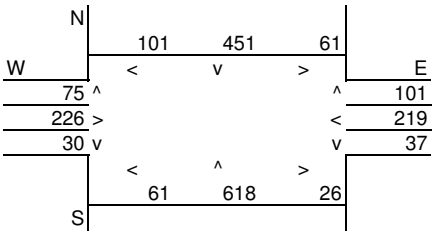
Intersection: Newland Street and Indianapolis Avenue
Analysis Condition: Year 2009 Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	Newland Street	At Grade	8	20	20
East-West Roadway:	Indianapolis Avenue	At Grade	8	20	20

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	1,186	N-S Road:	1,407
E-W Road:	818	E-W Road:	712

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

Roadway	A_1 Reference CO Concentrations 25 Feet	A_2 50 Feet	A_3 100 Feet	B Traffic Volume	C Emission Factors[2]	Estimated CO Concentrations 25 Feet	50 Feet	100 Feet
A.M. Peak Traffic Hour								
North-South Road	5.7	4.6	3.4	1,186	4.97	0.34	0.27	0.20
East-West Road	2.2	1.9	1.6	818	4.97	0.09	0.08	0.07
P.M. Peak Traffic Hour								
North-South Road	5.7	4.6	3.4	1,407	4.97	0.40	0.32	0.24
East-West Road	2.2	1.9	1.6	712	4.97	0.08	0.07	0.06

[1] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).
[2] Emission factors from EMFAC2002 (2003).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration[2]

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
25 Feet from Roadway Edge	0.4	0.5	4.4
50 Feet from Roadway Edge	0.3	0.4	4.3
100 Feet from Roadway Edge	0.3	0.3	4.3

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Number: 11034-00
Project Title: Newland Street Residential Project

Background Information

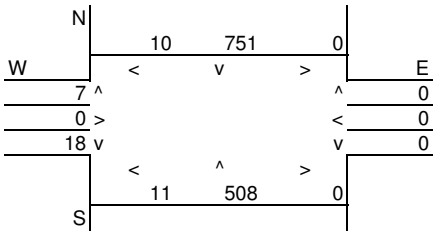
Nearest Air Monitoring Station measuring CO:	Costa Mesa-Mesa Verde Drive
Background 1-hour CO Concentration (ppm):	0.0
Background 8-hour CO Concentration (ppm):	4.1
Persistence Factor:	0.7
Analysis Year:	2009

Roadway Data

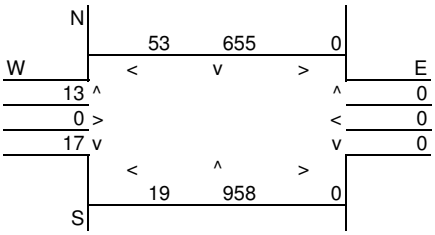
Intersection: Newland Street and Lomond Drive
Analysis Condition: Year 2009 Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	Newland Street	At Grade	4	20	15
East-West Roadway:	Lomond Drive	At Grade	2	5	5

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	1,288	N-S Road:	1,679
E-W Road:	46	E-W Road:	102

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

Roadway	A_1 Reference CO Concentrations 25 Feet	A_2 50 Feet	A_3 100 Feet	B Traffic Volume	C Emission Factors[2]	Estimated CO Concentrations 25 Feet	50 Feet	100 Feet
A.M. Peak Traffic Hour								
North-South Road	7.0	5.4	3.8	1,288	4.97	0.45	0.35	0.24
East-West Road	2.7	2.2	1.7	46	8.61	0.01	0.01	0.01
P.M. Peak Traffic Hour								
North-South Road	7.0	5.4	3.8	1,679	5.78	0.68	0.52	0.37
East-West Road	2.7	2.2	1.7	102	8.61	0.02	0.02	0.01

[1] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).
[2] Emission factors from EMFAC2002 (2003).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration[2]

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
25 Feet from Roadway Edge	0.5	0.7	4.6
50 Feet from Roadway Edge	0.4	0.5	4.5
100 Feet from Roadway Edge	0.3	0.4	4.3

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Number: 11034-00
Project Title: Newland Street Residential Project

Background Information

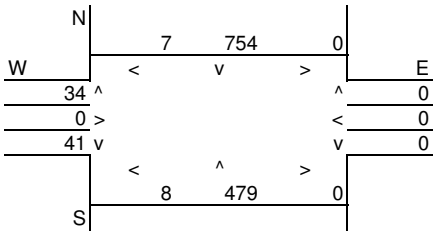
Nearest Air Monitoring Station measuring CO:	Costa Mesa-Mesa Verde Drive
Background 1-hour CO Concentration (ppm):	0.0
Background 8-hour CO Concentration (ppm):	4.1
Persistence Factor:	0.7
Analysis Year:	2009

Roadway Data

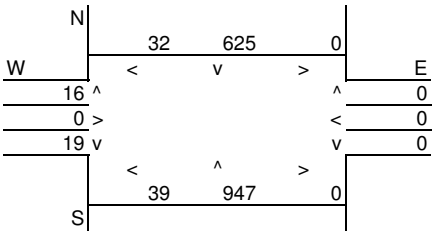
Intersection: Newland Street and Project Access
Analysis Condition: Year 2009 Traffic Volumes

		Roadway Type	No. of Lanes	Average Speed A.M.	Average Speed P.M.
North-South Roadway:	Newland Street	At Grade	4	20	15
East-West Roadway:	Project Access	At Grade	2	5	5

A.M. Peak Hour Traffic Volumes



P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	1,282	N-S Road:	1,630
E-W Road:	90	E-W Road:	106

Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000[1]

Roadway	A_1 Reference CO Concentrations 25 Feet	A_2 50 Feet	A_3 100 Feet	B Traffic Volume	C Emission Factors[2]	Estimated CO Concentrations 25 Feet	50 Feet	100 Feet
A.M. Peak Traffic Hour								
North-South Road	7.0	5.4	3.8	1,282	4.97	0.45	0.34	0.24
East-West Road	2.7	2.2	1.7	90	8.61	0.02	0.02	0.01
P.M. Peak Traffic Hour								
North-South Road	7.0	5.4	3.8	1,630	5.78	0.66	0.51	0.36
East-West Road	2.7	2.2	1.7	106	8.61	0.02	0.02	0.02

[1] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).
[2] Emission factors from EMFAC2002 (2003).

Total Roadway CO Concentrations

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration[2]
8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration[2]

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
25 Feet from Roadway Edge	0.5	0.7	4.5
50 Feet from Roadway Edge	0.4	0.5	4.4
100 Feet from Roadway Edge	0.3	0.4	4.3

[2] Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).