

City of Long Beach

# Safran Senior Housing Project

## Initial Study

September 2012



*Environmental Scientists Planners Engineers*

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# Safran Senior Housing Project

## Initial Study

*Prepared by:*

**City of Long Beach**  
**Development Services Department, Planning Division**  
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Long Beach, CA 90802  
Contact: Craig Chalfant  
Planner

*Prepared with the assistance of:*

**Rincon Consultants, Inc.**  
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Ventura, California 93003

*September 2012*

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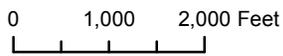
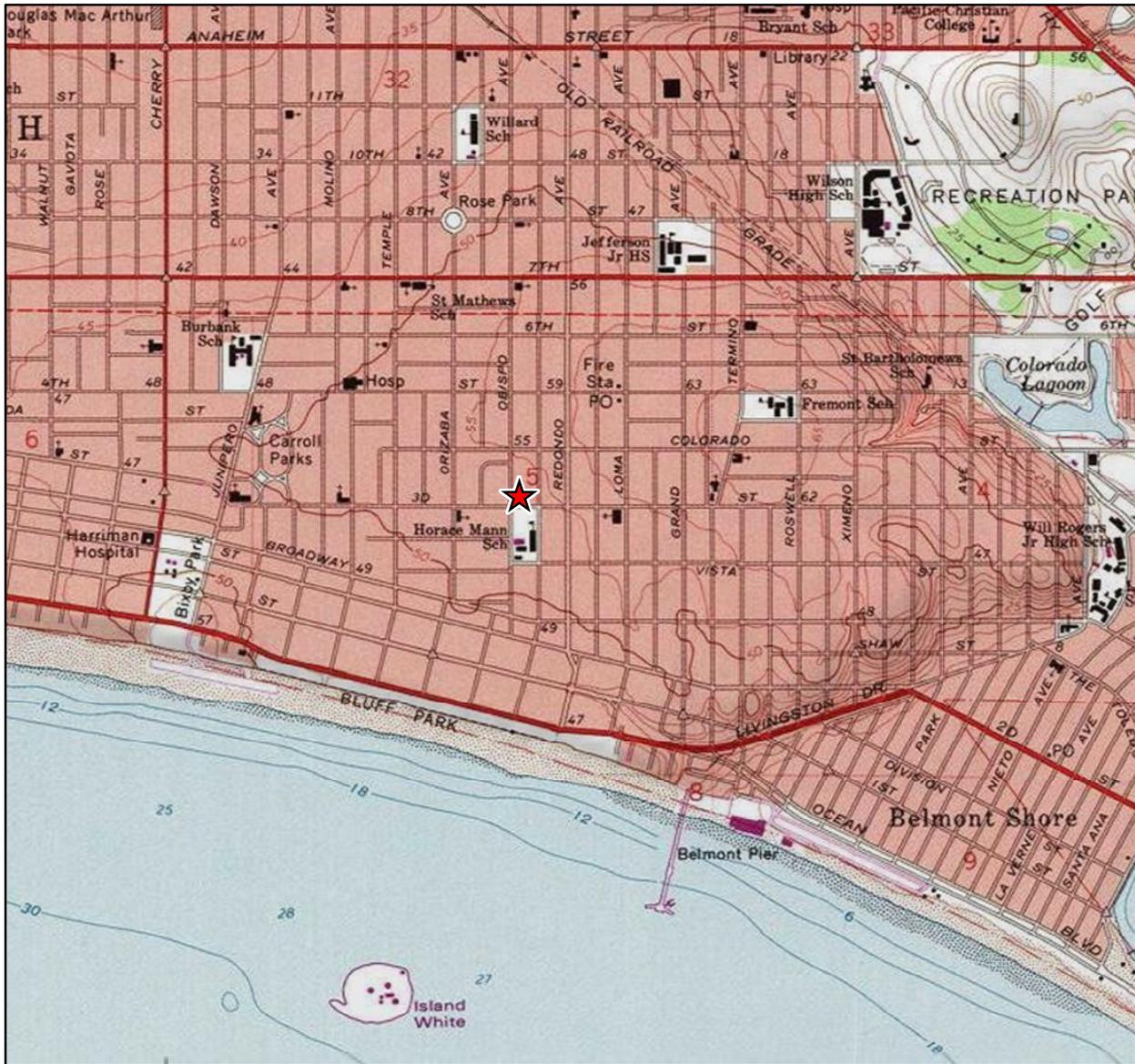
## INITIAL STUDY

1. **Project title:** Safran Senior Housing Project
2. **Lead agency name and address:** City of Long Beach  
Department of Development Services  
333 W. Ocean Boulevard, 5th Floor  
Long Beach, CA 90802
3. **Contact person and phone number:** Craig Chalfant  
(562) 570-6368
4. **Project location:** 3215 East 3<sup>rd</sup> Street and 304 Obispo Avenue, City of Long Beach, County of Los Angeles, CA.  
Figure 1 shows the location of the project site within the region and Figure 2 shows an aerial view of the project site within the Bluff Heights Historic District neighborhood of Long Beach.
5. **Project applicant's/sponsor's name and address:** Thomas Safran & Associates  
11812 San Vicente Boulevard, Suite 600  
Los Angeles, California 90049  
Phone: (310) 820-4888 Fax: (310) 207-6986
6. **General Plan designation:** Mixed Style Homes (LUD No. 2)
7. **Zoning:** R-2-A, Two-Family Residential, accessory second unit
8. **Project Description:**

The proposed project would involve conversion of the building that formerly housed the Immanuel Community Church, located at 3215 East 3<sup>rd</sup> Street, into a senior housing project consisting of 24 independent low or very low income senior dwelling units, one manager's unit and associated amenities/common areas in 31,006 square feet. It would also involve demolition of the existing single family home and detached garage and construction of a small parking lot serving the project on the adjoining parcel at 304 Obispo Avenue. Figure 3 shows a site plan of the proposed development. Vehicular access to the senior housing project would be from Obispo Avenue into the proposed parking lot (or to street parking on East 3<sup>rd</sup> Street, Obispo Avenue, or other local streets), while pedestrian access would be from East 3<sup>rd</sup> Street, Obispo Avenue, and the proposed parking lot on the north side of the building.



Safran Senior Housing Project EIR  
Initial Study



★ Project Location



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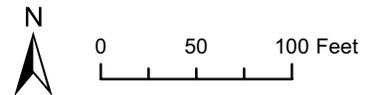
Regional Location

Figure 1



Bing Maps Aerial: (c) 2010 Microsoft Corporation and its data suppliers

 Project Boundaries

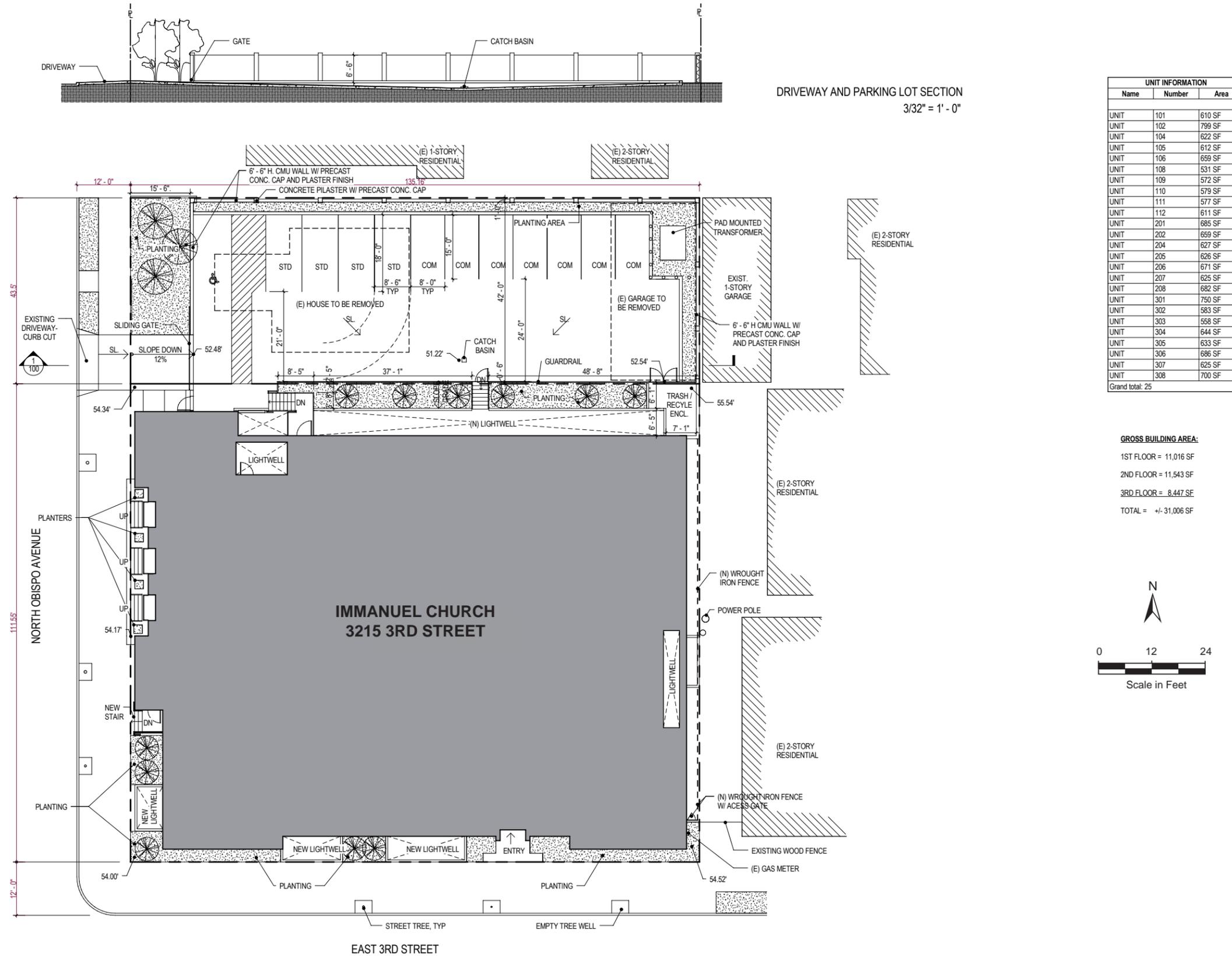


Aerial View of Project Site and Surrounding Uses

Figure 2

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Site Plan

## 9. Surrounding land uses and setting:

The prevailing uses to the north, east, and west of the site are one-, two-, and three-story single- and multi-family residences. Horace Mann Elementary School is located immediately to the south of the project site across East 3<sup>rd</sup> Street. One- to four-story commercial development is located along Redondo Avenue, two blocks east of the site.

## 10. Required Entitlements:

The project requires the following discretionary approvals (entitlements) from the City of Long Beach:

- **Site Plan Review** – Site plan review is required for construction of more than five residential units. The following aspects of the project would also require a waiver through the Site Plan Review process:
  - **Open Space** – No outdoor open space is provided under the project, but is required under the Municipal Code.
  - **Structures within the Front Yard Setback** – A 42-inch high railing and light wells are proposed under the project within the 15-foot front yard setback, which requires a waiver under the Municipal Code.
- **Administrative Use Permit** – Required for conversion of a legal nonconforming use (church) to another nonconforming use (senior housing).
- **Certificate of Appropriateness** – Required for any exterior alterations to a building within a designated historic district.
- **Lot Tie** – Required to tie the proposed parking lot on the adjacent parcel to the senior housing project.
- **Planning Commission Waiver** The project would require a waiver from the Planning Commission to allow 12 off-street parking spaces rather than the 13 off-street parking spaces required by Chapter 21.41.216 of the Long Beach Municipal Code.
- **Variations** – The project would require approval of variations for the following aspects of the project:
  - Open parking spaces (instead of enclosed garage parking spaces)
  - More than 50% compact size parking spaces
  - Parking lot side and rear yard setbacks of less than five feet
  - A reduced turning radius of less than 24 feet for a standard size parking stall
  - A one-way driveway for two-way traffic instead of a two-way driveway

## 11. Other public agencies whose approval is required:

The City of Long Beach is the lead agency and is the only public agency with discretionary approval over the project.



## ENVIRONMENTAL FACTORS AFFECTED

The environmental factors checked below would be potentially affected by this Project, involving at least one impact that is “Potentially Significant” or “Potentially Significant Unless Mitigation Incorporated” as indicated by the checklist on the following pages.

- |   |   |   |
|---|---|---|
| <input checked="" type="checkbox"/> Aesthetics        | <input type="checkbox"/> Agriculture and Forest Resources | <input type="checkbox"/> Air Quality                        |
| <input type="checkbox"/> Biological Resources         | <input checked="" type="checkbox"/> Cultural Resources    | <input type="checkbox"/> Geology/Soils                      |
| <input type="checkbox"/> Greenhouse Gas Emissions     | <input type="checkbox"/> Hazards & Hazardous Materials    | <input type="checkbox"/> Hydrology/Water Quality            |
| <input checked="" type="checkbox"/> Land Use/Planning | <input type="checkbox"/> Mineral Resources                | <input checked="" type="checkbox"/> Noise                   |
| <input type="checkbox"/> Population/Housing           | <input type="checkbox"/> Public Services                  | <input type="checkbox"/> Recreation                         |
| <input type="checkbox"/> Transportation/Traffic       | <input type="checkbox"/> Utilities/Service Systems        | <input type="checkbox"/> Mandatory Findings of Significance |



**DETERMINATION:**

On the basis of this initial evaluation:

- I find that the proposed Project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- I find that although the proposed Project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the Project have been made by or agreed to by the Project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find that the proposed Project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- I find that the proposed Project MAY have a “potentially significant impact” or “potentially significant unless mitigated” impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- I find that although the proposed Project could have a significant effect on the environment, because all potential significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed Project, nothing further is required.

Jill Griffiths  
Signature

Sept. 11, 2012  
Date

Jill Griffiths  
Printed Name

Craig Chalfant  
For



## Environmental Checklist

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
<b>I. <u>AESTHETICS</u> – Would the Project:</b>				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a) There are no scenic vistas in the vicinity of the project site (City of Long Beach, October 2002). There would be **no impact**.

b, c) There are no state scenic highways in the vicinity of the project site that would be affected by the proposed project. The Immanuel Community Church building that would be remodeled under the proposed project is located within the Bluff Heights Historic District neighborhood of Long Beach. This building, constructed between 1922 and 1923, was designed by prominent Long Beach architect W. Horace Austin, and is a contributor to the historic district. The single family residence at 304 Obispo Avenue, also within this historic district, was constructed circa 1920 and is also a contributor to this historic district. Consequently, the project has the potential to substantially damage scenic resources (historic buildings), or substantially degrade the existing visual character or quality of the site or its surroundings. The project's impact is **potentially significant** and will be studied in the EIR.

d) The proposed project would include some new sources of light and glare on the project site, such as parking lot lighting and reflective surfaces on parked cars. However, Chapter 21.41.259 of the Long Beach Municipal Code (LBMC) requires the following:

*"All parking lots and garages shall be illuminated with lights directed and shielded to prevent light and glare from intruding onto adjacent sites. The light standards shall not exceed the height of the principal use structure or one foot (1') for each two feet (2') of the distance between the light standard and the nearest property line, whichever is greater."*

Otherwise, the project site would be lit similarly to its current state, and any new lighting would be reviewed through the City's Site Plan Review process, as described in Division V of



Chapter 21.25 – *Site Plan Review* of the LBMC. The project’s impacts related to light and glare would therefore be **less than significant**.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
<b>II. <u>AGRICULTURE AND FOREST RESOURCES</u></b>				
-- In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state’s inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. -- Would the Project:				
a) Convert Prime Farmland, Unique Farmland, Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>



	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
--	--------------------------------	--	------------------------------	-----------

**II. AGRICULTURE AND FOREST**

**RESOURCES** -- In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. -- Would the Project:

- |   |                          |                          |                          |                                     |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|

a-e) There are no agricultural zones or forest lands within the City of Long Beach, which is a fully urbanized community that has been urbanized for over half a century. The proposed project would have no impact upon agricultural or forest resources.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
--	--------------------------------	--	------------------------------	-----------

**III. AIR QUALITY** -- Would the Project:

- |  |                          |                          |                                     |                                     |
|--|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| a) Conflict with or obstruct implementation of the applicable air quality plan?                                    | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |



	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
<b>III. AIR QUALITY --</b> Would the Project:				
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The project site is within the South Coast Air Basin, which is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). The local air quality management agency (SCAQMD) is required to monitor air pollutant levels to ensure that applicable air quality standards are met and, if they are not met, to develop strategies to meet the standards.

Depending on whether or not the standards are met or exceeded, the air basin is classified as being in "attainment" or "nonattainment." The South Coast Air Basin in which the project site is located is a nonattainment area for both the federal and state standards for ozone, particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>), and lead. In addition, the South Coast Air Basin is in nonattainment for the state standards for nitrogen dioxide (NO<sub>x</sub>) (California Air Resources Board, May 2012). Thus, the basin currently exceeds several state and federal ambient air quality standards and is required to implement strategies that would reduce the pollutant levels to recognized acceptable standards. This non-attainment status is a result of several factors, the primary ones being the naturally adverse meteorological conditions that limit the dispersion and diffusion of pollutants, the limited capacity of the local airshed to eliminate pollutants from the air, and the number, type, and density of emission sources within the South Coast Air Basin. The SCAQMD has adopted an Air Quality Management Plan (AQMP) that provides a strategy for the attainment of state and federal air quality standards.

The SCAQMD has established the following significance thresholds for project operations within the South Coast Air Basin:

- 55 pounds per day of reactive organic compounds (ROC (also known as ROG or VOC))
- 55 pounds per day of nitrogen oxides (NO<sub>x</sub>)
- 550 pounds per day of carbon monoxide (CO)
- 150 pounds per day of sulphur oxides (SO<sub>x</sub>)
- 150 pounds per day of particulate matter less than 10 microns in diameter (PM<sub>10</sub>)
- 55 pounds per day of particulate matter less than 2.5 microns in diameter (PM<sub>2.5</sub>)



The SCAQMD has also adopted the following thresholds for temporary construction-related pollutant emissions:

- 75 pounds per day ROC
- 100 pounds per day NO<sub>x</sub>
- 550 pounds per day CO
- 150 pounds per day of PM<sub>10</sub>
- 55 pounds per day of PM<sub>2.5</sub>
- 150 pounds per day SO<sub>x</sub>

Certain population groups are considered more sensitive to air pollution than others. Sensitive population groups include children, the elderly, the acutely ill and the chronically ill, especially those with cardio-respiratory diseases. Residential uses are also considered sensitive to air pollution because residents (including children and the elderly) tend to be at home for extended periods of time, resulting in sustained exposure to any pollutants present. Sensitive receptors in the vicinity of the project site include: residences immediately adjoining the project site on its north and east sides; residences across Obispo Avenue from the project site, the closest of which is located approximately 60 feet to its west; residences to the southwest of the project site across East 3<sup>rd</sup> Street, located at their closest approximately 90 feet from the project site; and Horace Mann Elementary School, located across East 3<sup>rd</sup> Street, approximately 50 feet south of the project site.

The SCAQMD has also developed Localized Significance Thresholds (LSTs) in response to the Governing Board's Environmental Justice Enhancement Initiative (1-4), which was prepared to update the SCAQMD's CEQA Air Quality Handbook. LSTs were devised in response to concern regarding exposure of individuals to criteria pollutants in local communities. LSTs represent the maximum emissions from a project that would not cause or contribute to an air quality exceedance of the most stringent applicable federal or state ambient air quality standard at the nearest sensitive receptor, taking into consideration ambient concentrations in each source receptor area (SRA), project size, and distance to the sensitive receptor. LSTs only apply to emissions within a fixed stationary location, including idling emissions during both project construction and operation. LSTs have been developed only for NO<sub>x</sub>, CO, PM<sub>10</sub> and PM<sub>2.5</sub>. LSTs are not applicable to mobile sources such as cars on a roadway (Final Localized Significance Threshold Methodology, SCAQMD, June 2003).

LSTs have been developed for emissions within areas up to five acres in size, with air pollutant modeling recommended for activity within larger areas. The SCAQMD provides a lookup table for project sites that measure one, two, three, four, or five acres. The project site would be less than one acre and is located in Source Receptor Area 4 (SRA-4), which is designated by the SCAQMD as the South Coastal LA County and includes the City of Long Beach. LST thresholds used for the proposed project are therefore for 1-acre sites in SRA-4, as shown in Table 1 (SCAQMD, June 2003). The closest sensitive receptors are residences immediately adjoining the project site on its north and east sides, and Horace Mann Elementary School, which is located to the south of the project site across East 3<sup>rd</sup> Street approximately 50 feet from the southern boundary of the project site. Both these sensitive receptors fall within the 25-meter receptor distance category.



**Table 1**  
**SCAQMD LSTs for Emissions in SRA-4**

Pollutant	Allowable emissions as a function of receptor distance in meters from a one acre site (lbs/day)				
	25	50	100	200	500
Gradual conversion of NO <sub>x</sub> to NO <sub>2</sub>	57	58	68	90	142
CO	585	789	1,180	2,296	7,558
PM <sub>10</sub> (construction)	4	13	29	61	158
PM <sub>10</sub> (operation)	1	3	7	15	38
PM <sub>2.5</sub> (construction)	3	5	10	26	93
PM <sub>2.5</sub> (operation)	1	2	3	7	23

Source: SCAQMD. <http://www.aqmd.gov/CEQA/handbook/LST/appC.pdf>, accessed online August 2012.

a) Vehicle use, energy consumption, and associated air pollutant emissions are directly related to population growth. The population forecasts upon which the Air Quality Management Plan (AQMP) is based are used to estimate future emissions and devise appropriate strategies to attain state and federal air quality standards. When population growth exceeds the forecasts upon which the AQMP is based, emission inventories could be surpassed, which could affect attainment of standards. However, as discussed in Section XIII, *Population and Housing*, the amount of housing proposed under the project would not induce population growth exceeding these population forecasts. Therefore, the project would not conflict with implementation of an air quality plan, and **no impact** would occur.

b-d) Construction and operation of the proposed project would generate emissions. The sensitive receptors closest to the project site that could potentially be affected by project emissions are residences immediately adjoining the project site on its north and east sides, and Horace Mann Elementary School, which is located to the south of the project site across East 3<sup>rd</sup> Street approximately 50 feet from the southern boundary of the project site. Emissions associated with the project were modeled by Rincon Consultants, Inc. using the California Emissions Estimator Model (CalEEMod) computer program (see Appendix A for complete CalEEMod results) based on the project description and the project's trip generation potential from the traffic technical memorandum prepared for the project by Iteris, Inc. in August 2012 (Appendix B).

Construction activities for the project would generate temporary air pollutant emissions and fugitive dust emissions associated with demolition of the residence currently located on the parcel at 304 Obispo Avenue, including emissions from construction equipment used in activities such as demolition, minor site grading, asphalt paving, and motor vehicles transporting construction workers. Construction activities for the project at the 3215 East 3<sup>rd</sup> Street parcel would consist of interior remodeling and minor façade alterations to the existing Immanuel Community Church building, and would also generate construction emissions. Exhaust emissions from construction activities would vary daily as construction activity levels change. Table 2 compares worst-case daily construction emissions from the project to SCAQMD



construction emissions and LST thresholds for all applicable criteria pollutants. LST thresholds from the 25-meter category are used because the closest sensitive receptors are neighboring residential units and Horace Mann Elementary School, both of which are located within 25 meters (approximately 83 feet) of the project site. As shown in Table 2, the project’s peak construction emissions would fall below applicable thresholds, and the project’s construction-related air quality impacts would be **less than significant**.

**Table 2**  
**Peak Daily Project Construction Emissions (lbs/day)**

	Total Emissions					
Pollutant	ROC	NO <sub>x</sub>	CO	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>x</sub>
Project Emissions	37.81	17.09	12.45	1.80	1.46	0.02
SCAQMD Threshold	75	100	550	150	55	150
<b>Threshold Exceeded?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>
	On-Site Emissions (lbs/day)					
Pollutant	ROC	NO <sub>x</sub>	CO	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>x</sub>
Project Emissions <sup>1</sup>	37.79	16.33	10.77	1.79	1.45	0.02
Local Significant Thresholds (LSTs)	n/a	57	585	4	3	n/a
<b>Threshold Exceeded?</b>	<b>n/a</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>n/a</b>

Source: SCAQMD LST Spreadsheet for a 1-acre site in SRA-4 and CalEEMod; See Appendix A for complete CalEEMod results.

<sup>1</sup> LST emissions are for on-site emissions only, not mobile emissions, as explained above.

The project is expected to generate a net total of 91 daily vehicle trips, with four total trips in the a.m. peak hour and five total trips in the p.m. peak hour. Stationary operational emissions sources associated with the project would result from energy usage from sources such as HVAC systems, water heating, and interior lighting. Operational emissions were calculated using CalEEMod. Table 3 compares the project’s worst-case daily operational emissions to SCAQMD operational emissions thresholds for all applicable criteria pollutants. As shown in Table 3, the project’s peak operational emissions would fall below applicable thresholds, and the project’s operational air quality impacts would be **less than significant**.

e) Because the proposed project would be purely residential, it would not create or emit any objectionable odors affecting a substantial number of people. There would be **no impact** related to objectionable odors.



**Table 3  
Peak Daily Project Operational Emissions (lbs/day)**

	Total Emissions					
Pollutant	ROC	NO <sub>x</sub>	CO	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>x</sub>
Project Emissions	1.37	1.21	6.81	0.92	0.07	0.01
SCAQMD Threshold	55	55	550	150	55	150
Threshold Exceeded?	No	No	No	No	No	No
	On-Site Emissions (lbs/day)					
Pollutant	ROC	NO <sub>x</sub>	CO	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>x</sub>
Project Emissions <sup>1</sup>	0.91	0.12	2.18	0.02	0.02	0.00
Local Significant Thresholds (LSTs)	n/a	149	885	1	1	n/a
Threshold Exceeded?	n/a	No	No	No	No	n/a

Source: SCAQMD LST Spreadsheet for a 1-acre site in SRA-4 and CalEEMod; See Appendix A for complete CalEEMod results.

<sup>1</sup> LST emissions are for on-site emissions only, not mobile emissions, as explained above.

**Potentially Significant Impact**     
 **Potentially Significant Unless Mitigation Incorporated**     
 **Less than Significant Impact**     
 **No Impact**

**IV. BIOLOGICAL RESOURCES --**

Would the Project:

- |  |                          |                          |                          |                                     |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |



	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
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**IV. BIOLOGICAL RESOURCES --**

Would the Project:

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a- d, f) The proposed project would be located within a developed portion of the city of Long Beach. The project site is located within an existing urbanized area that has been previously disturbed. The site lacks significant native vegetation that provides a habitat for any unique, rare, or endangered plant or animal species. The site does not contain and is not adjacent to wetlands. The area is sparsely vegetated with a few ornamental street trees located on surrounding streets. The area is highly urbanized and there is no potential for adverse effects to wildlife resources or their habitat either directly or indirectly. There would be **no impact**.

e) The proposed project would not conflict with any local policies or ordinances protecting biological resources such as trees, nor would it conflict with any conservation plans. There would be **no impact**.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
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**V. CULTURAL RESOURCES --**

Would the Project:

a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>



	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
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V. **CULTURAL RESOURCES --**

Would the Project:

resource as defined in §15064.5?

c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a) The project site is located within the Bluff Heights Historic District (City of Long Beach Historic Districts Map, August 23, 2012). The Immanuel Community Church building was constructed between 1922 and 1923. The building was designed by prominent Long Beach architect W. Horace Austin, and is a contributor to the historic district. The detached single family residence at 304 Obispo Avenue was constructed circa 1920. Because of its age and design, this building is also a contributor to the historic district. Because the project would demolish the residence at 304 Obispo Avenue and alter the exterior of the Immanuel Community Church building, it would have a **potentially significant impact** on historic resources, and this issue will be studied in the EIR.

b-d) The proposed project would require only minor grading at the 304 Obispo Avenue parcel, and no subsurface excavation on either parcel. The project site is currently developed, and has previously experienced subsurface disturbance when the existing buildings on the site were constructed. Because the site (both aboveground and underground) has been previously disturbed, the likelihood of finding intact archaeological or paleontological resources is considered low. In the unlikely event that such resources are discovered during construction of the proposed project, the project would be required to comply with standard procedures for assessment and preservation of such resources compliant with the State Health and Safety Code Section 7050.5 and Public Resources Code Section 5097.98, which regulate disturbance and disposition of cultural resources and human remains. Although unlikely, if human remains are found during demolition activities, work must stop in the vicinity of the find as well as any area that is reasonably suspected until the County Coroner has been called out and the remains have been investigated and appropriate recommendations have been made for the treatment and disposition of the remains. Compliance with State regulations, which detail the appropriate actions necessary in the event human remains are encountered, would reduce impacts to a **less than significant** level.



	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
<b>VI. <u>GEOLOGY AND SOILS</u> –</b>				
Would the Project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable as a result of the Project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code, creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a.i and ii) Similar to all of Southern California, active and/or potentially active faults in the region could generate strong groundshaking on the project site. However, the project site is not located within an Alquist-Priolo Earthquake Zone (California Department of Conservation, 2010), so the probability of seismic surface rupture is considered low. Per Plate 2 of the Seismic Safety Element of the General Plan, the most significant fault system in the City is the Newport-Inglewood fault zone. This fault zone runs in a northwest to southeast angle across the southern half of the City. However, the project site is located more than one mile southwest of the closest portion of the Newport-Inglewood Fault Zone. As such, project implementation



would not expose people or structures to potentially substantial adverse effects involving fault rupture.

The project would be required to comply with the California Building Code (CBC). The CBC requires various measures of all construction in California to account for hazards from seismic shaking, and the proposed senior housing project would be inspected for compliance with these measures by the City of Long Beach Building Bureau prior to Certificate of Occupancy. Impacts related to seismically-induced surface rupture or ground shaking would therefore be **less than significant**.

a.iii and iv) The project site is located on a relatively flat site in an area that is not susceptible to liquefaction or earthquake induced landslide hazards (California Department of Conservation Seismic Hazard Zones for the Long Beach Quadrangle, 1999). Landslide impacts would not occur as no hillsides are located near the project site. The project would therefore have a **less than significant** impact related to these hazards.

b) Soil erosion is the removal of soil by water, wind, and gravity. Demolition of the existing structure and construction of the proposed parking lot at the 304 Obispo Avenue parcel would involve soil-disturbing activities that could create soil erosion. However, Standard Urban Stormwater Mitigation Plan (SUSMP) and National Pollutant Discharge Elimination System (NPDES) requirements to utilize watering of soils and stormwater Best Management Practices (BMPs) limiting erosion would be enforced on the project, as described in Section IX, *Hydrology and Water Quality*. These impacts would be **less than significant**.

c, d) No new buildings or other structures would be constructed on the project site under the proposed project, and there is no indication from the history of the site, which has been occupied by the buildings currently on it for approximately the last 90 years, that the site is located on expansive soils or a geologic unit or soil that is or would become unstable as a result of the project, potentially resulting in on- or off-site landslide, lateral spreading, or subsidence. Therefore, impacts related to unstable soils and collapse would be **less than significant**.

e) The project is located in a fully developed part of Long Beach, with access to existing sewer connections, and would not require the use of septic tanks. Therefore, **no impact** related to the use of septic tanks would occur.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
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**VII. GREENHOUSE GAS EMISSIONS -**  
 Would the Project:

- |   |                          |                          |                                     |                          |
|---|--------------------------|--------------------------|-------------------------------------|--------------------------|
| a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|---|--------------------------|--------------------------|-------------------------------------|--------------------------|



Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
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**VII. GREENHOUSE GAS EMISSIONS -**

Would the Project:

- b) Conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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a) Project activities would generate greenhouse gas (GHG) emissions through the burning of fossil fuels or other emissions of GHGs, thus potentially contributing to cumulative impacts related to global climate change. The following summarizes global climate change, greenhouse gas emissions and the regulatory framework related to climate change.

**Local Regulations and CEQA Requirements**

Pursuant to the requirements of SB 97, the Resources Agency adopted amendments to the *CEQA Guidelines* for the feasible mitigation of GHG emissions and analysis of the effects of GHG emissions. The adopted *CEQA Guidelines* provide regulatory guidance on the analysis and mitigation of GHG emissions in CEQA documents, while giving lead agencies the discretion to set quantitative or qualitative thresholds for the assessment and mitigation of GHGs and climate change impacts. To date, the Bay Area Air Quality Management District (BAAQMD), the South Coast Air Quality Management District (SCAQMD), and the San Joaquin Air Pollution Control District (SJVAPCD) have adopted significance thresholds for GHGs. The SCAQMD threshold, which was adopted in December 2008, considers emissions of over 10,000 metric tons carbon dioxide equivalent (CDE)/year to be significant. However, the SCAQMD’s threshold applies only to stationary sources and is expressly intended to apply only when the SCAQMD is the CEQA lead agency. Although not adopted, the SCAQMD has a recommended quantitative threshold for all land use types of 3,000 metric tons CDE/year (SCAQMD, “Proposed Tier 3 Quantitative Thresholds - Option 1”, September 2010).

Because the SCAQMD has not adopted GHG emissions thresholds that apply to land use projects where the SCAQMD is not the lead agency and no GHG emissions reduction plan or GHG emissions thresholds have been adopted in Long Beach, the proposed project is evaluated based on the SCAQMD’s recommended/preferred option threshold for all land use types including residential of 3,000 metric tons CDE per year (SCAQMD, “Proposed Tier 3 Quantitative Thresholds - Option 1”, September 2010).

**Study Methodology**

The analysis of GHG emissions is based on the methodologies recommended by the California Air Pollution Control Officers Association [CAPCOA] (January 2008) *CEQA and Climate Change* white paper. The analysis focuses on CO<sub>2</sub>, N<sub>2</sub>O, and CH<sub>4</sub>, as these are the GHG emissions that onsite development would generate in the largest quantities. Fluorinated gases, such as HFCs, PFCs, and SF<sub>6</sub>, were also considered for the analysis. However, because the project would be a



senior housing project, the quantity of fluorinated gases would not be significant since fluorinated gases are primarily associated with industrial processes. Calculations were based on the methodologies discussed in the CAPCOA white paper (January 2008) and included the use of the California Climate Action Registry General Reporting Protocol (January 2009).

Although construction activity is addressed in this analysis, CAPCOA does not discuss whether any of the suggested threshold approaches (as discussed below in *GHG Cumulative Significance*) adequately address impacts from temporary construction activity. As stated in the *CEQA and Climate Change* white paper, “more study is needed to make this assessment or to develop separate thresholds for construction activity” (CAPCOA, 2008). Nevertheless, air districts such as the SCAQMD (2011) have suggested amortizing construction-related emissions over a 30-year period in conjunction with the proposed project’s operational emissions. Emissions associated with the construction period were estimated using the California Emissions Estimator Model (CalEEMod) computer model, based on the projected maximum amount of equipment that would be used onsite at one time. Complete CalEEMod results and assumptions can be viewed in Appendix A.

Operational emissions from energy use (electricity) for the project were estimated using CalEEMod (see Appendix A for calculations). The default values on which CalEEMod are based include the California Energy Commission (CEC) sponsored California Commercial End Use Survey (CEUS) and Residential Appliance Saturation Survey (RASS) studies. Emissions associated with area sources including consumer products and architectural coating were calculated in CalEEMod and utilize standard emission rates from CARB, USEPA, and district supplied emission factor values (CalEEMod User Guide, 2011). Operational emissions, including those associated with demand for water and generation of solid waste, wastewater, or vehicle trips were also calculated in CalEEMod. Because CalEEMod does not calculate N<sub>2</sub>O emissions from mobile sources, N<sub>2</sub>O emissions were quantified using the California Climate Action Registry General Reporting Protocol (January 2009) direct emissions factors for mobile combustion (see Appendix A for calculations). Total daily trip rates associated with the project were taken from the Traffic Memo prepared by Iteris, Inc. (August 2012). Emission rates for N<sub>2</sub>O emissions were based on the vehicle mix output generated by CalEEMod and the emission factors found in the California Climate Action Registry Protocol.

a) The proposed project would generate GHG emissions, during both construction and long-term operation of the project. GHG emissions associated with both construction and operational emissions, including motor vehicle activity, are discussed below.

Based on the CalEEMod results, construction activity for the project would generate an estimated 117 metric tons of carbon dioxide equivalent (CDE) units. Amortized over a 30-year period (the assumed life of the project), construction of the proposed project would generate an estimated 4 metric tons of CDE per year.

CalEEMod was used to calculate direct sources of air emissions from the project. These include “area source emissions” such as consumer product use, architectural coatings (reapplication), and landscape maintenance equipment. The model determined that the project’s area source emissions would be approximately 0.64 metric tons per year. Operation of the proposed project would consume electricity (see Appendix A for calculations) in order to operate mechanical equipment and lighting inside the building. Natural gas would also be consumed as a result of



the project. Electricity and natural gas consumption associated with the project would generate approximately 46 metric tons of CDE per year. Solid waste generation associated with the proposed project would generate approximately 5.23 metric tons of CDE per year. Based on the amount of electricity generated in order to supply water to the project site, water use associated with the proposed project would generate approximately 11 metric tons of CDE per year.

Mobile source GHG emissions were estimated using the ITE rate for average daily trips for the various land uses included in the proposed project, and by the total vehicle miles traveled (VMT) estimated in CalEEMod. The project would generate an estimated 238,627 annual VMT. As noted above, CalEEMod does not calculate N<sub>2</sub>O emissions related to mobile sources. As such, N<sub>2</sub>O emissions were calculated based on the project’s VMT using calculation methods provided by the California Climate Action Registry General Reporting Protocol (January 2009). According to these calculations, the project would generate approximately 122.08 metric tons of CDE units associated with mobile emissions.

Table 4 combines the construction and operational GHG emissions associated with onsite development for the proposed project. Construction emissions (approximately 117 metric tons CDE) are amortized over 30 years (the anticipated life of the project) as recommended by the SCAQMD.

**Table 4**  
**Combined Annual Emissions of Greenhouse Gases**

Emission Source	Annual Emissions
<b>Construction</b>	4 metric tons CDE
<b>Operational</b>	1 metric ton CDE
Area	46 metric tons CDE
Energy	5 metric tons CDE
Solid Waste	11 metric tons CDE
Water	
<b>Mobile</b>	122 metric tons CDE
<b>Total</b>	<b>189 metric tons CDE</b>

*Sources: See Appendix A for calculations and for GHG emission factor assumptions.*

For the proposed project, the combined annual emissions would total approximately 189 metric tons per year in CDE units. Because this total amount of GHG emissions would be lower than the threshold of 3,000 metric tons per year, impacts from GHG emissions would be **less than significant**.

b. In response to Executive Order (EO) S-3-05, CalEPA created the Climate Action Team (CAT), which in March 2006 published the Climate Action Team Report (the “2006 CAT Report”) (CalEPA, 2006). The 2006 CAT Report identified a recommended list of strategies that the state could pursue to reduce GHG emissions. These are strategies that could be implemented by various state agencies to ensure that the emission reduction targets in EO S-3-05 are met and can be met with existing authority of the state agencies. The strategies include the reduction of



passenger and light duty truck emissions, the reduction of idling times for diesel trucks, an overhaul of shipping technology/infrastructure, increased use of alternative fuels, increased recycling, and landfill methane capture, etc. In addition, in 2008 the California Attorney General published The California Environmental Quality Act Addressing Global Warming Impacts at the Local Agency Level (Office of the California Attorney General, Global Warming Measures Updated May 21, 2008). This document provides information that may be helpful to local agencies in carrying out their duties under CEQA as they relate to global warming. Included in this document are various measures that may reduce the global warming related impacts of a project.

The project would be consistent with the GHG reduction strategies set forth by the 2006 CAT Report as well as the 2008 Attorney General's Greenhouse Gas Reduction Measures. Most of these strategies are, or would in the future be, implemented through statewide regulations such as AB 1493 (Pavley), which requires the state to develop and adopt regulations that achieve the maximum feasible and cost-effective reduction of climate change emissions emitted by passenger vehicles and light duty trucks. Regulations to implement AB 1493 were adopted by the ARB in September 2004. Other state-wide mandates and programs that would help achieve these goals includes the State's Cal Green building code standards, which ensure that low flow fixtures and waterwise landscaping are incorporated into projects, and utility company incentives for the purchase of energy-efficient appliances.

The project site is located within the City of Long Beach, which is required to achieve a 50% solid waste diversion rate by the State. According to the State of California Consolidated Integrated Waste Management Board (CIWMB, December 2008), the City of Long Beach had achieved a solid waste diversion rate of 69% as of 2006. The City of Long Beach has an Urban Forestry Program, which is a collaborative effort between neighborhood associations, community groups, the Conservation Corps of Long Beach and the Neighborhood Services Bureau to plant trees in Long Beach neighborhoods. All Urban Forestry projects utilize Federal Community Development Block Grant (CDBG) and State of California Department of Urban Forestry funding to purchase trees and the tools and equipment for their planting and maintenance (City of Long Beach Urban Forestry website, August 2012). The proposed project would not interfere with or be inconsistent with this program, and would retain the minimal amount of on-site vegetation along Obispo Avenue and East 3<sup>rd</sup> Street.

Several alternative fueling stations are available in the region, including a biodiesel station located approximately 27 miles northeast of the project site in Placentia, an ethanol station located approximately 10 miles west of the site in Wilmington, and several electric vehicle charging stations in Long Beach, including two in downtown Long Beach approximately 2.5 miles west of the project site (U.S. Department of Energy, March 2012). The proposed project would increase the population density of the area, which is served by several bus lines with stops within ¼ mile of the project site. For example, bus lines run up and down Redondo Avenue, East 4<sup>th</sup> Street, and East Broadway, with stops at their intersections with East 3<sup>rd</sup> Street and Obispo Avenue. These bus lines provide access to the regional public transportation network, including the LA Metro Blue Line light rail line linking downtown Long Beach to downtown Los Angeles, as well as the Metrolink commuter rail system. The northbound bus line on Redondo Avenue also directly serves the Long Beach Airport. The project would introduce new residences into an area not only served by this transit network, but also within



walking distance of jobs and shopping opportunities in the local neighborhood, such as those along Redondo Avenue.

For these reasons, the proposed project’s potential to conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases would be **less than significant**.

	<b>Potentially Significant Impact</b>	<b>Potentially Significant Unless Mitigation Incorporated</b>	<b>Less than Significant Impact</b>	<b>No Impact</b>
<b>VIII. HAZARDS AND HAZARDOUS MATERIALS - Would the Project:</b>				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within ¼ mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Be located on a site which is included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project result in a safety hazard for people residing or working in the Project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the Project result in a safety hazard for people residing or working in the Project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>



	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
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**VIII. HAZARDS AND HAZARDOUS MATERIALS** - Would the Project:

h) Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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a) The proposed project involves demolition of an existing residence and construction of a senior housing project and surface parking lot. Operation of the proposed project would not involve the routine transport, use or disposal of hazardous substances. There would be **no impact**.

b, c) The school nearest to the project site is Mann Elementary School, which is located approximately 60 feet to the south of the project site across East 3<sup>rd</sup> Street. Operation of the proposed project would not involve the routine use or transport of hazardous materials or emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste, and nearby schools would therefore not be adversely affected. Construction of the project would involve demolition of the existing residence at 304 Obispo Avenue and interior remodeling of the Immanuel Community Church building. This could require the removal or transportation of hazardous materials such as asbestos-containing materials (ACMs) or lead-based paints and materials. South Coast Air Quality South Coast Air Quality Management District (SCAQMD) Rule 1403, *Asbestos Emissions from Demolition/Renovation Activities*, potentially applies to demolition activity within the project area. Compliance with SCAQMD Rule 1403 requires that the owner or operator of any demolition or renovation activity have an asbestos survey performed prior to demolition. Lead-based materials exposure is regulated by California Occupational Safety and Health Administration (CalOSHA) regulations. California Code of Regulations, §1532.1, requires testing, monitoring, containment, and disposal of lead-based materials such that exposure levels do not exceed CalOSHA standards. Compliance with these regulations would reduce the project’s potential impacts related to hazardous emissions or materials affecting school sites within ¼ mile to a **less than significant** level.

d) The following databases compiled pursuant to Government Code Section 65962.5 were checked (August 23, 2012) for known hazardous materials contamination at the project site:

- Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) database;
- Geotracker search for leaking underground storage tanks (LUSTs);
- Investigations- Cleanups (SLIC) and Landfill sites, Cortese list of Hazardous Waste and Substances Sites; and



- The Department of Toxic Substances Control’s Site Mitigation and Brownfields Database.

The project site does not appear on any of the above listed databases. The closest contaminated site is a LUST cleanup site located at 300 Redondo Avenue, approximately 540 feet east of the project site. Based on the records on the Geotracker online database (California State Water Quality Control Board, August 2012), potential contaminants of concern on this site as a result of the LUST include benzene, gasoline, toluene, and xylene. The case was opened in 1990 and its status is inactive as of April 2009. The record search indicates that cleanup onsite took place and the case was deemed to be closed by the Los Angeles Regional Water Quality Control Board (RWQCB) in April 2009. The closest “open status” contaminated site is located approximately 0.4 miles to the southwest of the site, with the sole potential contaminant of concern being gasoline. According to a September 2008 “Aquifer Characteristics Test” report by Frey Environmental accessed through the Geotracker database, groundwater flow at this site is to the west, away from the project site. There is no evidence to suggest that any contamination at these sites would affect the project site. Thus, construction of the proposed project would not create a significant hazard to the public or the environment from being located on a contaminated site. The impact would be **less than significant**.

e, f) The project site is located approximately 2.75 miles southwest of the closest airport, Long Beach Municipal Airport. The project site is not within an area covered by an airport land use plan, nor is it located in the vicinity of a private air strip. Thus, air traffic associated with the Long Beach Municipal Airport would not result in a safety hazard at the project site. There would be **no impact**.

g) The proposed project involves demolition of one residence, construction of a surface parking lot on that site, and conversion of the Immanuel Community Church building to a senior housing project, and would not conflict with an adopted emergency response plan or emergency evacuation plan or interfere with traffic on adjacent streets. The impact would be **less than significant**.

h) The project site is located in an urbanized area of Long Beach not in proximity to wildlands. Thus the proposed project would not expose persons or structures to wildfire hazard risks. There would be **no impact**.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
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**IX. HYDROLOGY AND WATER QUALITY**

– Would the Project:

- |   |                          |                          |                                     |                          |
|---|--------------------------|--------------------------|-------------------------------------|--------------------------|
| a) Violate any water quality standards or waste discharge requirements? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|---|--------------------------|--------------------------|-------------------------------------|--------------------------|



	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
<b>IX. <u>HYDROLOGY AND WATER QUALITY</u></b>				
– Would the Project:				
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Substantially alter the existing drainage pattern of the site or area, including the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>



	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
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**IX. HYDROLOGY AND WATER QUALITY**

– Would the Project:

i) Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j) Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a, e-f) The project site is located approximately 0.5 miles from the Pacific Ocean, one mile from Colorado Lagoon, 1.4 miles from the Marine Stadium portion of Alamitos Bay, 2 miles from the mouth of the Los Angeles River, and 2.6 miles from the mouth of the San Gabriel River. Construction activity, including grading for the proposed parking lot, could have the potential to degrade water quality due to sediment erosion or the presence of contaminants located within the soils (as discussed in Section VIII, *Hazards and Hazardous Materials*). However, on-site activities would be required to comply with the requirements of the Long Beach Municipal Code Chapter 18.95, NPDES and SUSMP Regulations. Specifically, proposed construction activities would be required to comply with LBMC Chapter 18.95.050, which requires construction plans to include construction and erosion and sediment control best management practices (BMPs). Examples of required BMPs include sediment traps, stockpile management, and material delivery and storage. Further, the City would be required to complete and submit a Stormwater Pollution and Prevention Plan (SWPPP) to both the Regional Water Quality Control Board (RWQCB) and the City of Long Beach in addition a Notice of Intent (NOI) to comply with the state construction activity storm water permit. Compliance with these requirements would reduce potential impacts associated with water quality during implementation of the proposed project to **less than significant**. The project does not involve any actions beyond construction activities that would adversely affect water quality.

b) The proposed project would eliminate one single family residence and introduce 25 new dwelling units on the project site, leading to an increase of 24 dwelling units. The project would therefore lead to a small increase in consumption of potable water. However, this increase would be so small in comparison to total water usage in this highly urbanized area that it would not significantly impact groundwater. Also, the project would produce little if any increase in impermeable surfaces in the area that would restrict groundwater recharge. The project would therefore not substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level, and this impact would be **less than significant**.

c, d) The proposed project would not alter the surface drainage pattern of the surrounding area. It also would not require the relocation of existing storm drain lines or construction of any new storm drain lines. Storm water would continue to flow into the City’s existing storm drain



system. The project would not significantly increase the amount of impermeable surfaces on the project site, and would therefore not significantly alter the overall amount of surface water drainage such that the project would result in flooding, substantial erosion or siltation on- or off-site. Construction activities, including excavation, may result in sedimentation or erosion on or off-site. However, as discussed above, proposed construction activities would be required to comply with LBMC Chapter 18.95.050, which requires construction plans to include construction and erosion and sediment control best management practices (BMPs) that would reduce the impacts related to erosion or siltation on or off site to a less than significant level. Impacts related to drainage patterns, both temporary and operational, would be **less than significant**.

g-h) Per FEMA flood zone maps (#06037C1970F), the project site is located in Zone X, which is outside both the 100-year flood zone (the area with a 1% chance per year of flooding) and the 500-year flood zone (the area with a 0.2% chance per year of flooding). The proposed project would not impede flood flows or expose people to significant flood-related safety impacts. Consequently, there would be **no impact**.

i) The proposed project is not subject to flooding due to dam or levee failure, and would not increase exposure to risks associated with dam or levee failure. **No impact** would occur.

j) A tsunami is a tidal wave produced by off-shore seismic activity; seiches are seismically-induced waves that occur in large bodies of water, such as lakes. The project site is not located within a tsunami hazard zone (California Department of Conservation, March 2009). Additionally, because the project site is not sufficiently close to a large body of water other than the ocean, seiches are not a significant concern. As described above in Section VI, *Geology and Soils*, the project site is not located within an area subject to potentially high landslide or debris and mud flows. Therefore, **no impact** related to these hazards would occur.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
<b>X. <u>LAND USE AND PLANNING</u> --</b> Would the proposal:				
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the Project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Conflict with an applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>



a) The proposed project would not physically divide or in any way affect an established community. **No impact** would occur.

b) The project site is located in the R-2-A, Two-Family Residential, accessory second unit zoning district and within General Plan Land Use Designation Mixed Style Homes (LUD No. 2). No changes to the General Plan land use or zoning designations are proposed. The project site is located in the Bluff Heights Historic District and the buildings located on the project site are contributors to this district. Therefore, the project has the potential to conflict with the Bluff Heights Historic District (City of Long Beach Ordinance No. C-7937). Also, the project would provide 12 off-street parking spaces, but Chapter 21.41.216 of the LBMC requires that Low Rent Senior Housing provide at least one off-street parking space for every two bedrooms. Because the project would include 25 residential units (24 senior units and one manager's unit) it would be required to provide 13 parking spaces. However, if the Planning Commission waives this parking requirement, this inconsistency would be resolved. The project would also require a waiver through the Site Plan Review process from Chapter 21.25.508 B of the LBMC, which requires outdoor open space and from Chapter 21.25.508 E of the LBMC because it proposed a 42-inch high railing and light wells in the required 15-foot front yard setback. The project would also require a variance from the following chapters of the LBMC to allow open parking spaces instead of enclosed garage parking spaces (21.42.213); more than 50% compact size spaces (21.41, Table 41-2); parking lot side and rear yard setback of less than five feet (21.52.221); a reduced turning radius of less than 24 feet for a standard size parking stall (21.41, Table 41-3); and a one-way driveway for two-way traffic instead of a two-way driveway (21.41, Table 41-4). The project would also require an Administrative Use Permit for conversion of a legal nonconforming use (church) to another nonconforming use (senior housing); a Certificate of Appropriateness for exterior alterations to a building within a designated historic district; and a Lot Tie to tie the proposed parking lot on the adjacent parcel to the senior housing project.

The project site is not located in the Coastal Zone, which ends at Broadway, located approximately ¼ mile to the south (City of Long Beach, LB Planning website, August 2012), and the project would therefore not conflict with the Local Coastal Plan (LCP). Because the project has the potential to conflict with the Bluff Heights Historic District Ordinance, this is a **potentially significant impact** that will be further studied in the Cultural Resources section of the EIR.

c) The project site is not located within an area that is subject to an adopted habitat conservation plan or natural community plan. **No impact** would occur.



	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
<b>XI. <u>MINERAL RESOURCES</u> --</b>				
Would the Project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a-b) The project site and surrounding properties are part of an urbanized area in southeast Long Beach. The project site is not located in a mineral extraction operations area. The proposed project does not involve a mineral resource recovery site and no mineral resource activities would be altered or displaced by the project. Therefore, **no impact** would occur.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
<b>XII. <u>NOISE</u> –</b>				
Would the Project result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) A substantial permanent increase in ambient noise levels above levels existing without the Project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) A substantial temporary or periodic increase in ambient noise levels in the Project vicinity above levels existing without the Project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
<b>XII. NOISE</b> – Would the Project result in:				
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project expose people residing or working in the Project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the Project expose people residing or working in the Project area to excessive noise?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Noise is defined as unwanted sound that disturbs human activity. Environmental noise levels typically fluctuate over time, and different types of noise descriptors are used to account for this variability. Noise level measurements include intensity, frequency, and duration, as well as time of occurrence. Noise level (or volume) is generally measured in decibels (dB) using the A-weighted sound pressure level (dBA). The A-weighting scale is an adjustment to the actual sound power levels to be consistent with that of human hearing response, which is most sensitive to frequencies around 4,000 Hertz (about the highest note on a piano) and less sensitive to low frequencies (below 100 Hertz). Decibels are measured on a logarithmic scale with the 0 dB level based on the lowest detectable sound pressure level that people can perceive (an audible sound that is not zero sound pressure level). Noise levels typically attenuate (drop off) at a rate of 6 dB per doubling of distance from point sources such as industrial machinery. Noise from lightly traveled roads typically attenuates at a rate of about 4.5 dB per doubling of distance. Noise from heavily traveled roads typically attenuates at about 3 dB per doubling of distance.

In addition to the instantaneous measurement of sound levels, the duration of sound is important since sounds that occur over a long period of time are more likely to be an annoyance or cause direct physical damage or environmental stress. One of the most frequently used noise metrics that considers both duration and sound power level is the equivalent noise level ( $L_{eq}$ ). The  $L_{eq}$  is defined as the single steady A-weighted level that is equivalent to the same amount of energy as that contained in the actual fluctuating levels over a period of time (essentially, the average noise level). Typically,  $L_{eq}$  is summed over a one-hour period.

The time period in which noise occurs is also important since noise that occurs at night tends to be more disturbing than that which occurs during the daytime. Two commonly used noise metrics – the Day-Night average level ( $L_{dn}$ ) and the Community Noise Equivalent Level (CNEL) - recognize this fact by weighting hourly  $L_{eqs}$  over a 24-hour period. The  $L_{dn}$  is a 24-hour average noise level that adds 10 dB to actual nighttime (10:00 PM to 7:00 AM) noise levels to account for the greater sensitivity to noise during that time period. The CNEL is identical to



the  $L_{dn}$ , except it also adds a 5 dB penalty for noise occurring during the evening (7:00 PM to 10:00 PM).

Some land uses are considered more sensitive to ambient noise levels than other uses due to the amount of noise exposure and the types of activities involved. The City of Long Beach designates the following land uses as being noise-sensitive: dwellings, schools, hospitals, hotels and health institutions (Long Beach General Plan Noise Element, 1975). The noise-sensitive land uses closest to the project site include: residences immediately adjoining the project site on its north and east sides; residences across Obispo Avenue from the project site, the closest of which is located approximately 60 feet to its west; residences to the southwest of the project site across East 3<sup>rd</sup> Street, located at their closest approximately 90 feet from the project site; and Horace Mann Elementary School, located across East 3<sup>rd</sup> Street, approximately 50 feet south of the project site.

In order to determine the compatibility of proposed new uses with existing development, the City of Long Beach uses the State Noise/Land Use Compatibility Standards shown in Table 5, which suggest a normally acceptable exterior noise exposure of up to 65 dBA CNEL for sensitive land uses such as residences and schools. Less sensitive commercial and industrial uses may be compatible with ambient noise levels up to 70 dBA.

The City's Noise Ordinance (LBMC Chapter 8.80) sets exterior and interior noise limits, and prohibits disturbing noises. Chapter 8.80.150 sets exterior noise limits for most of the City, including the project site and its vicinity, at 50 dBA during the day (7:00 a.m. to 10:00 p.m.) and 45 dBA at night (10:00 p.m. to 7:00 a.m.). Chapter 8.80.150B states the following:

*No person shall operate or cause to be operated any source of sound at any location within the incorporated limits of the city or allow the creation of any noise on property owned, leased, occupied, or otherwise controlled by such person, which causes the noise level when measured from any other property, either incorporated or unincorporated, to exceed:*

- 1. The noise standard for that land use district as specified in Table A in Section 8.80.160 for a cumulative period of more than thirty minutes in any hour; or*
- 2. The noise standard plus five decibels for a cumulative period of more than fifteen minutes in any hour; or*
- 3. The noise standard plus ten decibels for a cumulative period of more than five minutes in any hour; or*
- 4. The noise standard plus fifteen decibels for a cumulative period of more than one minute in any hour; or*
- 5. The noise standard plus twenty decibels or the maximum measured ambient, for any period of time.*



**Table 5**  
**Land Use Compatibility for Noise Environments**

Land Use Category	Community Noise Exposure Level			
	Normally Acceptable	Conditionally Acceptable	Normally Unacceptable	Clearly Unacceptable
Low Density, Single-Family, Duplex, Mobile Homes	50-60	55-70	70-75	75+
Residential – Multiple Family	50-65	60-70	70-75	75+
Transient Lodging – Motel, Hotels	50-65	60-70	70-80	80+
Schools, Libraries Churches, Hospitals, Nursing Homes	50-65	60-70	70-80	80+
Auditoriums, Concert Halls, Amphitheaters	NA	50-70	65+	NA
Sports Arenas, Outdoor Spectator Sports	NA	50-75	70+	NA
Playgrounds, Neighborhood Parks	50-70	NA	67-75	73+
Golf Courses, Riding Stable, Water Recreation, Cemeteries	50-75	NA	70-80	80+
Office Buildings, Business Commercial and Professional	50-70	67 -77	75+	NA
Industrial, Manufacturing, Utilities, Agriculture	50-75	70-80	80+	NA

Source: Office of Noise Control, California Department of Health.

Notes: NA - Not Applicable

**Normally Acceptable** – Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements

**Conditionally Acceptable** – New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.

**Normally Unacceptable** – New construction or development should be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.

**Clearly Unacceptable** – New construction or development should generally not be undertaken.

Chapter 8.80.150C of the LBMC states:

*If the measured ambient level exceeds that permissible within any of the first four noise limit categories in subsection B of this section, the allowable noise exposure standard shall be increased in five decibels increments in each category as appropriate to encompass or reflect the ambient noise level. In the event the ambient noise level exceeds the fifth noise limit category in subsection B of this section, the maximum allowable noise level under said category shall be increased to reflect the maximum ambient noise level.*

Chapter 8.80.202 of the LBMC prohibits noise associated with demolition and other construction activities that produce loud or unusual noise that would annoy or disturb a reasonable person of normal sensitivity between the hours of 7:00 PM and 7:00 AM on any weekdays including federal holidays, except for authorized emergency work. On Saturdays, such activities are allowed only between the hours of 9:00 AM and 6:00 PM, and not allowed



any time on Sunday unless for authorized emergency work or work authorized by the noise control officer. Impacts from construction noise would be considered significant if noise were to occur outside the allowable times without authorization. Chapter 8.80.200 of the LBMC forbids certain noise disturbances, including operating or permitting the operation of any air-conditioning or air refrigerating equipment in such a manner as to exceed the following sound levels specified in the American Society of Heating, Refrigeration and Air Conditioning Engineers Code of Recommended Practices.

Noise levels were measured in two locations near the project site (one on the west side of Obispo Avenue across from the parking lot proposed under the project; and one on the south side of East 3<sup>rd</sup> Street across from the Immanuel Community Church building and in front of Horace Mann Elementary, approximately midblock between Obispo Avenue and Coronado Avenue) on the afternoon of Friday, August 10<sup>th</sup>, 2012, between approximately 4:00 p.m. and 4:45 p.m. Table 6 shows the results of these noise measurements, which indicate an existing noise environment in the immediate vicinity of the project site of approximately 53 to 61 Leq dBA, which is within the normally acceptable exterior noise exposure level for multiple family residential of 65 dBA CNEL. Existing ambient noise levels are higher than the 50 dBA exterior noise level standard listed in Chapter 8.80.150B of the LBMC, and the maximum allowable noise level would therefore be adjusted upwards to reflect these existing ambient noise levels, in compliance with Chapter 8.80.150C of the LBMC.

**Table 6**  
**Existing Ambient Noise Levels<sup>1</sup>**

Measurement Location	Time	Noise Equivalent Level (Leq) (dBA)
1) East 3 <sup>rd</sup> Street, approx. midblock between Obispo Avenue and Coronado Avenue, approx. 20 feet from the center of East 3 <sup>rd</sup> Street.	4:02-4:17 PM	60.9
2) Obispo Avenue, approx. 170 feet north of its intersection with East 3 <sup>rd</sup> Street and approx. 20 feet from the center of Obispo Avenue.	4:27-4:42 PM	53.2

<sup>1</sup> Noise readings were taken by Rincon Consultants with a Rion NL-21 Sound Level Meter on Friday August 10<sup>th</sup>, 2012.

Vibration is a unique form of noise. It is unique because its energy is carried through buildings, structures, and the ground, whereas noise is simply carried through the air. Thus, vibration is generally felt rather than heard. Some vibration effects can be caused by noise; e.g., the rattling of windows from truck pass-bys. This phenomenon is caused by the coupling of the acoustic energy at frequencies that are close to the resonant frequency of the material being vibrated. Typically, groundborne vibration generated by manmade activities attenuates rapidly as distance from the source of the vibration increases. The ground motion caused by vibration is measured as particle velocity in inches per second and is referenced as vibration decibels (VdB) in the U.S.

The vibration velocity level threshold of perception for humans is approximately 65 VdB. A vibration velocity of 75 VdB is the approximate dividing line between barely perceptible and distinctly perceptible levels for many people. Most perceptible indoor vibration is caused by



sources within buildings such as operation of mechanical equipment, movement of people, or the slamming of doors. Typical outdoor sources of perceptible groundborne vibration are construction equipment, steel wheeled trains, and traffic on rough roads.

The City has not adopted any thresholds or regulations addressing vibration. Vibration impacts would be significant if they exceeded the following Federal Railroad Administration (FRA) thresholds.

- *65 VdB where low ambient vibration is essential for interior operations, such as hospitals and recording studios.*
- *72 VdB for residences and buildings where people normally sleep, including hotels.*
- *75 VdB for institutional land uses with primary daytime use, such as churches and schools.*
- *95 VdB for physical damage to extremely fragile historic buildings.*
- *100 VdB for physical damage to buildings.*

Construction vibration impacts would be less than significant for residential receptors if they are below the threshold of physical damage to buildings and occur during the City's normally permitted hours of construction, as described above, because these construction hours are during the daytime and would therefore not normally interfere with sleep.

a, c) The proposed project involves demolition of one existing single family residence and remodeling of the existing Immanuel Community Church building to accommodate 24 apartments and one manager's unit. The project would generate vehicular trips and increase vehicular traffic on surrounding streets. The primary operational sources of noise associated with the proposed project that could increase existing ambient noise levels would be this project-generated traffic, stationary sources such as mechanical equipment, and non-stationary noise such as parking lot noise from vehicles and conversations.

Based on trip generation rates from the Institute of Transportation Engineers (ITE) Trip Generation Manual, 8<sup>th</sup> Edition, the project is expected to generate a net total of 94 daily vehicle trips, with four total trips in the a.m. peak hour and five total trips in the p.m. peak hour. Based on a trip distribution of 80% of these trips going east/west on East 3<sup>rd</sup> Street and 20% of these trips going north/south on Obispo Avenue, the project would contribute four p.m. peak hour trips to East 3<sup>rd</sup> Street, and one p.m. peak hour trip to Obispo Avenue. Using this trip generation and traffic counts from the City of Long Beach (City of Long Beach, August 2012), the project's contribution to roadway noise levels was modeled for East 3<sup>rd</sup> Street using the Federal Highway Administration's Traffic Noise Model (TNM) Lookup software program, the results of which are shown in Table 8 (see Appendix C for detailed results). As shown in Table 7, the project would cause only a 0.1 dB increase and would not raise ambient noise levels above the 65 dBA "normally acceptable" threshold shown in Table 5. Results were not modeled for Obispo Avenue due to lack of existing traffic volume data for that street, but the project would generate only one p.m. peak hour trip on this segment as opposed to four p.m. peak hour trips on East 3<sup>rd</sup> Street, on a street with lower traffic volumes and ambient noise levels, and would therefore also not be expected to violate the 65 dBA standard. Vehicle trips generated by the project would therefore cause a **less than significant** increase in operational traffic noise impacts.



**Table 7**  
**Project Contribution to Roadway Noise Levels**

Roadway Segment	Existing (dBA)	Existing Plus Project (dBA)	Increase Over Existing (dB)
1) East 3 <sup>rd</sup> Street, between Obispo Avenue and Coronado Avenue.	60.7	60.8	0.1

Source: Rincon Consultants field survey, August 10, 2012; TNM Lookup software program. See Appendix C for TNM data output sheets.

Mechanical equipment associated with the proposed project would be limited to equipment such as HVAC systems associated with residential development, which would produce temporary noise. However, such HVAC equipment would be subject to Chapter 8.80.200 of the LBMC, as discussed above. Enforcement of this regulation would ensure that its operation would not cause a significant operational noise impact. Noise levels from typical parking lot noise sources are shown in Table 8. Due to the relatively small size of the proposed parking lot, its operation would not be expected to involve sweepers or tire squeals, but parking lot noise from vehicles and conversations could produce noise levels up to 77 dBA. Given the fact that existing ambient noise levels on Obispo Avenue near the project site are approximately 53 dBA, impacts from these noise sources would be significant if they violated Chapter 8.80.150B of the LBMC (discussed above) by causing the noise level when measured from any other property to exceed the base noise level (in this case, approximately 53 dBA) by a cumulative period of more than 30 minutes in any hour; the base noise level plus five decibels for a cumulative period of more than 15 minutes in any hour; the base noise level plus ten decibels for a cumulative period of more than five minutes in any hour; the base noise level plus 15 decibels for a cumulative period of more than one minute in any hour; or the base noise level plus 20 decibels or the maximum measured ambient, for any period of time. Because the noise levels for car horns and car alarm signals shown in Table 8 exceed the base noise level by 24 dB, such noise levels at immediately adjacent noise-sensitive receptors to the north and northeast of the project site could be significant, although temporary, if not properly attenuated. However, as shown on the project site plan (Figure 3), the project site would be bordered on its north and east sides by a 6'6" CMU (concrete masonry unit) wall. This wall would provide substantial noise attenuation for these neighboring properties, and this impact would be **less than significant**.

b) The proposed project would involve demolition and construction activities at the 304 Obispo Avenue parcel such as tear-down of the existing residence, foundation removal, pavement removal, and grading and paving activities for the proposed surface parking lot. Construction of the proposed improvements at the former Immanuel Community Church building would be almost exclusively to the interior of the building, with exterior changes limited to some fenestration and other façade work. Project construction activities, especially on the 304 Obispo Avenue parcel, are anticipated to result in some vibration that may be felt on properties in the immediate vicinity of the project site, as commonly occurs with construction projects. Table 9 identifies various vibration velocity levels for different types of construction equipment. The project would not utilize pile drivers or large bulldozers, but could utilize jackhammers and small bulldozers on the project site during construction, and loaded trucks on the project site and surrounding streets during construction.



**Table 8**  
**Typical Parking Lot Noise Sources**

Source	Level at 20 Feet (dBA)
Autos at 14 mph	58
Sweepers	80
Car Alarm Signal	77
Car Alarm Chirp	62
Car Horns	77
Door Slams or Radios	72
Talking	44
Tire Squeals	74

Source: Gordon Bricken & Associates, February 1996.  
Estimates are based on actual noise measurements taken at various parking lots.

**Table 9**  
**Vibration Source Levels for Construction Equipment**

Equipment	Approximate VdB					
	25 Feet	50 Feet	60 Feet	75 Feet	100 Feet	120 Feet
Pile Driver	104	95	93	90	86	84
Large Bulldozer	87	78	76	73	69	67
Loaded Trucks	86	77	74	71	68	65
Jackhammer	79	70	67	65	61	58
Small Bulldozer	58	48	46	43	39	37

Source: Federal Railroad Administration, 1998

Based on the information presented in Table 9, vibration levels could temporarily and intermittently reach a maximum of 86 VdB at the residences immediately adjoining (and thus within 25 feet of) the project site. This would exceed the 72 VdB threshold for residences and buildings where people normally sleep. However, as already stated, the City's Noise Ordinance prohibits construction outside daytime hours; therefore, construction vibration would not be significant at these receptors because it would occur outside hours when people normally sleep, and would not exceed the 100 VdB threshold for minor cosmetic damage to fragile buildings. While Horace Mann Elementary School, the nearest non-residential sensitive receptor, is located directly across East 3<sup>rd</sup> Street and approximately 60 feet from the project site, this part of the campus is occupied by playground space, and school buildings where children would be sensitive to vibration impacts would be located over 300 feet from the project site. On-site construction vibration impacts at this sensitive receptor would be well below applicable thresholds, as shown in Table 9. However, if loaded trucks leaving the project site used Obispo Avenue or Coronado Avenue south of East 3<sup>rd</sup> Street, they could come within 25 feet of certain school buildings and produce vibration levels up to 86 VdB, thus exceeding the 75 VdB



threshold for institutional land uses with primary daytime use, such as churches and schools. Mitigation Measure N-1 is therefore necessary to reduce this potential impact to construction vibration impacts on nearby residential and school uses. This impact would be **less than significant with mitigation incorporated**.

The following mitigation measure is required to reduce construction noise and vibration impacts on sensitive receptors:

- N-1 Heavy Truck Restriction/Haul Routes.** The construction contractor shall prohibit heavy trucks from driving on either Obispo Avenue or Coronado Avenue south of East 3<sup>rd</sup> Street. Heavy trucks include all cargo vehicles with three or more axles, generally with gross vehicle weight greater than 26,400 lbs. The preferred haul route for demolition and construction materials shall be East 3<sup>rd</sup> Street to Redondo Avenue to the nearest major arterial or freeway.

d) Project construction would involve the use of heavy equipment associated with grading. Noise generated during this phase would be typical of such site preparation activity and would be temporary. Typical noise levels for construction activities are listed in Table 10. The project would not utilize pile drivers or large bulldozers, but could utilize jackhammers and pavers on the project site during construction, and loaded trucks on the project site and surrounding streets during construction. The sensitive receptors closest to the project site are the residential properties adjoining it on its north and east sides, which would be less than 50 feet from the source of construction noise. Maximum noise levels at the nearest sensitive receptors would normally range from about 85-89 dBA. Such noise levels would exceed ambient levels in the area and could cause temporary disturbance to nearby receptors.

**Table 10  
Typical Construction Noise Levels**

Equipment	Typical Level (dBA) 50 Feet from the Source	Typical Level (dBA) 100 Feet from the Source	Typical Level (dBA) 200 Feet from the Source	Typical Level (dBA) 400 Feet from the Source
Pile Driver	101	95	89	83
Large Bulldozer	90	84	78	72
Paver	89	83	77	71
Jackhammer	88	82	76	70
Truck	88	82	76	70
Front End Loader	85	79	73	67

Source: Harris Miller, Miller & Hanson Inc. May2006 for the Federal Transit Administration

Pursuant to Chapter 8.80 of the City’s Municipal Code, it is prohibited for noise associated with demolition and other construction activities to exceed the allowable exterior noise level for any zone outside the hours of 7:00 AM and 7:00 PM on any weekday including federal holidays, outside the hours of 9:00 AM and 6:00 PM on Saturday, and anytime on Sunday. Because the proposed project would be required to comply with the City’s Municipal code requirements,



impacts related to temporary construction noise on sensitive residential receptors would be **less than significant**.

While Horace Mann Elementary School, the nearest non-residential sensitive receptor, is located directly across East 3<sup>rd</sup> Street and approximately 60 feet from the project site, this part of the campus is occupied by playground space, and school buildings where children would be more sensitive to noise impacts would be located over 300 feet from the project site, and over 400 feet from the part of the project site on which heavier construction activities such as demolition, foundation removal, grading, and paving would take place. As shown in Table 10, maximum noise levels from project construction activities for sensitive receptors at Horace Mann School would range from about 67-71 dBA, which is within both the “conditionally acceptable” range of 60-70 CNEL and the “normally unacceptable” range of 70-80 CNEL for schools shown in Table 5. The loudest of these on-site construction activities, such as jackhammers and pavers, would be screened from Horace Mann School by the existing Immanuel Community Church building, so actual noise levels would be slightly lower and on-site construction noise levels would fall into the “conditionally acceptable” range. For all of the reasons discussed above, on-site construction noise impacts from the project on Horace Mann School would be less than significant. However, if large construction trucks associated with project construction travelled on either Obispo Avenue or Coronado Avenue south of East 3<sup>rd</sup> Street, they could come within 25 feet of certain school buildings and produce noise levels up to 88 dB, thus exceeding the 70 dB threshold for schools listed in Table 5. While such noise would occur only for a few moments while the truck was passing the building, this impact could be significant unless mitigated. However, implementation of Mitigation Measure N-1 (listed above) would prohibit trucks from using Obispo Avenue or Coronado Avenue south of East 3<sup>rd</sup> Street. Construction noise impacts on Horace Mann School would therefore be **less than significant with mitigation incorporated**.

e, f) The project site is located approximately 2.75 miles southwest of the closest airport, Long Beach Municipal Airport. Therefore, **no impact** associated with airport noise conflicts would occur.

	<b>Potentially Significant Impact</b>	<b>Potentially Significant Unless Mitigation Incorporated</b>	<b>Less than Significant Impact</b>	<b>No Impact</b>
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**XIII. POPULATION AND HOUSING —**

Would the Project:

a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>



	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
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**XIII. POPULATION AND HOUSING —**

Would the Project:

- c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

a) The proposed project would involve the creation of 25 new housing units (24 independent low or very low income senior dwelling units, and one manager’s unit), and the elimination of one existing housing unit (the residence currently located at 304 Obispo Avenue), resulting in an increase of 24 housing units. The population of the City of Long Beach is 464,662 (California Department of Finance, May 2012). The Southern California Association of Governments (SCAG) in its adopted 2012 Integrated Growth Forecast (SCAG, August 2012), forecasts that the population of Long Beach will grow to 491,000 by 2020, which would be a population increase of 26,338 persons, or 5.7%. The potential population increase generated by the project, which would be at a maximum two persons for each unit, would be approximately 50 persons. This falls well within SCAG’s population increase forecast and, therefore, would not directly or indirectly induce substantial population growth in the area. For the same reason, the project’s employment generating potential would not be significant compared to projected growth. Therefore, this impact would be **less than significant**.

b, c) The proposed project would result in the displacement of only one housing unit: the existing residence at 304 Obispo Avenue. This would not constitute a substantial displacement of housing or people, and this impact would be **less than significant**.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
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**XIV. PUBLIC SERVICES**

- a) Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:



	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
<b>XIV. PUBLIC SERVICES</b>				
i) Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii) Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii) Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv) Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
v) Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a.i, ii) Fire and police protection are provided by the Long Beach Fire Department (LBFD) and the Long Beach Police Department (LBPD). The proposed project does not include any new buildings or structures, but would convert an existing, although currently vacant, institutional use into 25 housing units. However, as discussed in Section XIII, *Population and Housing*, the project would not create a significant increase in population compared to projected growth. The project would therefore not significantly affect existing fire and police service ratios and response times or significantly increase the demand for fire and police protection services beyond that already planned. The proposed senior housing project would be built according to California Building Code (CBC) requirements. Additionally, the submitted plans would require review and approval from the City of Long Beach Building Department and all other required departments and agencies to ensure that fire and life safety regulations are met. Therefore, impacts would be **less than significant**.

a.iii, iv, v) The amount of residential development and employment opportunities created by the proposed project would not directly result in significant population increases or significantly increased demand for schools, parks, or other facilities, and this impact would be **less than significant**.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
<b>XV. RECREATION --</b>				
a) Would the Project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>



	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
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**XV. RECREATION --**

b) Does the Project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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a, b) As discussed in Section XIV, *Public Services*, the proposed project would not result in significant population growth or new employment opportunities that would result in significantly increased demand for, or increased use of, park or recreational facilities. Furthermore, the project does not propose any recreational facilities that could be used by the public. Therefore the project's impacts on recreational facilities would be **less than significant**.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
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**XVI. TRANSPORTATION / TRAFFIC --**  
Would the Project:

a) Conflict with an applicable plan, ordinance or policy establishing a measure of effectiveness for the performance of the circulation system, taking into account all modes of transportation, including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways, and freeways, pedestrian and bicycle paths, and mass transit?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
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**XVI. TRANSPORTATION / TRAFFIC --**

Would the Project:

d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Conflict with adopted policies, plans, or programs regarding public transit, bikeways, or pedestrian facilities, or otherwise substantially decrease the performance or safety of such facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a, b) The proposed project involves the demolition of one single family residence at 304 Obispo Avenue and construction of a 12-space surface parking lot on that parcel, as well as conversion of the existing, currently vacant, Immanuel Community Church building to 24 units of independent low or very low income senior dwelling units, one manager’s unit, and associated amenities. It would therefore lead to an increased number of vehicle trips associated with the increased level of residence and activity on the site as well as traffic generated during construction activities, both of which would have the potential to impacting the surrounding street system.

A Technical Memorandum providing analysis of the estimated trip generation and potential traffic impacts of the project was performed by Iteris, Inc. in August 2012 (Appendix B). It found that the project would generate approximately 91 daily trips, including 4 a.m. peak hour trips and 5 p.m. peak hour trips. This anticipated trip generation for the a.m. and p.m. peak hours is below the City’s threshold requirements for a detailed traffic impact study, and no traffic related impacts are anticipated at roadways and intersections within the vicinity of the project. The project would therefore not conflict with an applicable congestion management program (CMP), or any other applicable plan, ordinance or policy establishing a measure of effectiveness for the performance of the circulation system, because it would not alter level of service standards or other standards, including those established for CMP designated roads or highways. **No impact** would occur.

c) As discussed in Section VIII, *Hazards and Hazardous Materials*, given the fact that the project site is located approximately 2.75 miles southwest of the closest airport, Long Beach Municipal Airport, the project would not present any impediments to air traffic, and would therefore not affect air traffic patterns. Therefore, **no impact** would occur.

d) Site plans for the proposed project would be reviewed by the City to ensure that the project would not include any design features that could present traffic hazards. Vehicular access to the project site would be taken from Obispo Avenue, approximately in the location of the



existing driveway at 304 Obispo Avenue. Construction activity for the project may result in temporary impacts to surrounding streets such as Obispo Avenue and East 3<sup>rd</sup> Street for all users including drivers, bicyclists, and pedestrians. However, these impacts would be temporary in nature and would be **less than significant**.

e) The proposed project contains no features that would impair or result in inadequate emergency access. As stated above, the project may have temporary impacts on immediately surrounding streets, but no streets closures are anticipated, and emergency vehicles would continue to be able to access the project site and surrounding properties. The project would therefore have a **less than significant** impact on emergency access.

f) The proposed project would not directly result in changes to the public transportation system that would conflict with adopted policies plans or programs. There is currently no transit service along East 3<sup>rd</sup> Street or Obispo Avenue in the project area, but there are four transit routes located within a few blocks of the project site on East Broadway, 4<sup>th</sup> Street and Redondo Avenue. Additionally, as described in Section XIII, *Population and Housing*, no significant population increase would result from the project that would increase the burden on public transportation. As described above, construction of the project may have temporary impacts on immediately surrounding streets, but no transit lines travel along these streets. This impact would be **less than significant**.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
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**XVII. UTILITIES AND SERVICE SYSTEMS --**

Would the Project:

a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Have sufficient water supplies available to serve the Project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>



	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
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**XVII. UTILITIES AND SERVICE SYSTEMS --**

Would the Project:

e) Result in a determination by the wastewater treatment provider which serves or may serve the Project that it has adequate capacity to serve the Project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Be served by a landfill with sufficient permitted capacity to accommodate the Project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a, b, d, e) The proposed project does not include any new buildings or structures that would require connection to the existing sewer infrastructure but, because of the increase in the number of people that would be living on the project site, it would result in a small increase in the amount of water consumed and the amount of wastewater produced on the site. However, the site is already served by the City's existing water and sewer system. As discussed in Section XIII, *Population and Housing*, the project would not generate population growth exceeding projections, and would thus not create unanticipated demands on the City's water or wastewater systems. Thus, the project would not require new water sources or entitlements, exceed wastewater treatment requirements, exceed the capacity of the City's water or wastewater systems, or require the construction of new water or wastewater treatment facilities. These impacts would be **less than significant**.

c) As discussed in Section IX, *Hydrology and Water Quality*, the proposed project would not substantially change the amount of impervious surfaces on the project site, and the project would therefore not significantly increase the amount of runoff from the site. It would therefore not require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects, and would have **no impact** in this regard.

f, g) Demolition materials, including asphalt and concrete, would be disposed of at either the Azusa Landfill or the Puente Hills Landfill. Azusa Landfill is a Class III landfill with 6,500 tons per day capacity that accepts inert waste and contaminated soil. Demolition materials containing any contaminated soils (if found onsite as described in Section VIII, *Hazards and Hazardous Materials*) would be disposed of at this landfill. All other demolition waste would be disposed of at the Puente Hills Landfill, which is a Class III landfill with 13,200 tons per day capacity. Asphalt and concrete demolition debris would likely be recycled at Hanson Aggregates, a local construction recycling facility in Long Beach (located approximately 9 miles



north of the site). Demolition materials would be a one-time deposit and the project would not be a continuous solid waste generator. Because any population and employment increase associated with the project is expected to fall within adopted projections (see Section XIII, *Population and Housing*), operation of the project would not generate waste that would exceed the capacity of local landfills. Therefore, impacts related to solid waste would be **less than significant**.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
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**XVIII. MANDATORY FINDINGS OF SIGNIFICANCE —**

a) Does the Project have the potential to substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Does the Project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Does the Project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a) As discussed in Section V, *Cultural Resources*, the project site does contain potentially historic structures that would be removed or altered by the proposed project. This impact is therefore **potentially significant**, and will be studied in the Cultural Resources section of the EIR. However, the project would be required to comply with standard procedures for assessment and preservation of subsurface resources compliant with the State Health and Safety Code Section 7050.5 and Public Resources Code Section 5097.98, which regulate disturbance and disposition of cultural resources and human remains. Compliance with these regulations, which detail the appropriate actions necessary in the event human remains are encountered, would reduce impacts to these cultural resources to a **less than significant** level.



As discussed in Section IV, *Biological Resources*, the project area is located within an existing urbanized area that has been previously disturbed. The site lacks significant native vegetation that would provide a habitat for any unique, rare, or endangered plant or animal species. The site does not contain and is not adjacent to wetlands. Vegetation in the area is limited to ornamental street trees and other ornamental vegetation along local streets and on private property. The area is highly urbanized and there is no potential for adverse effects to wildlife resources or their habitat either directly or indirectly. There would be **no impact** related to biological resources.

b) The proposed project has potentially significant impacts related to aesthetics, cultural resources, and land use (associated with cultural resources), which could potentially contribute to cumulative impacts in the same areas. The project's **potentially significant** cumulative impacts will be studied in the EIR.

c) As analyzed in this Initial Study, the proposed project has potentially significant environmental effects in the areas of aesthetics, cultural resources, and land use (associated with cultural resources), but these environmental effects would not cause substantial adverse effects on human beings, either directly or indirectly. The project's impacts in this area are therefore **less than significant**.



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**Appendix A**  
Air Quality/Greenhouse Gas Emissions  
Modeling Results

## Safran Senior Housing Project South Coast Air Basin, Annual

### 1.0 Project Characteristics

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#### 1.1 Land Usage

Land Uses	Size	Metric
Parking Lot	12	Space
Apartment Low Rise	1	Dwelling Unit
Apartment Mid Rise	24	Dwelling Unit

#### 1.2 Other Project Characteristics

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Utility Company</b>	Southern California Edison
<b>Climate Zone</b>	9	<b>Precipitation Freq (Days)</b>	31		

#### 1.3 User Entered Comments

Project Characteristics -

Land Use - Edits to this screen were made to reflect actual Project Description.

Construction Phase - Changes were made to reflect actual construction start date of October 2013, and to reflect a more realistic number of days to perform architectural coatings.

Demolition -

Vehicle Trips - Adjustments to Trip Rates were made to reflect the assumptions from the project's Traffic Study

Woodstoves - There are no fireplaces or wood stoves included in these apartments.

Area Mitigation - No hearths are included in the Project Description.

## 2.0 Emissions Summary

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### 2.1 Overall Construction

#### Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2013	0.08	0.54	0.40	0.00	0.01	0.04	0.05	0.00	0.04	0.04	0.00	63.65	63.65	0.01	0.00	63.78
2014	0.25	0.42	0.32	0.00	0.01	0.03	0.03	0.00	0.03	0.03	0.00	53.06	53.06	0.00	0.00	53.16
<b>Total</b>	<b>0.33</b>	<b>0.96</b>	<b>0.72</b>	<b>0.00</b>	<b>0.02</b>	<b>0.07</b>	<b>0.08</b>	<b>0.00</b>	<b>0.07</b>	<b>0.07</b>	<b>0.00</b>	<b>116.71</b>	<b>116.71</b>	<b>0.01</b>	<b>0.00</b>	<b>116.94</b>

#### Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2013	0.08	0.54	0.40	0.00	0.00	0.04	0.04	0.00	0.04	0.04	0.00	63.65	63.65	0.01	0.00	63.78
2014	0.25	0.42	0.32	0.00	0.00	0.03	0.03	0.00	0.03	0.03	0.00	53.06	53.06	0.00	0.00	53.16
<b>Total</b>	<b>0.33</b>	<b>0.96</b>	<b>0.72</b>	<b>0.00</b>	<b>0.00</b>	<b>0.07</b>	<b>0.07</b>	<b>0.00</b>	<b>0.07</b>	<b>0.07</b>	<b>0.00</b>	<b>116.71</b>	<b>116.71</b>	<b>0.01</b>	<b>0.00</b>	<b>116.94</b>

## 2.2 Overall Operational

### Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.25	0.01	0.55	0.00		0.00	0.03		0.00	0.03	2.66	15.93	18.59	0.01	0.00	18.88
Energy	0.00	0.02	0.01	0.00		0.00	0.00		0.00	0.00	0.00	45.24	45.24	0.00	0.00	45.52
Mobile	0.08	0.19	0.78	0.00	0.13	0.01	0.14	0.00	0.01	0.01	0.00	116.98	116.98	0.00	0.00	117.08
Waste						0.00	0.00		0.00	0.00	2.33	0.00	2.33	0.14	0.00	5.23
Water						0.00	0.00		0.00	0.00	0.00	9.51	9.51	0.05	0.00	10.99
<b>Total</b>	<b>0.33</b>	<b>0.22</b>	<b>1.34</b>	<b>0.00</b>	<b>0.13</b>	<b>0.01</b>	<b>0.17</b>	<b>0.00</b>	<b>0.01</b>	<b>0.04</b>	<b>4.99</b>	<b>187.66</b>	<b>192.65</b>	<b>0.20</b>	<b>0.00</b>	<b>197.70</b>

## 2.2 Overall Operational

### Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.16	0.00	0.39	0.00		0.00	0.00		0.00	0.00	0.00	0.62	0.62	0.00	0.00	0.64
Energy	0.00	0.02	0.01	0.00		0.00	0.00		0.00	0.00	0.00	45.24	45.24	0.00	0.00	45.52
Mobile	0.08	0.19	0.78	0.00	0.13	0.01	0.14	0.00	0.01	0.01	0.00	116.98	116.98	0.00	0.00	117.08
Waste						0.00	0.00		0.00	0.00	2.33	0.00	2.33	0.14	0.00	5.23
Water						0.00	0.00		0.00	0.00	0.00	9.51	9.51	0.05	0.00	10.99
<b>Total</b>	<b>0.24</b>	<b>0.21</b>	<b>1.18</b>	<b>0.00</b>	<b>0.13</b>	<b>0.01</b>	<b>0.14</b>	<b>0.00</b>	<b>0.01</b>	<b>0.01</b>	<b>2.33</b>	<b>172.35</b>	<b>174.68</b>	<b>0.19</b>	<b>0.00</b>	<b>179.46</b>

## 3.0 Construction Detail

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### 3.1 Mitigation Measures Construction

### 3.2 Demolition - 2013

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.01	0.07	0.05	0.00		0.01	0.01		0.01	0.01	0.00	6.69	6.69	0.00	0.00	6.71
<b>Total</b>	<b>0.01</b>	<b>0.07</b>	<b>0.05</b>	<b>0.00</b>	<b>0.00</b>	<b>0.01</b>	<b>0.01</b>	<b>0.00</b>	<b>0.01</b>	<b>0.01</b>	<b>0.00</b>	<b>6.69</b>	<b>6.69</b>	<b>0.00</b>	<b>0.00</b>	<b>6.71</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.19	0.19	0.00	0.00	0.19
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.46	0.46	0.00	0.00	0.46
<b>Total</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.65</b>	<b>0.65</b>	<b>0.00</b>	<b>0.00</b>	<b>0.65</b>

### 3.2 Demolition - 2013

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.01	0.07	0.05	0.00		0.01	0.01		0.01	0.01	0.00	6.69	6.69	0.00	0.00	6.71
<b>Total</b>	<b>0.01</b>	<b>0.07</b>	<b>0.05</b>	<b>0.00</b>	<b>0.00</b>	<b>0.01</b>	<b>0.01</b>	<b>0.00</b>	<b>0.01</b>	<b>0.01</b>	<b>0.00</b>	<b>6.69</b>	<b>6.69</b>	<b>0.00</b>	<b>0.00</b>	<b>6.71</b>

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.19	0.19	0.00	0.00	0.19
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.46	0.46	0.00	0.00	0.46
<b>Total</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.65</b>	<b>0.65</b>	<b>0.00</b>	<b>0.00</b>	<b>0.65</b>

### 3.3 Site Preparation - 2013

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.00	0.01	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.64	0.64	0.00	0.00	0.64
<b>Total</b>	<b>0.00</b>	<b>0.01</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.64</b>	<b>0.64</b>	<b>0.00</b>	<b>0.00</b>	<b>0.64</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.02	0.00	0.00	0.02
<b>Total</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.02</b>	<b>0.02</b>	<b>0.00</b>	<b>0.00</b>	<b>0.02</b>

### 3.3 Site Preparation - 2013

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.00	0.01	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.64	0.64	0.00	0.00	0.64
<b>Total</b>	<b>0.00</b>	<b>0.01</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.64</b>	<b>0.64</b>	<b>0.00</b>	<b>0.00</b>	<b>0.64</b>

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.02	0.00	0.00	0.02
<b>Total</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.02</b>	<b>0.02</b>	<b>0.00</b>	<b>0.00</b>	<b>0.02</b>

### 3.4 Grading - 2013

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.00	0.01	0.01	0.00		0.00	0.00		0.00	0.00	0.00	1.34	1.34	0.00	0.00	1.34
<b>Total</b>	<b>0.00</b>	<b>0.01</b>	<b>0.01</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>1.34</b>	<b>1.34</b>	<b>0.00</b>	<b>0.00</b>	<b>1.34</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.09	0.00	0.00	0.09
<b>Total</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.09</b>	<b>0.09</b>	<b>0.00</b>	<b>0.00</b>	<b>0.09</b>

### 3.4 Grading - 2013

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.00	0.01	0.01	0.00		0.00	0.00		0.00	0.00	0.00	1.34	1.34	0.00	0.00	1.34
<b>Total</b>	<b>0.00</b>	<b>0.01</b>	<b>0.01</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>1.34</b>	<b>1.34</b>	<b>0.00</b>	<b>0.00</b>	<b>1.34</b>

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.09	0.00	0.00	0.09
<b>Total</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.09</b>	<b>0.09</b>	<b>0.00</b>	<b>0.00</b>	<b>0.09</b>

### 3.5 Building Construction - 2013

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.06	0.43	0.29	0.00		0.03	0.03		0.03	0.03	0.00	46.76	46.76	0.00	0.00	46.85
<b>Total</b>	<b>0.06</b>	<b>0.43</b>	<b>0.29</b>	<b>0.00</b>		<b>0.03</b>	<b>0.03</b>		<b>0.03</b>	<b>0.03</b>	<b>0.00</b>	<b>46.76</b>	<b>46.76</b>	<b>0.00</b>	<b>0.00</b>	<b>46.85</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.60	2.60	0.00	0.00	2.61
Worker	0.00	0.00	0.03	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	4.86	4.86	0.00	0.00	4.86
<b>Total</b>	<b>0.00</b>	<b>0.02</b>	<b>0.04</b>	<b>0.00</b>	<b>0.01</b>	<b>0.00</b>	<b>0.01</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>7.46</b>	<b>7.46</b>	<b>0.00</b>	<b>0.00</b>	<b>7.47</b>

### 3.5 Building Construction - 2013

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.06	0.43	0.29	0.00		0.03	0.03		0.03	0.03	0.00	46.76	46.76	0.00	0.00	46.85
<b>Total</b>	<b>0.06</b>	<b>0.43</b>	<b>0.29</b>	<b>0.00</b>		<b>0.03</b>	<b>0.03</b>		<b>0.03</b>	<b>0.03</b>	<b>0.00</b>	<b>46.76</b>	<b>46.76</b>	<b>0.00</b>	<b>0.00</b>	<b>46.85</b>

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.60	2.60	0.00	0.00	2.61
Worker	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.86	4.86	0.00	0.00	4.86
<b>Total</b>	<b>0.00</b>	<b>0.02</b>	<b>0.04</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>7.46</b>	<b>7.46</b>	<b>0.00</b>	<b>0.00</b>	<b>7.47</b>

### 3.5 Building Construction - 2014

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.05	0.35	0.25	0.00		0.02	0.02		0.02	0.02	0.00	41.46	41.46	0.00	0.00	41.54
<b>Total</b>	<b>0.05</b>	<b>0.35</b>	<b>0.25</b>	<b>0.00</b>		<b>0.02</b>	<b>0.02</b>		<b>0.02</b>	<b>0.02</b>	<b>0.00</b>	<b>41.46</b>	<b>41.46</b>	<b>0.00</b>	<b>0.00</b>	<b>41.54</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.32	2.32	0.00	0.00	2.32
Worker	0.00	0.00	0.03	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	4.23	4.23	0.00	0.00	4.24
<b>Total</b>	<b>0.00</b>	<b>0.01</b>	<b>0.04</b>	<b>0.00</b>	<b>0.01</b>	<b>0.00</b>	<b>0.01</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>6.55</b>	<b>6.55</b>	<b>0.00</b>	<b>0.00</b>	<b>6.56</b>

### 3.5 Building Construction - 2014

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.05	0.35	0.25	0.00		0.02	0.02		0.02	0.02	0.00	41.46	41.46	0.00	0.00	41.54
<b>Total</b>	<b>0.05</b>	<b>0.35</b>	<b>0.25</b>	<b>0.00</b>		<b>0.02</b>	<b>0.02</b>		<b>0.02</b>	<b>0.02</b>	<b>0.00</b>	<b>41.46</b>	<b>41.46</b>	<b>0.00</b>	<b>0.00</b>	<b>41.54</b>

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.32	2.32	0.00	0.00	2.32
Worker	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.23	4.23	0.00	0.00	4.24
<b>Total</b>	<b>0.00</b>	<b>0.01</b>	<b>0.04</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>6.55</b>	<b>6.55</b>	<b>0.00</b>	<b>0.00</b>	<b>6.56</b>

### 3.6 Paving - 2014

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.01	0.03	0.02	0.00		0.00	0.00		0.00	0.00	0.00	3.19	3.19	0.00	0.00	3.20
Paving	0.00					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total</b>	<b>0.01</b>	<b>0.03</b>	<b>0.02</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>3.19</b>	<b>3.19</b>	<b>0.00</b>	<b>0.00</b>	<b>3.20</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.41	0.41	0.00	0.00	0.41
<b>Total</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.41</b>	<b>0.41</b>	<b>0.00</b>	<b>0.00</b>	<b>0.41</b>

### 3.6 Paving - 2014

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.01	0.03	0.02	0.00		0.00	0.00		0.00	0.00	0.00	3.19	3.19	0.00	0.00	3.20
Paving	0.00					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total</b>	<b>0.01</b>	<b>0.03</b>	<b>0.02</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>3.19</b>	<b>3.19</b>	<b>0.00</b>	<b>0.00</b>	<b>3.20</b>

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.41	0.41	0.00	0.00	0.41
<b>Total</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.41</b>	<b>0.41</b>	<b>0.00</b>	<b>0.00</b>	<b>0.41</b>

### 3.7 Architectural Coating - 2014

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.19					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.00	0.01	0.01	0.00		0.00	0.00		0.00	0.00	0.00	1.28	1.28	0.00	0.00	1.28
<b>Total</b>	<b>0.19</b>	<b>0.01</b>	<b>0.01</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>1.28</b>	<b>1.28</b>	<b>0.00</b>	<b>0.00</b>	<b>1.28</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18	0.18	0.00	0.00	0.18
<b>Total</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.18</b>	<b>0.18</b>	<b>0.00</b>	<b>0.00</b>	<b>0.18</b>

### 3.7 Architectural Coating - 2014

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr										MT/yr						
Archit. Coating	0.19					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.00	0.01	0.01	0.00		0.00	0.00		0.00	0.00	0.00	1.28	1.28	0.00	0.00	1.28	
<b>Total</b>	<b>0.19</b>	<b>0.01</b>	<b>0.01</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>1.28</b>	<b>1.28</b>	<b>0.00</b>	<b>0.00</b>	<b>1.28</b>	

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr										MT/yr						
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18	0.18	0.00	0.00	0.18	
<b>Total</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.18</b>	<b>0.18</b>	<b>0.00</b>	<b>0.00</b>	<b>0.18</b>	

### 4.0 Mobile Detail

#### 4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.08	0.19	0.78	0.00	0.13	0.01	0.14	0.00	0.01	0.01	0.00	116.98	116.98	0.00	0.00	117.08
Unmitigated	0.08	0.19	0.78	0.00	0.13	0.01	0.14	0.00	0.01	0.01	0.00	116.98	116.98	0.00	0.00	117.08
<b>Total</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>

#### 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	6.65	6.39	5.86	18,461	18,461
Apartments Mid Rise	83.52	60.24	64.80	220,166	220,166
Parking Lot	0.00	0.00	0.00		
<b>Total</b>	<b>90.17</b>	<b>66.63</b>	<b>70.66</b>	<b>238,627</b>	<b>238,627</b>

#### 4.3 Trip Type Information

Land Use	Miles			Trip %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW
Apartments Low Rise	10.80	7.30	7.50	40.20	19.20	40.60
Apartments Mid Rise	10.80	7.30	7.50	40.20	19.20	40.60

Land Use	Miles			Trip %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00

## 5.0 Energy Detail

### 5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.00	0.00		0.00	0.00	0.00	25.31	25.31	0.00	0.00	25.46
Electricity Unmitigated						0.00	0.00		0.00	0.00	0.00	25.31	25.31	0.00	0.00	25.46
NaturalGas Mitigated	0.00	0.02	0.01	0.00		0.00	0.00		0.00	0.00	0.00	19.93	19.93	0.00	0.00	20.06
NaturalGas Unmitigated	0.00	0.02	0.01	0.00		0.00	0.00		0.00	0.00	0.00	19.93	19.93	0.00	0.00	20.06
<b>Total</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>

## 5.2 Energy by Land Use - NaturalGas

### Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU	tons/yr										MT/yr					
Apartments Low Rise	19199.5	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	1.02	1.02	0.00	0.00	1.03
Apartments Mid Rise	354350	0.00	0.02	0.01	0.00		0.00	0.00		0.00	0.00	0.00	18.91	18.91	0.00	0.00	19.02
Parking Lot	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total</b>		<b>0.00</b>	<b>0.02</b>	<b>0.01</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>19.93</b>	<b>19.93</b>	<b>0.00</b>	<b>0.00</b>	<b>20.05</b>

### Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU	tons/yr										MT/yr					
Apartments Low Rise	19199.5	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	1.02	1.02	0.00	0.00	1.03
Apartments Mid Rise	354350	0.00	0.02	0.01	0.00		0.00	0.00		0.00	0.00	0.00	18.91	18.91	0.00	0.00	19.02
Parking Lot	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total</b>		<b>0.00</b>	<b>0.02</b>	<b>0.01</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>19.93</b>	<b>19.93</b>	<b>0.00</b>	<b>0.00</b>	<b>20.05</b>

### 5.3 Energy by Land Use - Electricity

#### Unmitigated

	Electricity Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	kWh	tons/yr				MT/yr			
Apartments Low Rise	3560.29					1.04	0.00	0.00	1.04
Apartments Mid Rise	83440.8					24.27	0.00	0.00	24.42
Parking Lot	0					0.00	0.00	0.00	0.00
<b>Total</b>						<b>25.31</b>	<b>0.00</b>	<b>0.00</b>	<b>25.46</b>

#### Mitigated

	Electricity Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	kWh	tons/yr				MT/yr			
Apartments Low Rise	3560.29					1.04	0.00	0.00	1.04
Apartments Mid Rise	83440.8					24.27	0.00	0.00	24.42
Parking Lot	0					0.00	0.00	0.00	0.00
<b>Total</b>						<b>25.31</b>	<b>0.00</b>	<b>0.00</b>	<b>25.46</b>

### 6.0 Area Detail

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## 6.1 Mitigation Measures Area

No Hearths Installed

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.16	0.00	0.39	0.00		0.00	0.00		0.00	0.00	0.00	0.62	0.62	0.00	0.00	0.64
Unmitigated	0.25	0.01	0.55	0.00		0.00	0.03		0.00	0.03	2.66	15.93	18.59	0.01	0.00	18.88
<b>Total</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>

## 6.2 Area by SubCategory

### Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.02					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.13					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth	0.08	0.00	0.16	0.00		0.00	0.02		0.00	0.02	2.66	15.31	17.96	0.01	0.00	18.25
Landscaping	0.01	0.00	0.39	0.00		0.00	0.00		0.00	0.00	0.00	0.62	0.62	0.00	0.00	0.64
<b>Total</b>	<b>0.24</b>	<b>0.00</b>	<b>0.55</b>	<b>0.00</b>		<b>0.00</b>	<b>0.02</b>		<b>0.00</b>	<b>0.02</b>	<b>2.66</b>	<b>15.93</b>	<b>18.58</b>	<b>0.01</b>	<b>0.00</b>	<b>18.89</b>

## 6.2 Area by SubCategory

### Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
SubCategory	tons/yr										MT/yr						
Architectural Coating	0.02					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.13					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping	0.01	0.00	0.39	0.00		0.00	0.00		0.00	0.00	0.00	0.62	0.62	0.00	0.00	0.00	0.64
<b>Total</b>	<b>0.16</b>	<b>0.00</b>	<b>0.39</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.62</b>	<b>0.62</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.64</b>

## 7.0 Water Detail

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### 7.1 Mitigation Measures Water

	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr				MT/yr			
Mitigated					9.51	0.05	0.00	10.99
Unmitigated					9.51	0.05	0.00	10.99
<b>Total</b>	<b>NA</b>							

## 7.2 Water by Land Use

### Unmitigated

	Indoor/Outdoor Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	tons/yr				MT/yr			
Apartments Low Rise	0.065154 / 0.0410754					0.38	0.00	0.00	0.44
Apartments Mid Rise	1.5637 / 0.985809					9.13	0.05	0.00	10.55
Parking Lot	0 / 0					0.00	0.00	0.00	0.00
<b>Total</b>						<b>9.51</b>	<b>0.05</b>	<b>0.00</b>	<b>10.99</b>

## 7.2 Water by Land Use

### Mitigated

	Indoor/Outdoor Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	tons/yr				MT/yr			
Apartments Low Rise	0.065154 / 0.0410754					0.38	0.00	0.00	0.44
Apartments Mid Rise	1.5637 / 0.985809					9.13	0.05	0.00	10.55
Parking Lot	0 / 0					0.00	0.00	0.00	0.00
<b>Total</b>						<b>9.51</b>	<b>0.05</b>	<b>0.00</b>	<b>10.99</b>

## 8.0 Waste Detail

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### 8.1 Mitigation Measures Waste

**Category/Year**

	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
	tons/yr				MT/yr			
Mitigated					2.33	0.14	0.00	5.23
Unmitigated					2.33	0.14	0.00	5.23
<b>Total</b>	<b>NA</b>							

**8.2 Waste by Land Use**

**Unmitigated**

	Waste Disposed	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	tons	tons/yr				MT/yr			
Apartments Low Rise	0.46					0.09	0.01	0.00	0.21
Apartments Mid Rise	11.04					2.24	0.13	0.00	5.02
Parking Lot	0					0.00	0.00	0.00	0.00
<b>Total</b>						<b>2.33</b>	<b>0.14</b>	<b>0.00</b>	<b>5.23</b>

## 8.2 Waste by Land Use

### Mitigated

	Waste Disposed	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	tons	tons/yr				MT/yr			
Apartments Low Rise	0.46					0.09	0.01	0.00	0.21
Apartments Mid Rise	11.04					2.24	0.13	0.00	5.02
Parking Lot	0					0.00	0.00	0.00	0.00
<b>Total</b>						<b>2.33</b>	<b>0.14</b>	<b>0.00</b>	<b>5.23</b>

## 9.0 Vegetation

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## Safran Senior Housing Project South Coast Air Basin, Summer

### 1.0 Project Characteristics

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#### 1.1 Land Usage

Land Uses	Size	Metric
Parking Lot	12	Space
Apartments Low Rise	1	Dwelling Unit
Apartments Mid Rise	24	Dwelling Unit

#### 1.2 Other Project Characteristics

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Utility Company</b>	Southern California Edison
<b>Climate Zone</b>	9	<b>Precipitation Freq (Days)</b>	31		

#### 1.3 User Entered Comments

Project Characteristics -

Land Use - Edits to this screen were made to reflect actual Project Description.

Construction Phase - Changes were made to reflect actual construction start date of October 2013, and to reflect a more realistic number of days to perform architectural coatings.

Demolition -

Vehicle Trips - Adjustments to Trip Rates were made to reflect the assumptions from the project's Traffic Study

Woodstoves - There are no fireplaces or wood stoves included in these apartments.

Area Mitigation - No hearths are included in the Project Description.

## 2.0 Emissions Summary

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### 2.1 Overall Construction (Maximum Daily Emission)

#### Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2013	2.37	17.09	12.45	0.02	0.88	1.07	1.93	0.42	1.07	1.46	0.00	2,268.60	0.00	0.21	0.00	2,273.04
2014	37.81	15.73	12.23	0.02	0.30	1.11	1.35	0.00	1.11	1.11	0.00	2,265.14	0.00	0.21	0.00	2,269.47
<b>Total</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>

#### Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2013	2.37	17.09	12.45	0.02	0.76	1.07	1.80	0.42	1.07	1.46	0.00	2,268.60	0.00	0.21	0.00	2,273.04
2014	37.81	15.73	12.23	0.02	0.01	1.11	1.12	0.00	1.11	1.11	0.00	2,265.14	0.00	0.21	0.00	2,269.47
<b>Total</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>

## 2.2 Overall Operational

### Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	3.56	0.15	10.41	0.02		0.00	1.33		0.00	1.33	176.42	453.76		0.70	0.01	648.27
Energy	0.01	0.09	0.04	0.00		0.00	0.01		0.00	0.01		120.40		0.00	0.00	121.14
Mobile	0.46	1.09	4.63	0.01	0.85	0.05	0.90	0.01	0.04	0.05		798.98		0.03		799.62
<b>Total</b>	<b>4.03</b>	<b>1.33</b>	<b>15.08</b>	<b>0.03</b>	<b>0.85</b>	<b>0.05</b>	<b>2.24</b>	<b>0.01</b>	<b>0.04</b>	<b>1.39</b>	<b>176.42</b>	<b>1,373.14</b>		<b>0.73</b>	<b>0.01</b>	<b>1,569.03</b>

### Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.90	0.03	2.14	0.00		0.00	0.01		0.00	0.01	0.00	3.76		0.00	0.00	3.84
Energy	0.01	0.09	0.04	0.00		0.00	0.01		0.00	0.01		120.40		0.00	0.00	121.14
Mobile	0.46	1.09	4.63	0.01	0.85	0.05	0.90	0.01	0.04	0.05		798.98		0.03		799.62
<b>Total</b>	<b>1.37</b>	<b>1.21</b>	<b>6.81</b>	<b>0.01</b>	<b>0.85</b>	<b>0.05</b>	<b>0.92</b>	<b>0.01</b>	<b>0.04</b>	<b>0.07</b>	<b>0.00</b>	<b>923.14</b>		<b>0.03</b>	<b>0.00</b>	<b>924.60</b>

## 3.0 Construction Detail

### 3.1 Mitigation Measures Construction

### 3.2 Demolition - 2013

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.11	0.00	0.11	0.00	0.00	0.00						0.00
Off-Road	2.00	13.91	9.51	0.02		1.04	1.04		1.04	1.04		1,476.12		0.18		1,479.88
<b>Total</b>	<b>2.00</b>	<b>13.91</b>	<b>9.51</b>	<b>0.02</b>	<b>0.11</b>	<b>1.04</b>	<b>1.15</b>	<b>0.00</b>	<b>1.04</b>	<b>1.04</b>		<b>1,476.12</b>		<b>0.18</b>		<b>1,479.88</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.03	0.27	0.14	0.00	0.12	0.01	0.13	0.00	0.01	0.01		41.58		0.00		41.61
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.06	0.06	0.64	0.00	0.13	0.00	0.13	0.00	0.00	0.01		107.26		0.01		107.40
<b>Total</b>	<b>0.09</b>	<b>0.33</b>	<b>0.78</b>	<b>0.00</b>	<b>0.25</b>	<b>0.01</b>	<b>0.26</b>	<b>0.00</b>	<b>0.01</b>	<b>0.02</b>		<b>148.84</b>		<b>0.01</b>		<b>149.01</b>

### 3.2 Demolition - 2013

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Fugitive Dust					0.11	0.00	0.11	0.00	0.00	0.00							0.00
Off-Road	2.00	13.91	9.51	0.02		1.04	1.04		1.04	1.04	0.00	1,476.12		0.18			1,479.88
<b>Total</b>	<b>2.00</b>	<b>13.91</b>	<b>9.51</b>	<b>0.02</b>	<b>0.11</b>	<b>1.04</b>	<b>1.15</b>	<b>0.00</b>	<b>1.04</b>	<b>1.04</b>	<b>0.00</b>	<b>1,476.12</b>		<b>0.18</b>			<b>1,479.88</b>

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.03	0.27	0.14	0.00	0.00	0.01	0.01	0.00	0.01	0.01		41.58		0.00		41.61
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.06	0.06	0.64	0.00	0.00	0.00	0.01	0.00	0.00	0.01		107.26		0.01		107.40
<b>Total</b>	<b>0.09</b>	<b>0.33</b>	<b>0.78</b>	<b>0.00</b>	<b>0.00</b>	<b>0.01</b>	<b>0.02</b>	<b>0.00</b>	<b>0.01</b>	<b>0.02</b>		<b>148.84</b>		<b>0.01</b>		<b>149.01</b>

### 3.3 Site Preparation - 2013

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.53	0.00	0.53	0.00	0.00	0.00						0.00
Off-Road	1.72	12.58	8.68	0.01		0.81	0.81		0.81	0.81		1,402.64		0.15		1,405.88
<b>Total</b>	<b>1.72</b>	<b>12.58</b>	<b>8.68</b>	<b>0.01</b>	<b>0.53</b>	<b>0.81</b>	<b>1.34</b>	<b>0.00</b>	<b>0.81</b>	<b>0.81</b>		<b>1,402.64</b>		<b>0.15</b>		<b>1,405.88</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.03	0.03	0.32	0.00	0.07	0.00	0.07	0.00	0.00	0.00		53.63		0.00		53.70
<b>Total</b>	<b>0.03</b>	<b>0.03</b>	<b>0.32</b>	<b>0.00</b>	<b>0.07</b>	<b>0.00</b>	<b>0.07</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>		<b>53.63</b>		<b>0.00</b>		<b>53.70</b>

### 3.3 Site Preparation - 2013

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.53	0.00	0.53	0.00	0.00	0.00						0.00
Off-Road	1.72	12.58	8.68	0.01		0.81	0.81		0.81	0.81	0.00	1,402.64		0.15		1,405.88
<b>Total</b>	<b>1.72</b>	<b>12.58</b>	<b>8.68</b>	<b>0.01</b>	<b>0.53</b>	<b>0.81</b>	<b>1.34</b>	<b>0.00</b>	<b>0.81</b>	<b>0.81</b>	<b>0.00</b>	<b>1,402.64</b>		<b>0.15</b>		<b>1,405.88</b>

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.03	0.03	0.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00		53.63		0.00		53.70
<b>Total</b>	<b>0.03</b>	<b>0.03</b>	<b>0.32</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>		<b>53.63</b>		<b>0.00</b>		<b>53.70</b>

### 3.4 Grading - 2013

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Fugitive Dust					0.75	0.00	0.75	0.41	0.00	0.41							0.00
Off-Road	2.00	13.91	9.51	0.02		1.04	1.04		1.04	1.04		1,476.12		0.18			1,479.88
<b>Total</b>	<b>2.00</b>	<b>13.91</b>	<b>9.51</b>	<b>0.02</b>	<b>0.75</b>	<b>1.04</b>	<b>1.79</b>	<b>0.41</b>	<b>1.04</b>	<b>1.45</b>		<b>1,476.12</b>		<b>0.18</b>			<b>1,479.88</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00			0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00			0.00
Worker	0.06	0.06	0.64	0.00	0.13	0.00	0.13	0.00	0.00	0.01		107.26		0.01			107.40
<b>Total</b>	<b>0.06</b>	<b>0.06</b>	<b>0.64</b>	<b>0.00</b>	<b>0.13</b>	<b>0.00</b>	<b>0.13</b>	<b>0.00</b>	<b>0.00</b>	<b>0.01</b>		<b>107.26</b>		<b>0.01</b>			<b>107.40</b>

### 3.4 Grading - 2013

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.75	0.00	0.75	0.41	0.00	0.41						0.00
Off-Road	2.00	13.91	9.51	0.02		1.04	1.04		1.04	1.04	0.00	1,476.12		0.18		1,479.88
<b>Total</b>	<b>2.00</b>	<b>13.91</b>	<b>9.51</b>	<b>0.02</b>	<b>0.75</b>	<b>1.04</b>	<b>1.79</b>	<b>0.41</b>	<b>1.04</b>	<b>1.45</b>	<b>0.00</b>	<b>1,476.12</b>		<b>0.18</b>		<b>1,479.88</b>

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.06	0.06	0.64	0.00	0.00	0.00	0.01	0.00	0.00	0.01		107.26		0.01		107.40
<b>Total</b>	<b>0.06</b>	<b>0.06</b>	<b>0.64</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.01</b>	<b>0.00</b>	<b>0.00</b>	<b>0.01</b>		<b>107.26</b>		<b>0.01</b>		<b>107.40</b>

### 3.5 Building Construction - 2013

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.20	16.33	10.77	0.02		1.04	1.04		1.04	1.04		1,945.40		0.20		1,949.52
<b>Total</b>	<b>2.20</b>	<b>16.33</b>	<b>10.77</b>	<b>0.02</b>		<b>1.04</b>	<b>1.04</b>		<b>1.04</b>	<b>1.04</b>		<b>1,945.40</b>		<b>0.20</b>		<b>1,949.52</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.06	0.65	0.40	0.00	0.04	0.02	0.06	0.00	0.02	0.02		108.67		0.00		108.73
Worker	0.11	0.11	1.29	0.00	0.26	0.01	0.27	0.00	0.01	0.01		214.53		0.01		214.79
<b>Total</b>	<b>0.17</b>	<b>0.76</b>	<b>1.69</b>	<b>0.00</b>	<b>0.30</b>	<b>0.03</b>	<b>0.33</b>	<b>0.00</b>	<b>0.03</b>	<b>0.03</b>		<b>323.20</b>		<b>0.01</b>		<b>323.52</b>

### 3.5 Building Construction - 2013

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.20	16.33	10.77	0.02		1.04	1.04		1.04	1.04	0.00	1,945.40		0.20		1,949.52
<b>Total</b>	<b>2.20</b>	<b>16.33</b>	<b>10.77</b>	<b>0.02</b>		<b>1.04</b>	<b>1.04</b>		<b>1.04</b>	<b>1.04</b>	<b>0.00</b>	<b>1,945.40</b>		<b>0.20</b>		<b>1,949.52</b>

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.06	0.65	0.40	0.00	0.00	0.02	0.03	0.00	0.02	0.02		108.67		0.00		108.73
Worker	0.11	0.11	1.29	0.00	0.01	0.01	0.02	0.00	0.01	0.01		214.53		0.01		214.79
<b>Total</b>	<b>0.17</b>	<b>0.76</b>	<b>1.69</b>	<b>0.00</b>	<b>0.01</b>	<b>0.03</b>	<b>0.05</b>	<b>0.00</b>	<b>0.03</b>	<b>0.03</b>		<b>323.20</b>		<b>0.01</b>		<b>323.52</b>

### 3.5 Building Construction - 2014

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.02	15.03	10.68	0.02		0.92	0.92		0.92	0.92		1,945.40		0.18		1,949.18
<b>Total</b>	<b>2.02</b>	<b>15.03</b>	<b>10.68</b>	<b>0.02</b>		<b>0.92</b>	<b>0.92</b>		<b>0.92</b>	<b>0.92</b>		<b>1,945.40</b>		<b>0.18</b>		<b>1,949.18</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.05	0.60	0.36	0.00	0.04	0.02	0.06	0.00	0.02	0.02		108.94		0.00		108.99
Worker	0.10	0.10	1.19	0.00	0.26	0.01	0.27	0.00	0.01	0.01		210.80		0.01		211.05
<b>Total</b>	<b>0.15</b>	<b>0.70</b>	<b>1.55</b>	<b>0.00</b>	<b>0.30</b>	<b>0.03</b>	<b>0.33</b>	<b>0.00</b>	<b>0.03</b>	<b>0.03</b>		<b>319.74</b>		<b>0.01</b>		<b>320.04</b>

### 3.5 Building Construction - 2014

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.02	15.03	10.68	0.02		0.92	0.92		0.92	0.92	0.00	1,945.40		0.18		1,949.18
<b>Total</b>	<b>2.02</b>	<b>15.03</b>	<b>10.68</b>	<b>0.02</b>		<b>0.92</b>	<b>0.92</b>		<b>0.92</b>	<b>0.92</b>	<b>0.00</b>	<b>1,945.40</b>		<b>0.18</b>		<b>1,949.18</b>

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.05	0.60	0.36	0.00	0.00	0.02	0.02	0.00	0.02	0.02		108.94		0.00		108.99
Worker	0.10	0.10	1.19	0.00	0.01	0.01	0.02	0.00	0.01	0.01		210.80		0.01		211.05
<b>Total</b>	<b>0.15</b>	<b>0.70</b>	<b>1.55</b>	<b>0.00</b>	<b>0.01</b>	<b>0.03</b>	<b>0.04</b>	<b>0.00</b>	<b>0.03</b>	<b>0.03</b>		<b>319.74</b>		<b>0.01</b>		<b>320.04</b>

### 3.6 Paving - 2014

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.18	13.77	9.69	0.02		1.10	1.10		1.10	1.10		1,408.52		0.20		1,412.63
Paving	0.07					0.00	0.00		0.00	0.00						0.00
<b>Total</b>	<b>2.25</b>	<b>13.77</b>	<b>9.69</b>	<b>0.02</b>		<b>1.10</b>	<b>1.10</b>		<b>1.10</b>	<b>1.10</b>		<b>1,408.52</b>		<b>0.20</b>		<b>1,412.63</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.09	0.09	1.07	0.00	0.23	0.01	0.24	0.00	0.01	0.01		189.72		0.01		189.94
<b>Total</b>	<b>0.09</b>	<b>0.09</b>	<b>1.07</b>	<b>0.00</b>	<b>0.23</b>	<b>0.01</b>	<b>0.24</b>	<b>0.00</b>	<b>0.01</b>	<b>0.01</b>		<b>189.72</b>		<b>0.01</b>		<b>189.94</b>

### 3.6 Paving - 2014

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.18	13.77	9.69	0.02		1.10	1.10		1.10	1.10	0.00	1,408.52		0.20		1,412.63
Paving	0.07					0.00	0.00		0.00	0.00						0.00
<b>Total</b>	<b>2.25</b>	<b>13.77</b>	<b>9.69</b>	<b>0.02</b>		<b>1.10</b>	<b>1.10</b>		<b>1.10</b>	<b>1.10</b>	<b>0.00</b>	<b>1,408.52</b>		<b>0.20</b>		<b>1,412.63</b>

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.09	0.09	1.07	0.00	0.01	0.01	0.02	0.00	0.01	0.01		189.72		0.01		189.94
<b>Total</b>	<b>0.09</b>	<b>0.09</b>	<b>1.07</b>	<b>0.00</b>	<b>0.01</b>	<b>0.01</b>	<b>0.02</b>	<b>0.00</b>	<b>0.01</b>	<b>0.01</b>		<b>189.72</b>		<b>0.01</b>		<b>189.94</b>

### 3.7 Architectural Coating - 2014

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	37.34					0.00	0.00		0.00	0.00						0.00
Off-Road	0.45	2.77	1.92	0.00		0.24	0.24		0.24	0.24		281.19		0.04		282.03
<b>Total</b>	<b>37.79</b>	<b>2.77</b>	<b>1.92</b>	<b>0.00</b>		<b>0.24</b>	<b>0.24</b>		<b>0.24</b>	<b>0.24</b>		<b>281.19</b>		<b>0.04</b>		<b>282.03</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.02	0.02	0.24	0.00	0.05	0.00	0.05	0.00	0.00	0.00		42.16		0.00		42.21
<b>Total</b>	<b>0.02</b>	<b>0.02</b>	<b>0.24</b>	<b>0.00</b>	<b>0.05</b>	<b>0.00</b>	<b>0.05</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>		<b>42.16</b>		<b>0.00</b>		<b>42.21</b>

### 3.7 Architectural Coating - 2014

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	37.34					0.00	0.00		0.00	0.00						0.00
Off-Road	0.45	2.77	1.92	0.00		0.24	0.24		0.24	0.24	0.00	281.19		0.04		282.03
<b>Total</b>	<b>37.79</b>	<b>2.77</b>	<b>1.92</b>	<b>0.00</b>		<b>0.24</b>	<b>0.24</b>		<b>0.24</b>	<b>0.24</b>	<b>0.00</b>	<b>281.19</b>		<b>0.04</b>		<b>282.03</b>

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.02	0.02	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00		42.16		0.00		42.21
<b>Total</b>	<b>0.02</b>	<b>0.02</b>	<b>0.24</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>		<b>42.16</b>		<b>0.00</b>		<b>42.21</b>

### 4.0 Mobile Detail

#### 4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.46	1.09	4.63	0.01	0.85	0.05	0.90	0.01	0.04	0.05		798.98		0.03		799.62
Unmitigated	0.46	1.09	4.63	0.01	0.85	0.05	0.90	0.01	0.04	0.05		798.98		0.03		799.62
<b>Total</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>

#### 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	6.65	6.39	5.86	18,461	18,461
Apartments Mid Rise	83.52	60.24	64.80	220,166	220,166
Parking Lot	0.00	0.00	0.00		
<b>Total</b>	<b>90.17</b>	<b>66.63</b>	<b>70.66</b>	<b>238,627</b>	<b>238,627</b>

#### 4.3 Trip Type Information

Land Use	Miles			Trip %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW
Apartments Low Rise	10.80	7.30	7.50	40.20	19.20	40.60
Apartments Mid Rise	10.80	7.30	7.50	40.20	19.20	40.60

Land Use	Miles			Trip %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00

## 5.0 Energy Detail

### 5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.01	0.09	0.04	0.00		0.00	0.01		0.00	0.01		120.40		0.00	0.00	121.14
NaturalGas Unmitigated	0.01	0.09	0.04	0.00		0.00	0.01		0.00	0.01		120.40		0.00	0.00	121.14
<b>Total</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>

## 5.2 Energy by Land Use - NaturalGas

### Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU	lb/day										lb/day					
Apartments Low Rise	52.6013	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		6.19		0.00	0.00	6.23
Apartments Mid Rise	970.822	0.01	0.09	0.04	0.00		0.00	0.01		0.00	0.01		114.21		0.00	0.00	114.91
Parking Lot	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
<b>Total</b>		<b>0.01</b>	<b>0.09</b>	<b>0.04</b>	<b>0.00</b>		<b>0.00</b>	<b>0.01</b>		<b>0.00</b>	<b>0.01</b>		<b>120.40</b>		<b>0.00</b>	<b>0.00</b>	<b>121.14</b>

### Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU	lb/day										lb/day					
Apartments Low Rise	0.0526013	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		6.19		0.00	0.00	6.23
Apartments Mid Rise	0.970822	0.01	0.09	0.04	0.00		0.00	0.01		0.00	0.01		114.21		0.00	0.00	114.91
Parking Lot	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
<b>Total</b>		<b>0.01</b>	<b>0.09</b>	<b>0.04</b>	<b>0.00</b>		<b>0.00</b>	<b>0.01</b>		<b>0.00</b>	<b>0.01</b>		<b>120.40</b>		<b>0.00</b>	<b>0.00</b>	<b>121.14</b>

## 6.0 Area Detail

## 6.1 Mitigation Measures Area

No Hearths Installed

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.90	0.03	2.14	0.00		0.00	0.01		0.00	0.01	0.00	3.76		0.00	0.00	3.84
Unmitigated	3.56	0.15	10.41	0.02		0.00	1.33		0.00	1.33	176.42	453.76		0.70	0.01	648.27
<b>Total</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>

## 6.2 Area by SubCategory

### Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.10					0.00	0.00		0.00	0.00						0.00
Consumer Products	0.73					0.00	0.00		0.00	0.00						0.00
Hearth	2.66	0.12	8.28	0.02		0.00	1.32		0.00	1.32	176.42	450.00		0.70	0.01	644.43
Landscaping	0.07	0.03	2.14	0.00		0.00	0.01		0.00	0.01		3.76		0.00		3.84
<b>Total</b>	<b>3.56</b>	<b>0.15</b>	<b>10.42</b>	<b>0.02</b>		<b>0.00</b>	<b>1.33</b>		<b>0.00</b>	<b>1.33</b>	<b>176.42</b>	<b>453.76</b>		<b>0.70</b>	<b>0.01</b>	<b>648.27</b>

## 6.2 Area by SubCategory

### Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
SubCategory	lb/day										lb/day						
Architectural Coating	0.10					0.00	0.00		0.00	0.00							0.00
Consumer Products	0.73					0.00	0.00		0.00	0.00							0.00
Hearth	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00		0.00	0.00		0.00
Landscaping	0.07	0.03	2.14	0.00		0.00	0.01		0.00	0.01		3.76		0.00			3.84
<b>Total</b>	<b>0.90</b>	<b>0.03</b>	<b>2.14</b>	<b>0.00</b>		<b>0.00</b>	<b>0.01</b>		<b>0.00</b>	<b>0.01</b>	<b>0.00</b>	<b>3.76</b>		<b>0.00</b>	<b>0.00</b>		<b>3.84</b>

## 7.0 Water Detail

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### 7.1 Mitigation Measures Water

## 8.0 Waste Detail

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### 8.1 Mitigation Measures Waste

## 9.0 Vegetation

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## Safran Senior Housing Project South Coast Air Basin, Winter

### 1.0 Project Characteristics

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#### 1.1 Land Usage

Land Uses	Size	Metric
Parking Lot	12	Space
Apartment Low Rise	1	Dwelling Unit
Apartment Mid Rise	24	Dwelling Unit

#### 1.2 Other Project Characteristics

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Utility Company</b>	Southern California Edison
<b>Climate Zone</b>	9	<b>Precipitation Freq (Days)</b>	31		

#### 1.3 User Entered Comments

Project Characteristics -

Land Use - Edits to this screen were made to reflect actual Project Description.

Construction Phase - Changes were made to reflect actual construction start date of October 2013, and to reflect a more realistic number of days to perform architectural coatings.

Demolition -

Vehicle Trips - Adjustments to Trip Rates were made to reflect the assumptions from the project's Traffic Study

Woodstoves - There are no fireplaces or wood stoves included in these apartments.

Area Mitigation - No hearths are included in the Project Description.

## 2.0 Emissions Summary

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### 2.1 Overall Construction (Maximum Daily Emission)

#### Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2013	2.38	17.14	12.42	0.02	0.88	1.07	1.93	0.42	1.07	1.46	0.00	2,249.84	0.00	0.21	0.00	2,254.27
2014	37.81	15.77	12.20	0.02	0.30	1.11	1.35	0.00	1.11	1.11	0.00	2,246.64	0.00	0.21	0.00	2,250.96
<b>Total</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>

#### Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2013	2.38	17.14	12.42	0.02	0.76	1.07	1.80	0.42	1.07	1.46	0.00	2,249.84	0.00	0.21	0.00	2,254.27
2014	37.81	15.77	12.20	0.02	0.01	1.11	1.12	0.00	1.11	1.11	0.00	2,246.64	0.00	0.21	0.00	2,250.96
<b>Total</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>

## 2.2 Overall Operational

### Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	3.56	0.15	10.41	0.02		0.00	1.33		0.00	1.33	176.42	453.76		0.70	0.01	648.27
Energy	0.01	0.09	0.04	0.00		0.00	0.01		0.00	0.01		120.40		0.00	0.00	121.14
Mobile	0.49	1.18	4.52	0.01	0.85	0.05	0.90	0.01	0.04	0.05		743.49		0.03		744.15
<b>Total</b>	<b>4.06</b>	<b>1.42</b>	<b>14.97</b>	<b>0.03</b>	<b>0.85</b>	<b>0.05</b>	<b>2.24</b>	<b>0.01</b>	<b>0.04</b>	<b>1.39</b>	<b>176.42</b>	<b>1,317.65</b>		<b>0.73</b>	<b>0.01</b>	<b>1,513.56</b>

### Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.90	0.03	2.14	0.00		0.00	0.01		0.00	0.01	0.00	3.76		0.00	0.00	3.84
Energy	0.01	0.09	0.04	0.00		0.00	0.01		0.00	0.01		120.40		0.00	0.00	121.14
Mobile	0.49	1.18	4.52	0.01	0.85	0.05	0.90	0.01	0.04	0.05		743.49		0.03		744.15
<b>Total</b>	<b>1.40</b>	<b>1.30</b>	<b>6.70</b>	<b>0.01</b>	<b>0.85</b>	<b>0.05</b>	<b>0.92</b>	<b>0.01</b>	<b>0.04</b>	<b>0.07</b>	<b>0.00</b>	<b>867.65</b>		<b>0.03</b>	<b>0.00</b>	<b>869.13</b>

## 3.0 Construction Detail

### 3.1 Mitigation Measures Construction

### 3.2 Demolition - 2013

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.11	0.00	0.11	0.00	0.00	0.00						0.00
Off-Road	2.00	13.91	9.51	0.02		1.04	1.04		1.04	1.04		1,476.12		0.18		1,479.88
<b>Total</b>	<b>2.00</b>	<b>13.91</b>	<b>9.51</b>	<b>0.02</b>	<b>0.11</b>	<b>1.04</b>	<b>1.15</b>	<b>0.00</b>	<b>1.04</b>	<b>1.04</b>		<b>1,476.12</b>		<b>0.18</b>		<b>1,479.88</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.03	0.28	0.16	0.00	0.12	0.01	0.13	0.00	0.01	0.01		41.38		0.00		41.41
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.06	0.06	0.60	0.00	0.13	0.00	0.13	0.00	0.00	0.01		98.29		0.01		98.41
<b>Total</b>	<b>0.09</b>	<b>0.34</b>	<b>0.76</b>	<b>0.00</b>	<b>0.25</b>	<b>0.01</b>	<b>0.26</b>	<b>0.00</b>	<b>0.01</b>	<b>0.02</b>		<b>139.67</b>		<b>0.01</b>		<b>139.82</b>

### 3.2 Demolition - 2013

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.11	0.00	0.11	0.00	0.00	0.00						0.00
Off-Road	2.00	13.91	9.51	0.02		1.04	1.04		1.04	1.04	0.00	1,476.12		0.18		1,479.88
<b>Total</b>	<b>2.00</b>	<b>13.91</b>	<b>9.51</b>	<b>0.02</b>	<b>0.11</b>	<b>1.04</b>	<b>1.15</b>	<b>0.00</b>	<b>1.04</b>	<b>1.04</b>	<b>0.00</b>	<b>1,476.12</b>		<b>0.18</b>		<b>1,479.88</b>

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.03	0.28	0.16	0.00	0.00	0.01	0.01	0.00	0.01	0.01		41.38		0.00		41.41
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.06	0.06	0.60	0.00	0.00	0.00	0.01	0.00	0.00	0.01		98.29		0.01		98.41
<b>Total</b>	<b>0.09</b>	<b>0.34</b>	<b>0.76</b>	<b>0.00</b>	<b>0.00</b>	<b>0.01</b>	<b>0.02</b>	<b>0.00</b>	<b>0.01</b>	<b>0.02</b>		<b>139.67</b>		<b>0.01</b>		<b>139.82</b>

### 3.3 Site Preparation - 2013

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.53	0.00	0.53	0.00	0.00	0.00						0.00
Off-Road	1.72	12.58	8.68	0.01		0.81	0.81		0.81	0.81		1,402.64		0.15		1,405.88
<b>Total</b>	<b>1.72</b>	<b>12.58</b>	<b>8.68</b>	<b>0.01</b>	<b>0.53</b>	<b>0.81</b>	<b>1.34</b>	<b>0.00</b>	<b>0.81</b>	<b>0.81</b>		<b>1,402.64</b>		<b>0.15</b>		<b>1,405.88</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.03	0.03	0.30	0.00	0.07	0.00	0.07	0.00	0.00	0.00		49.14		0.00		49.21
<b>Total</b>	<b>0.03</b>	<b>0.03</b>	<b>0.30</b>	<b>0.00</b>	<b>0.07</b>	<b>0.00</b>	<b>0.07</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>		<b>49.14</b>		<b>0.00</b>		<b>49.21</b>

### 3.3 Site Preparation - 2013

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Fugitive Dust					0.53	0.00	0.53	0.00	0.00	0.00							0.00
Off-Road	1.72	12.58	8.68	0.01		0.81	0.81		0.81	0.81	0.00	1,402.64		0.15			1,405.88
<b>Total</b>	<b>1.72</b>	<b>12.58</b>	<b>8.68</b>	<b>0.01</b>	<b>0.53</b>	<b>0.81</b>	<b>1.34</b>	<b>0.00</b>	<b>0.81</b>	<b>0.81</b>	<b>0.00</b>	<b>1,402.64</b>		<b>0.15</b>			<b>1,405.88</b>

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00			0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00			0.00
Worker	0.03	0.03	0.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		49.14		0.00			49.21
<b>Total</b>	<b>0.03</b>	<b>0.03</b>	<b>0.30</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>		<b>49.14</b>		<b>0.00</b>			<b>49.21</b>

### 3.4 Grading - 2013

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Fugitive Dust					0.75	0.00	0.75	0.41	0.00	0.41							0.00
Off-Road	2.00	13.91	9.51	0.02		1.04	1.04		1.04	1.04		1,476.12		0.18			1,479.88
<b>Total</b>	<b>2.00</b>	<b>13.91</b>	<b>9.51</b>	<b>0.02</b>	<b>0.75</b>	<b>1.04</b>	<b>1.79</b>	<b>0.41</b>	<b>1.04</b>	<b>1.45</b>		<b>1,476.12</b>		<b>0.18</b>			<b>1,479.88</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00			0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00			0.00
Worker	0.06	0.06	0.60	0.00	0.13	0.00	0.13	0.00	0.00	0.01		98.29		0.01			98.41
<b>Total</b>	<b>0.06</b>	<b>0.06</b>	<b>0.60</b>	<b>0.00</b>	<b>0.13</b>	<b>0.00</b>	<b>0.13</b>	<b>0.00</b>	<b>0.00</b>	<b>0.01</b>		<b>98.29</b>		<b>0.01</b>			<b>98.41</b>

### 3.4 Grading - 2013

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Fugitive Dust					0.75	0.00	0.75	0.41	0.00	0.41							0.00
Off-Road	2.00	13.91	9.51	0.02		1.04	1.04		1.04	1.04	0.00	1,476.12		0.18			1,479.88
<b>Total</b>	<b>2.00</b>	<b>13.91</b>	<b>9.51</b>	<b>0.02</b>	<b>0.75</b>	<b>1.04</b>	<b>1.79</b>	<b>0.41</b>	<b>1.04</b>	<b>1.45</b>	<b>0.00</b>	<b>1,476.12</b>		<b>0.18</b>			<b>1,479.88</b>

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00			0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00			0.00
Worker	0.06	0.06	0.60	0.00	0.00	0.00	0.01	0.00	0.00	0.01		98.29		0.01			98.41
<b>Total</b>	<b>0.06</b>	<b>0.06</b>	<b>0.60</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.01</b>	<b>0.00</b>	<b>0.00</b>	<b>0.01</b>		<b>98.29</b>		<b>0.01</b>			<b>98.41</b>

### 3.5 Building Construction - 2013

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.20	16.33	10.77	0.02		1.04	1.04		1.04	1.04		1,945.40		0.20		1,949.52
<b>Total</b>	<b>2.20</b>	<b>16.33</b>	<b>10.77</b>	<b>0.02</b>		<b>1.04</b>	<b>1.04</b>		<b>1.04</b>	<b>1.04</b>		<b>1,945.40</b>		<b>0.20</b>		<b>1,949.52</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.06	0.68	0.45	0.00	0.04	0.02	0.06	0.00	0.02	0.02		107.86		0.00		107.93
Worker	0.12	0.13	1.21	0.00	0.26	0.01	0.27	0.00	0.01	0.01		196.57		0.01		196.82
<b>Total</b>	<b>0.18</b>	<b>0.81</b>	<b>1.66</b>	<b>0.00</b>	<b>0.30</b>	<b>0.03</b>	<b>0.33</b>	<b>0.00</b>	<b>0.03</b>	<b>0.03</b>		<b>304.43</b>		<b>0.01</b>		<b>304.75</b>

### 3.5 Building Construction - 2013

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.20	16.33	10.77	0.02		1.04	1.04		1.04	1.04	0.00	1,945.40		0.20		1,949.52
<b>Total</b>	<b>2.20</b>	<b>16.33</b>	<b>10.77</b>	<b>0.02</b>		<b>1.04</b>	<b>1.04</b>		<b>1.04</b>	<b>1.04</b>	<b>0.00</b>	<b>1,945.40</b>		<b>0.20</b>		<b>1,949.52</b>

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.06	0.68	0.45	0.00	0.00	0.02	0.03	0.00	0.02	0.02		107.86		0.00		107.93
Worker	0.12	0.13	1.21	0.00	0.01	0.01	0.02	0.00	0.01	0.01		196.57		0.01		196.82
<b>Total</b>	<b>0.18</b>	<b>0.81</b>	<b>1.66</b>	<b>0.00</b>	<b>0.01</b>	<b>0.03</b>	<b>0.05</b>	<b>0.00</b>	<b>0.03</b>	<b>0.03</b>		<b>304.43</b>		<b>0.01</b>		<b>304.75</b>

### 3.5 Building Construction - 2014

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.02	15.03	10.68	0.02		0.92	0.92		0.92	0.92		1,945.40		0.18		1,949.18
<b>Total</b>	<b>2.02</b>	<b>15.03</b>	<b>10.68</b>	<b>0.02</b>		<b>0.92</b>	<b>0.92</b>		<b>0.92</b>	<b>0.92</b>		<b>1,945.40</b>		<b>0.18</b>		<b>1,949.18</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.06	0.62	0.41	0.00	0.04	0.02	0.06	0.00	0.02	0.02		108.11		0.00		108.17
Worker	0.11	0.12	1.11	0.00	0.26	0.01	0.27	0.00	0.01	0.01		193.13		0.01		193.36
<b>Total</b>	<b>0.17</b>	<b>0.74</b>	<b>1.52</b>	<b>0.00</b>	<b>0.30</b>	<b>0.03</b>	<b>0.33</b>	<b>0.00</b>	<b>0.03</b>	<b>0.03</b>		<b>301.24</b>		<b>0.01</b>		<b>301.53</b>

### 3.5 Building Construction - 2014

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.02	15.03	10.68	0.02		0.92	0.92		0.92	0.92	0.00	1,945.40		0.18		1,949.18
<b>Total</b>	<b>2.02</b>	<b>15.03</b>	<b>10.68</b>	<b>0.02</b>		<b>0.92</b>	<b>0.92</b>		<b>0.92</b>	<b>0.92</b>	<b>0.00</b>	<b>1,945.40</b>		<b>0.18</b>		<b>1,949.18</b>

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.06	0.62	0.41	0.00	0.00	0.02	0.02	0.00	0.02	0.02		108.11		0.00		108.17
Worker	0.11	0.12	1.11	0.00	0.01	0.01	0.02	0.00	0.01	0.01		193.13		0.01		193.36
<b>Total</b>	<b>0.17</b>	<b>0.74</b>	<b>1.52</b>	<b>0.00</b>	<b>0.01</b>	<b>0.03</b>	<b>0.04</b>	<b>0.00</b>	<b>0.03</b>	<b>0.03</b>		<b>301.24</b>		<b>0.01</b>		<b>301.53</b>

### 3.6 Paving - 2014

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.18	13.77	9.69	0.02		1.10	1.10		1.10	1.10		1,408.52		0.20		1,412.63
Paving	0.07					0.00	0.00		0.00	0.00						0.00
<b>Total</b>	<b>2.25</b>	<b>13.77</b>	<b>9.69</b>	<b>0.02</b>		<b>1.10</b>	<b>1.10</b>		<b>1.10</b>	<b>1.10</b>		<b>1,408.52</b>		<b>0.20</b>		<b>1,412.63</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.10	0.10	1.00	0.00	0.23	0.01	0.24	0.00	0.01	0.01		173.82		0.01		174.03
<b>Total</b>	<b>0.10</b>	<b>0.10</b>	<b>1.00</b>	<b>0.00</b>	<b>0.23</b>	<b>0.01</b>	<b>0.24</b>	<b>0.00</b>	<b>0.01</b>	<b>0.01</b>		<b>173.82</b>		<b>0.01</b>		<b>174.03</b>

### 3.6 Paving - 2014

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.18	13.77	9.69	0.02		1.10	1.10		1.10	1.10	0.00	1,408.52		0.20		1,412.63
Paving	0.07					0.00	0.00		0.00	0.00						0.00
<b>Total</b>	<b>2.25</b>	<b>13.77</b>	<b>9.69</b>	<b>0.02</b>		<b>1.10</b>	<b>1.10</b>		<b>1.10</b>	<b>1.10</b>	<b>0.00</b>	<b>1,408.52</b>		<b>0.20</b>		<b>1,412.63</b>

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.10	0.10	1.00	0.00	0.01	0.01	0.02	0.00	0.01	0.01		173.82		0.01		174.03
<b>Total</b>	<b>0.10</b>	<b>0.10</b>	<b>1.00</b>	<b>0.00</b>	<b>0.01</b>	<b>0.01</b>	<b>0.02</b>	<b>0.00</b>	<b>0.01</b>	<b>0.01</b>		<b>173.82</b>		<b>0.01</b>		<b>174.03</b>

### 3.7 Architectural Coating - 2014

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	37.34					0.00	0.00		0.00	0.00						0.00
Off-Road	0.45	2.77	1.92	0.00		0.24	0.24		0.24	0.24		281.19		0.04		282.03
<b>Total</b>	<b>37.79</b>	<b>2.77</b>	<b>1.92</b>	<b>0.00</b>		<b>0.24</b>	<b>0.24</b>		<b>0.24</b>	<b>0.24</b>		<b>281.19</b>		<b>0.04</b>		<b>282.03</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.02	0.02	0.22	0.00	0.05	0.00	0.05	0.00	0.00	0.00		38.63		0.00		38.67
<b>Total</b>	<b>0.02</b>	<b>0.02</b>	<b>0.22</b>	<b>0.00</b>	<b>0.05</b>	<b>0.00</b>	<b>0.05</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>		<b>38.63</b>		<b>0.00</b>		<b>38.67</b>

### 3.7 Architectural Coating - 2014

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	37.34					0.00	0.00		0.00	0.00						0.00
Off-Road	0.45	2.77	1.92	0.00		0.24	0.24		0.24	0.24	0.00	281.19		0.04		282.03
<b>Total</b>	<b>37.79</b>	<b>2.77</b>	<b>1.92</b>	<b>0.00</b>		<b>0.24</b>	<b>0.24</b>		<b>0.24</b>	<b>0.24</b>	<b>0.00</b>	<b>281.19</b>		<b>0.04</b>		<b>282.03</b>

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.02	0.02	0.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00		38.63		0.00		38.67
<b>Total</b>	<b>0.02</b>	<b>0.02</b>	<b>0.22</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>		<b>38.63</b>		<b>0.00</b>		<b>38.67</b>

### 4.0 Mobile Detail

#### 4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.49	1.18	4.52	0.01	0.85	0.05	0.90	0.01	0.04	0.05		743.49		0.03		744.15
Unmitigated	0.49	1.18	4.52	0.01	0.85	0.05	0.90	0.01	0.04	0.05		743.49		0.03		744.15
<b>Total</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>

#### 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	6.65	6.39	5.86	18,461	18,461
Apartments Mid Rise	83.52	60.24	64.80	220,166	220,166
Parking Lot	0.00	0.00	0.00		
<b>Total</b>	<b>90.17</b>	<b>66.63</b>	<b>70.66</b>	<b>238,627</b>	<b>238,627</b>

#### 4.3 Trip Type Information

Land Use	Miles			Trip %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW
Apartments Low Rise	10.80	7.30	7.50	40.20	19.20	40.60
Apartments Mid Rise	10.80	7.30	7.50	40.20	19.20	40.60

Land Use	Miles			Trip %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00

## 5.0 Energy Detail

### 5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.01	0.09	0.04	0.00		0.00	0.01		0.00	0.01		120.40		0.00	0.00	121.14
NaturalGas Unmitigated	0.01	0.09	0.04	0.00		0.00	0.01		0.00	0.01		120.40		0.00	0.00	121.14
<b>Total</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>

## 5.2 Energy by Land Use - NaturalGas

### Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU	lb/day										lb/day					
Apartments Low Rise	52.6013	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		6.19		0.00	0.00	6.23
Apartments Mid Rise	970.822	0.01	0.09	0.04	0.00		0.00	0.01		0.00	0.01		114.21		0.00	0.00	114.91
Parking Lot	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
<b>Total</b>		<b>0.01</b>	<b>0.09</b>	<b>0.04</b>	<b>0.00</b>		<b>0.00</b>	<b>0.01</b>		<b>0.00</b>	<b>0.01</b>		<b>120.40</b>		<b>0.00</b>	<b>0.00</b>	<b>121.14</b>

### Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU	lb/day										lb/day					
Apartments Low Rise	0.0526013	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		6.19		0.00	0.00	6.23
Apartments Mid Rise	0.970822	0.01	0.09	0.04	0.00		0.00	0.01		0.00	0.01		114.21		0.00	0.00	114.91
Parking Lot	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
<b>Total</b>		<b>0.01</b>	<b>0.09</b>	<b>0.04</b>	<b>0.00</b>		<b>0.00</b>	<b>0.01</b>		<b>0.00</b>	<b>0.01</b>		<b>120.40</b>		<b>0.00</b>	<b>0.00</b>	<b>121.14</b>

## 6.0 Area Detail

## 6.1 Mitigation Measures Area

No Hearths Installed

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.90	0.03	2.14	0.00		0.00	0.01		0.00	0.01	0.00	3.76		0.00	0.00	3.84
Unmitigated	3.56	0.15	10.41	0.02		0.00	1.33		0.00	1.33	176.42	453.76		0.70	0.01	648.27
<b>Total</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>

## 6.2 Area by SubCategory

### Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.10					0.00	0.00		0.00	0.00						0.00
Consumer Products	0.73					0.00	0.00		0.00	0.00						0.00
Hearth	2.66	0.12	8.28	0.02		0.00	1.32		0.00	1.32	176.42	450.00		0.70	0.01	644.43
Landscaping	0.07	0.03	2.14	0.00		0.00	0.01		0.00	0.01		3.76		0.00		3.84
<b>Total</b>	<b>3.56</b>	<b>0.15</b>	<b>10.42</b>	<b>0.02</b>		<b>0.00</b>	<b>1.33</b>		<b>0.00</b>	<b>1.33</b>	<b>176.42</b>	<b>453.76</b>		<b>0.70</b>	<b>0.01</b>	<b>648.27</b>

## 6.2 Area by SubCategory

### Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
SubCategory	lb/day										lb/day						
Architectural Coating	0.10					0.00	0.00		0.00	0.00							0.00
Consumer Products	0.73					0.00	0.00		0.00	0.00							0.00
Hearth	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00		0.00	0.00		0.00
Landscaping	0.07	0.03	2.14	0.00		0.00	0.01		0.00	0.01		3.76		0.00			3.84
<b>Total</b>	<b>0.90</b>	<b>0.03</b>	<b>2.14</b>	<b>0.00</b>		<b>0.00</b>	<b>0.01</b>		<b>0.00</b>	<b>0.01</b>	<b>0.00</b>	<b>3.76</b>		<b>0.00</b>	<b>0.00</b>		<b>3.84</b>

## 7.0 Water Detail

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### 7.1 Mitigation Measures Water

## 8.0 Waste Detail

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### 8.1 Mitigation Measures Waste

## 9.0 Vegetation

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**Greenhouse Gas Emission Worksheet**  
**N2O Mobile Emissions**

Long Beach Safran Senior Housing Project

From CalEEMod Vehicle Fleet Mix Output:

Annual VMT: 238,627

Vehicle Type	Percent Type	CH4 Emission Factor (g/mile)*	CH4 Emission (g/mile)**	N2O Emission Factor (g/mile)*	N2O Emission (g/mile)**
Light Auto	48.6%	0.04	0.01944	0.04	0.01944
Light Truck < 3750 lbs	10.9%	0.05	0.00545	0.06	0.00654
Light Truck 3751-5750 lbs	21.8%	0.05	0.0109	0.06	0.01308
Med Truck 5751-8500 lbs	9.6%	0.12	0.01152	0.2	0.0192
Lite-Heavy Truck 8501-10,000 lbs	1.7%	0.12	0.00204	0.2	0.0034
Lite-Heavy Truck 10,001-14,000 lbs	0.7%	0.09	0.00063	0.125	0.000875
Med-Heavy Truck 14,001-33,000 lbs	1.0%	0.06	0.0006	0.05	0.0005
Heavy-Heavy Truck 33,001-60,000 lbs	0.9%	0.06	0.00054	0.05	0.00045
Other Bus	0.1%	0.06	0.00006	0.05	0.00005
Urban Bus	0.1%	0.06	0.00006	0.05	0.00005
Motorcycle	3.5%	0.09	0.00315	0.01	0.00035
School Bus	0.1%	0.06	0.00006	0.05	0.00005
Motor Home	1.0%	0.09	0.0009	0.125	0.00125
<b>Total</b>	<b>100.0%</b>		<b>0.05535</b>		<b>0.065235</b>

**Total Emissions (metric tons) =**

**Emission Factor by Vehicle Mix (g/mi) x Annual VMT(mi) x 0.000001 metric tons/g**

**Conversion to Carbon Dioxide Equivalency (CO2e) Units based on Global Warming Potential (GWP)**

CH4 21 GWP  
 N2O 310 GWP  
 1 ton (short, US) = 0.90718474 metric ton

**Annual Mobile Emissions:**

**Total Emissions**                      **Total CO2e units**  
 N2O Emissions: 0.0156 metric tons N2O                      5 metric tons CO2e

<b>Project Total:</b>	<b>5 metric tons CO2e</b>
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**References**

\* from Table C.4: Methane and Nitrous Oxide Emission Factors for Mobile Sources by Vehicle and Fuel Type (g/mile).

in California Climate Action Registry General Reporting Protocol, Reporting Entity-Wide Greenhouse Gas Emissions, Version 3.1, January 2009.

Assume Model year 2000-present, gasoline fueled.

\*\* Source: California Climate Action Registry General Reporting Protocol, Reporting Entity-Wide Greenhouse Gas Emissions, Version 3.1, January 2009.

## **Appendix B**

Traffic Technical Memorandum





## Technical Memorandum

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**To:** Joe Power, Greg Martin; Rincon Consulting  
**From:** Janet Harvey, Iteris  
**Date:** September 10, 2012  
**Job Number:** 17-J12-1782  
**Re:** Safran Senior Housing Project, Long Beach, CA

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This technical memorandum provides transportation technical support for the environmental documentation for the Safran Senior Housing Project in Long Beach, CA.

The Proposed Project (Project) involves the conversion of an existing church building into a low income senior housing project, with 24 independent dwelling units, and one manager's unit. Parking will be provided via a 12-space parking lot that would be constructed on an adjacent parcel. The existing church building is vacant, and has no active land uses. The Project is located at the northeast corner of East 3<sup>rd</sup> Street and Obispo Avenue in the City of Long Beach.

### Project Setting

The Project is located at the northeast corner of East 3<sup>rd</sup> Street and Obispo Avenue, and parking for the Project will be accessed from Obispo Avenue, just north of East 3<sup>rd</sup> Street. In this area, East 3<sup>rd</sup> Street is classified as a Collector Street in the City of Long Beach General Plan, and Obispo Avenue is classified as a local street. The nearest Major roadway is Redondo Avenue, a north-south facility located east of the project site.

Neither East 3<sup>rd</sup> Street nor Obispo Avenue is shown as a bicycle facility on the City's Bicycle Master Plan. However, a block south of the Project, Vista Street contains an east-west Bike Boulevard which runs from Temple Avenue to Nieto Avenue. The nearest north-south bicycle facility is a Class II Bicycle Route located on Junipero Avenue.

There is curbside parking available in the Project area. There are no parking restrictions, other than street sweeping and the parking of oversized vehicles. Adjacent to the project site, there are a total of approximately 11-12 on-street parking spaces adjacent to the existing building. Sidewalks currently exist along both sides of the street in the Project vicinity. Due to the proximity of Mann Elementary School, there are several marked pedestrian crosswalks, the closest being at the intersection of East 3<sup>rd</sup> Street and Obispo Avenue.

There is currently no transit service along East 3<sup>rd</sup> Street in the project area. There are four (4) transit routes located within a few blocks of the Project on East Broadway, 4<sup>th</sup> Street and Redondo Avenue.

- Along East Broadway, there are two transit routes, Routes 111 and 112.
  - Route 111 begins at the downtown Transit Gallery, travels east on East Broadway, then north on Ximeno Avenue and Lakewood Boulevard to the Lakewood Regional Medical Center. Weekday peak hour headways are approximately 30 minutes, and Saturday/Sunday/Holiday service is available. Route 111 also stops at the Long Beach Airport.



- Similar to Route 111, Route 112 begins at the downtown Transit Gallery and ends at the Lakewood Regional Medical Center, but instead of Lakewood Boulevard, this route takes Clark Avenue north to Del Amo Boulevard. This service alternates times with Route 111, with 30 minute headways for Route 112 in the weekday peak hours. Overall, service is provided every 15 minutes between the two routes. Route 112 also has Saturday/Sunday/Holiday service available.
- East 4<sup>th</sup> Street is served by Route 151. This route, in the Project vicinity, goes from the Colorado Lagoon, then westerly along East 4<sup>th</sup> Street, to the downtown Transit Gallery, then continues westerly to Golden Avenue near Golden Park. This service has 20 minute headways in the weekday peak hours, and Saturday/Sunday/Holiday service is available.
- Redondo Avenue is served by Route 131. This route runs between the Alamitos Bay Landing and the Wardlow Metro Station via 2<sup>nd</sup> Street/Ocean Boulevard, Redondo Avenue, Spring Street and Wardlow Road. Weekday peak hour headways are approximately every 40 minutes. There is limited Saturday/Sunday/Holiday service available on Route 131.

**Project Trip Generation**

Trip generation for the Proposed Project was calculated for the AM and PM peak hours, as well as daily. In order for a conservative analysis, the trip generation consists of 25 Senior Attached Housing Units, and 1 Apartment Unit for the Manager.

Table 1 – Trip Generation Estimates											
Land Use	Size		ITE Code	Daily Trips	AM Peak Hour			PM Peak Hour			
					In	Out	Total	In	Out	Total	
Senior Adult Housing - Attached	24	DU	220	rate	3.48	0.05	0.08	0.13	0.10	0.06	0.16
				trips	84	1	2	3	2	2	4
Apartment (Manager)	1	DU	220	rate	6.65	0.10	0.41	0.51	0.40	0.22	0.62
				trips	7	0	1	1	1	0	1
<b>TOTAL</b>					<b>91</b>	<b>1</b>	<b>3</b>	<b>4</b>	<b>3</b>	<b>2</b>	<b>5</b>

Notes:

Source - ITE Trip Generation 8th Edition  
 DU = Dwelling Unit

As shown in Table 1, the Project is estimated to generate a total of 91 daily trips, of which there would be 4 AM peak hour trips, and 5 PM peak hour trips. This anticipated trip generation for the AM and PM peak hours is below the City's threshold requirements for a detailed traffic impact study, and no traffic related impacts are anticipated at roadways and intersections within the vicinity of the Project.



The project trips would tend to use Collector streets rather than local roadways, therefore a majority (approximately 80% or more) of the Project trips would be expected to use East 3<sup>rd</sup> Street. Some traffic may use Obispo Avenue for north-south access, but it would be expected that a majority of north-south traffic would use larger streets such as Redondo Avenue or Temple Avenue.

### **Project Parking**

Parking for the project will be provided in a 12-space parking lot on an adjacent parcel. City of Long Beach Zoning Code section 21.41.216 identifies the number of spaces required for each use. This project consists of 24 low income senior dwelling units plus a manager's unit, for a total of 25 units.

Table 41-1B of the Zoning Code section states that low rent senior citizen units require 1 space for each 2 bedrooms. However, a footnote states The Planning Commission may further reduce the parking standards to 1 space per 3 bedrooms if it finds that the neighborhoods in which the facility is proposed has ample, readily available on-street parking or is well-served by public transportation and a concentration of senior services.

The zoning code requires a total of 13 parking spaces for the project, and only 12 are proposed; however, there is ample on-street parking adjacent to the building. Therefore, the Planning Commission will need to approve the reduction in on-site parking from 13 to 12, with the utilization of on-street parking for the one required parking space.

# Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: Redondo Ave

DATE: 7/10/2008

LOCATION: City of Long Beach

E-W STREET: 3rd St

DAY: THURSDAY

PROJECT# 08-2323-018

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	1	2	0	1	2	0	0	1	0	0	1	0	
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	5	139	1	3	68	6	29	16	3	3	16	10	299
7:15 AM	5	153	0	3	90	20	38	19	5	4	18	18	373
7:30 AM	5	179	2	10	110	15	34	22	7	2	18	14	418
7:45 AM	5	176	1	20	152	20	32	14	4	6	37	6	473
8:00 AM	7	179	2	8	122	18	22	14	5	4	26	13	420
8:15 AM	4	214	1	12	112	25	25	15	7	9	25	15	464
8:30 AM	6	181	8	8	144	12	36	20	8	10	14	13	460
8:45 AM	10	210	3	14	134	15	21	13	9	5	15	29	478
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													

TOTAL VOLUMES =	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	47	1431	18	78	932	131	237	133	48	43	169	118	3385

AM Peak Hr Begins at: 800 AM

PEAK VOLUMES =	27	784	14	42	512	70	104	62	29	28	80	70	1822
PEAK HR. FACTOR:		0.925			0.951			0.762			0.908		0.953

CONTROL: Signalized

# Intersection Turning Movement

Prepared by:

## National Data & Surveying Services

N-S STREET: Redondo Ave

DATE: 7/10/2008

LOCATION: City of Long Beach

E-W STREET: 3rd St

DAY: THURSDAY

PROJECT# 08-2323-018

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	1	2	0	1	2	0	0	1	0	0	1	0	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	6	162	6	9	177	13	17	25	13	8	13	9	458
4:15 PM	8	176	6	24	226	22	21	21	9	2	34	9	558
4:30 PM	3	157	2	16	157	20	21	14	4	4	26	15	439
4:45 PM	8	184	4	21	202	28	29	30	9	6	28	22	571
5:00 PM	6	231	4	17	198	10	35	43	6	2	46	11	609
5:15 PM	11	157	3	22	205	26	48	44	6	5	24	21	572
5:30 PM	11	192	4	19	174	15	37	42	11	10	28	10	553
5:45 PM	4	176	4	15	233	27	32	33	11	6	29	6	576
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													

TOTAL VOLUMES =	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	57	1435	33	143	1572	161	240	252	69	43	228	103	4336

PM Peak Hr Begins at: 500 PM

PEAK VOLUMES =	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	32	756	15	73	810	78	152	162	34	23	127	48	2310
PEAK HR. FACTOR:		0.833			0.874			0.888			0.839		0.948

CONTROL: Signalized



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## **Appendix C**

Noise Modeling Results

East 3rd Street between Obispo and Coronado, existing  
\* \* \* \* CASE INFORMATION \* \* \* \*

\* \* \* \* Results calculated with TNM Version 2.5 \* \* \* \*

\* \* \* \* TRAFFIC VOLUME/SPEED INFORMATION \* \* \* \*

Automobile volume (v/h):	570.0
Average automobile speed (mph):	25.0
Medium truck volume (v/h):	5.0
Average medium truck speed (mph):	25.0
Heavy truck volume (v/h):	5.0
Average heavy truck speed (mph):	25.0
Bus volume (v/h):	0.0
Average bus speed (mph):	0.0
Motorcycle volume (v/h):	5.0
Average Motorcycle speed (mph):	25.0

\* \* \* \* TERRAIN SURFACE INFORMATION \* \* \* \*

Terrain surface: hard

\* \* \* \* RECEIVER INFORMATION \* \* \* \*

DESCRIPTION OF RECEIVER # 1

East 3rd Street between Obispo and Coronado, existing

Distance from center of 12-ft wide, single lane roadway (ft):	32.8
A-weighted Hourly Equivalent Sound Level without Barrier (dBA):	60.7

East 3rd Street between Obispo and Coronado, existing plus project  
\* \* \* \* CASE INFORMATION \* \* \* \*

\* \* \* \* Results calculated with TNM Version 2.5 \* \* \* \*

\* \* \* \* TRAFFIC VOLUME/SPEED INFORMATION \* \* \* \*

Automobile volume (v/h):	574.0
Average automobile speed (mph):	25.0
Medium truck volume (v/h):	5.0
Average medium truck speed (mph):	25.0
Heavy truck volume (v/h):	5.0
Average heavy truck speed (mph):	25.0
Bus volume (v/h):	0.0
Average bus speed (mph):	0.0
Motorcycle volume (v/h):	5.0
Average Motorcycle speed (mph):	25.0

\* \* \* \* TERRAIN SURFACE INFORMATION \* \* \* \*

Terrain surface: hard

\* \* \* \* RECEIVER INFORMATION \* \* \* \*

DESCRIPTION OF RECEIVER # 1

East 3rd Street between Obispo and Coronado, existing plus project

Distance from center of 12-ft wide, single lane roadway (ft):	32.8
A-weighted Hourly Equivalent Sound Level without Barrier (dBA):	60.8