

City of Long Beach

# Safran Senior Housing Project

## *Final* Environmental Impact Report

SCH # 2012091026



December 2012

*E n v i r o n m e n t a l   S c i e n t i s t s   P l a n n e r s   E n g i n e e r s*

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*Final*  
**Environmental Impact Report**

**Safran Senior Housing Project**

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**December 2012**

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# Safran Senior Housing Project EIR

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## EXECUTIVE SUMMARY

This section summarizes the characteristics of the proposed project, and the environmental impacts, mitigation measures, and residual impacts associated with the proposed project.

### PROJECT SYNOPSIS

#### Project Applicant

Thomas Safran & Associates  
11812 San Vicente Boulevard, Suite 600  
Los Angeles, California 90049  
Phone: (310) 820-4888      Fax: (310) 207-6986

#### Project Description

This Environmental Impact Report (EIR) has been prepared to examine the potential environmental effects of the proposed Safran Senior Housing project. The following is a summary of the full project description, which may be found in Section 2.0 *Project Description*.

The proposed project would involve conversion of an existing 31,006 square foot church building at 3215 East 3rd 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. The project also includes demolition of the existing single family home and detached garage on the adjacent parcel at 304 Obispo Avenue and construction of a 12-space parking lot serving the project. Table ES-1 provides a summary of proposed development. In Section 2.0, *Project Description*, Figure 2-5 shows the proposed site plan, Figures 2-6a and 2-6b show the proposed elevations, and Figure 2-7 shows a rendering of the completed project in the context of its surroundings.

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 street). The primary pedestrian access to the proposed building would be from East 3<sup>rd</sup> Street. The current wooden doors on Obispo Avenue would be removed and replaced with ten lite doors with transoms, which would serve as private entries for units. There would be additional entries to the ground floor and lower level on the north side of the existing church, accessible from the parking lot. The primary changes to the exterior of the building would consist of the following (also shown on Figures 2-6a and 2-6b):

#### West Elevation

1. New window at area well.
2. New doors to replace the existing entry doors.
3. New window at north tower.
4. Guardrails added at 2<sup>nd</sup> floor units.
5. Wall and gate added at parking lot.



South Elevation

1. New window at area well.
2. New windows and door at Lobby.
3. New mechanical platform and screen.

North Elevation

1. New doors at lower level units and new windows at area well.
2. New doors to replace existing.
3. Various openings infilled and new lightwell opening added.
4. Removing existing stairs.

East Elevation

1. New area well and opening.
2. Existing door and window openings infilled, add new window.
3. New mechanical platform and screen.

**Table ES-1  
Project Summary**

| <b>Land Use</b>                     | <b>Size<br/>(square feet)</b> | <b>Quantity</b> |
|-------------------------------------|-------------------------------|-----------------|
| Senior Housing Residential          | 15,176                        | 24 units        |
| Manager's Unit                      | 750                           | 1 unit          |
| Amenities/Common and<br>Other Areas | 15,080                        | n/a             |
| Gross Building Area                 | 31,006                        | n/a             |
| Parking Spaces                      | n/a                           | 12 spaces       |

Implementation of the project would require the following discretionary approvals 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.

The City has also expressed a desire that the applicant request designation as a historic landmark for the former church property. Approval of such a request would also require discretionary approval from the City.

## **ALTERNATIVES**

Three alternatives to the proposed project were selected for consideration as follows:

- Alternative 1: No Project (no change to existing land uses)
- Alternative 2: Relocate 304 Obispo Avenue Residence
- Alternative 3: Minimize Exterior Changes to Former Church Building

The No Project alternative would involve no change to the environment and is therefore considered environmentally superior overall. It should be noted, however, that this alternative would not preclude future development of the site and/or renovations or expansions of existing structures or uses. Among the other two alternatives, Alternative 2, the Relocate 304 Obispo Avenue Residence alternative, is considered environmentally superior.

## **SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Table ES-2 includes a brief description of the environmental issues relative to the proposed project, the identified environmental impacts, proposed mitigation measures, and residual impacts (the impact after application of mitigation, if any). Impacts are categorized by classes. Class I impacts are defined as significant, unavoidable adverse impacts which require a statement of overriding considerations to be issued per Section 15093 of the *State CEQA Guidelines* if the project is approved. Class II impacts are significant adverse impacts that can be feasibly mitigated to less than significant levels and which require findings to be made under Section 15091 of the *State CEQA Guidelines*. Class III impacts are considered less than significant impacts.



**Table ES-2 Summary of Environmental Impacts,  
 Mitigation Measures, and Residual Impacts**

| Impact  | Mitigation Measures  | Residual Impact             |
|---|--|-----------------------------|
| <b>AESTHETICS</b>   |  |                             |
| <p><b>Impact AES-1.</b> The proposed project would involve replacing the existing single-family home at 304 Obispo Avenue with a surface parking lot, and making some changes to the exterior of the former Immanuel Community Church building at 3215 East 3<sup>rd</sup> Street. These changes would alter the visual character of the project site and would have the potential to damage scenic resources. However, due to the relatively limited scope of the proposed changes within a highly urbanized context, the project's impact would be Class III, <i>less than significant</i>.</p>   | None required  | Less than significant       |
| <p><b>Impact AES-2.</b> The proposed changes would not conflict with adopted policies of the City of Long Beach related to aesthetics, and would therefore produce a Class III, <i>less than significant</i>, impact.</p>   | None required  | Less than significant       |
| <b>CULTURAL RESOURCES</b>   |  |                             |
| <p><b>Impact CR-1.</b> The proposed Safran Senior Housing Project would involve demolition of the single family residence at 304 Obispo Avenue and construction of a surface parking lot on the property, as well as changes to the exterior of the former Immanuel Community Church building at 3215 E. 3rd Street. These properties are contributors to a designated historic district, and the project would result in a reduction to the design integrity of the historic district. While impacts to the former church building could be mitigated to a less than significant level, demolition of the residence would lead to the complete loss of a contributor to a historic district, and this impact would be Class I, <i>significant and unavoidable</i>.</p> | <p><b>CR-1(a): 304 Obispo Avenue Documentation Report.</b> In consultation with the Planning Bureau of the Long Beach Development Services Department, a historic preservation professional qualified in accordance with the Secretary of the Interior's Standards shall be selected to complete a Documentation Report on the property at 304 Obispo Avenue. The property shall be documented with archival quality photographs of a type and format approved by the City of Long Beach. This documentation, along with historical background for this property, shall be submitted to an appropriate repository approved by the City of Long Beach. The documentation reports shall be completed and approved by the City of Long Beach prior to the issuance of demolition permits.</p> <p><b>CR-1(b): Immanuel Community Church Certificate of Appropriateness.</b> The proposed alterations to the former Immanuel Community Church building at 3215 E. 3rd Street shall be subject to the issuance of a Certificate of Appropriateness by the City of Long Beach Cultural Heritage Commission, which shall find that the proposed alterations conform to the <i>Secretary of the Interior's Standards</i> prior to the issuance of the Certificate of Appropriateness. All provisions of Ordinance C-7937, "An Ordinance of the City Council of the City of Long Beach</p> | Significant and unavoidable |



**Table ES-2 Summary of Environmental Impacts,  
 Mitigation Measures, and Residual Impacts**

| <b>Impact</b>   | <b>Mitigation Measures</b>   | <b>Residual Impact</b>                                    |
|---|--|---|
|   | Designating the Bluff Heights Historic Landmark District," particularly with respect to retaining and preserving all original architectural materials and design features, shall apply to this review.   |   |
| <b>NOISE (see Initial Study, Appendix A)</b>  |  |   |
| <p><b>Impact N-1.</b> If loaded trucks leaving the project site used Obispo Avenue or Coronado Avenue south of East 3rd 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. This impact would be Class II, significant but mitigable.</p> | <p><b>N-1: Heavy Truck Restriction/Haul Routes.</b> 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.</p> | <p>Less than significant with mitigation incorporated</p> |



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## 1.0 INTRODUCTION

This document is a Draft Environmental Impact Report (EIR) for the proposed Safran Senior Housing Project, located in the City of Long Beach, County of Los Angeles. For the purposes of this analysis, the Safran Senior Housing Project refers to the development scenario proposed by Thomas Safran & Associates for the entire 0.48-acre site, as detailed in Section 2.0, *Project Description*.

This section describes: (1) the purpose and legal authority of the EIR; (2) the general background of the project; (3) the scope and content of the EIR; (4) lead, responsible, and trustee agencies; (5) the environmental review process required under the California Environmental Quality Act (CEQA); and (6) areas of known public controversy.

### 1.1 ENVIRONMENTAL IMPACT REPORT BACKGROUND

A Notice of Preparation (NOP) of an environmental impact report was prepared for the proposed project and distributed for agency and public review for the required 30-day review period on September 13, 2012. Five written responses to the NOP were received (including the State Clearinghouse letter confirming receipt of the NOP). The NOP is presented in Appendix A, along with the Initial Study that was prepared for the project and the NOP responses received. The intent of the NOP was to provide interested individuals, groups, public agencies and others a forum to provide input to the City regarding scope and focus of the EIR. Table 1-1 lists the issues relevant to the EIR that were brought up in the NOP written comments and the EIR sections where the issues are addressed.

**Table 1-1 NOP Response Issues**

| Issue  | How Addressed  |
|--|--|
| Native American cultural resources                           | Initial Study (Appendix A)                             |
| Demolition of house at 304 Obispo Avenue                     | 4.2 <i>Cultural Resources</i>                          |
| Retention of architectural details on former church building | 4.1 <i>Aesthetics</i><br>4.2 <i>Cultural Resources</i> |
| Sewerage service   | Initial Study (Appendix A)                             |

### 1.2 PURPOSE AND LEGAL AUTHORITY

The proposed project requires the discretionary approval of the City of Long Beach. Therefore, it is subject to the requirements of CEQA. In accordance with Section 15121 of the *CEQA Guidelines*, the purpose of this EIR is to serve as an informational document that:

*...will inform public agency decision-makers and the public generally of the significant environmental effects of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project.*

This EIR has been prepared as a Project EIR pursuant to Section 15161 of the *CEQA Guidelines*. A Project EIR is appropriate for a specific development project. As stated in the *CEQA Guidelines*:



*This type of EIR should focus primarily on the changes in the environment that would result from the development project. The EIR shall examine all phases of the project, including planning, construction, and operation.*

This EIR is to serve as an informational document for the public and City of Long Beach decision-makers. The process will culminate with a Planning Commission hearing to consider certification of the Final EIR and approval of the project, unless the Planning Commission's decision is appealed to the City Council, in which case the process would culminate with a City Council hearing to consider certification of the Final EIR and approval of the project.

### **1.3 SCOPE AND CONTENT/ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED**

This EIR addresses the issues determined to be potentially significant by the City of Long Beach. The issues addressed in this EIR include:

- *Aesthetics*
- *Cultural Resources*
- *Land Use and Planning (discussed in the Cultural Resources section)*

This EIR addresses the issues referenced above and identifies the potentially significant environmental impacts, including site-specific and cumulative effects of the project, in accordance with the provisions set forth in the *CEQA Guidelines*. In addition, the EIR recommends feasible mitigation measures, where possible, that would reduce or eliminate adverse environmental effects.

In preparing the EIR, use was made of pertinent City policies and guidelines, certified EIRs and adopted CEQA documents, and background documents prepared by the City. A full reference list is contained in Section 7.0, *References and Report Preparers*.

The Alternatives Section of the EIR (Section 6.0) was prepared in accordance with Section 15126.6 of the *CEQA Guidelines*. The alternatives discussion evaluates the CEQA-required "no project" alternative and two alternative development scenarios for the site. It also identifies the environmentally superior alternative among the alternatives assessed.

The level of detail contained throughout this EIR is consistent with the requirements of CEQA and applicable court decisions. The *CEQA Guidelines* provide the standard of adequacy on which this document is based. *CEQA Guidelines* Section 15151 states:

*An EIR should be prepared with a sufficient degree of analysis to provide decision-makers with information which enables them to make a decision which intelligently takes account of environmental consequences. An evaluation of the environmental effects of the proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts. The courts have looked not for perfection, but for adequacy, completeness, and a good faith effort at full disclosure.*



## 1.4 LEAD, RESPONSIBLE, AND TRUSTEE AGENCIES

The *CEQA Guidelines* define lead, responsible and trustee agencies. The City of Long Beach is the lead agency for the project because it holds principal responsibility for approving this EIR.

A responsible agency refers to a public agency other than the lead agency that has discretionary approval over the project. There are no responsible agencies for the project.

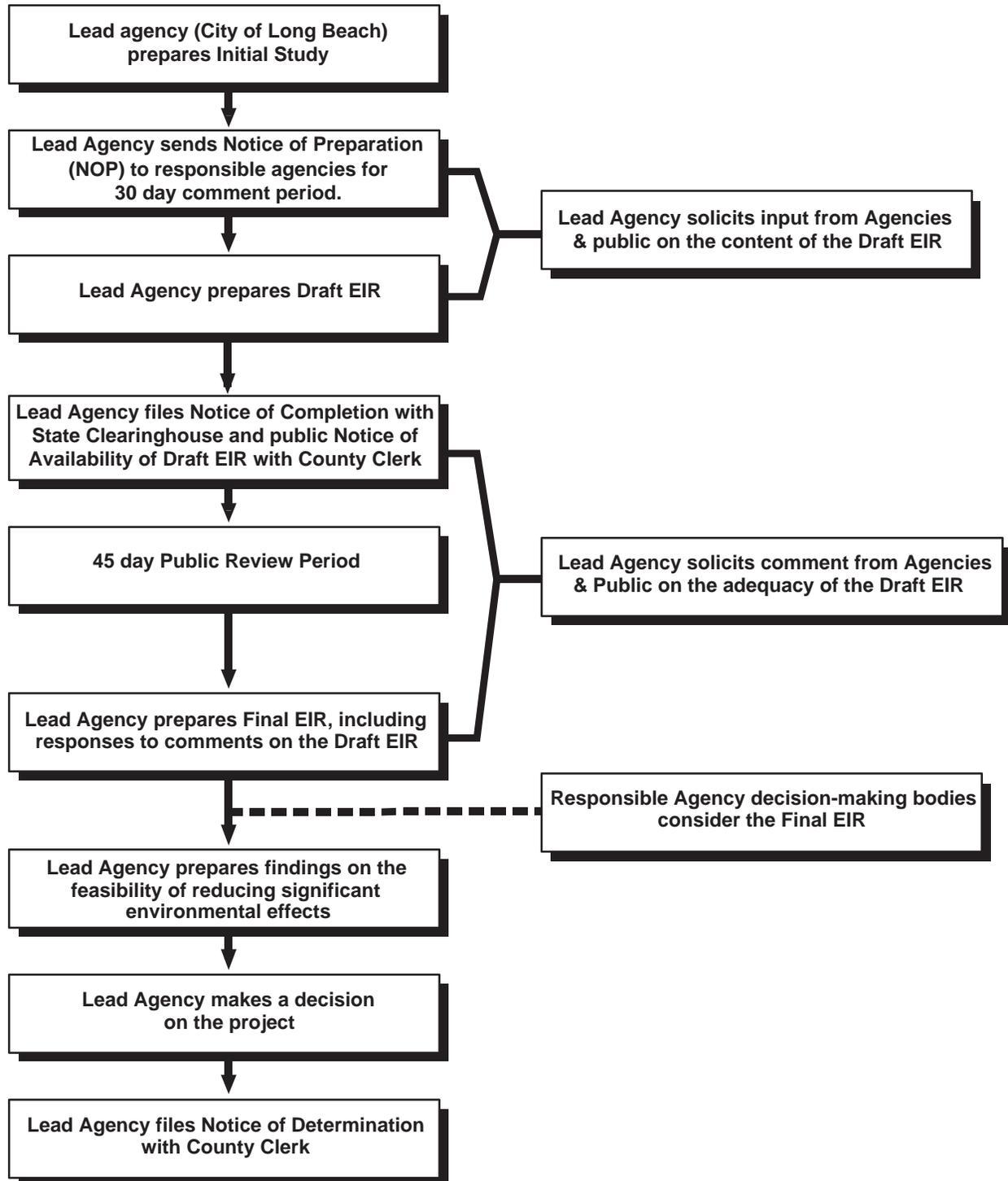
A trustee agency refers to a state agency having jurisdiction by law over natural resources affected by a project. There are no trustee agencies for the proposed project.

## 1.5 ENVIRONMENTAL REVIEW PROCESS

The major steps in the environmental review process, as required under CEQA, are outlined below and illustrated on Figure 1-1. The steps are presented in sequential order.

1. **Notice of Preparation (NOP).** After deciding that an EIR is required, the lead agency must file an NOP soliciting input on the EIR scope to the State Clearinghouse, other concerned agencies, and parties previously requesting notice in writing (*CEQA Guidelines* Section 15082; Public Resources Code Section 21092.2). The NOP must be posted in the County Clerk's office for 30 days. The NOP may be accompanied by an Initial Study that identifies the issue areas for which the proposed project could create significant environmental impacts.
2. **Draft Environmental Impact Report (DEIR) Prepared.** The DEIR must contain: a) table of contents or index; b) summary; c) project description; d) environmental setting; e) discussion of significant impacts (direct, indirect, cumulative, growth-inducing and unavoidable impacts); f) a discussion of alternatives; g) mitigation measures; and, h) discussion of irreversible changes.
3. **Notice of Completion and Notice of Availability.** A lead agency must file a Notice of Completion with the State Clearinghouse when it completes a Draft EIR (*CEQA Guidelines* Section 15085) and prepare a Public Notice of Availability of a Draft EIR. The lead agency must file the Notice of Availability with the County Clerk's office for a 30 day posting period and send a copy of the Notice of Availability to anyone requesting it (*CEQA Guidelines* Section 15087). Additionally, public notice of DEIR availability must be given through at least one of the following procedures: a) publication in a newspaper of general circulation; b) posting on and off the project site; and c) direct mailing to owners and occupants of contiguous properties. The lead agency must solicit input from other agencies and the public, and respond in writing to all comments received (PRC Sections 21104 and 21153). The minimum public review period for a DEIR is 30 days. When a Draft EIR is sent to the State Clearinghouse for review, the public review period must be 45 days unless the Clearinghouse (Public Resources Code Section 21091) approves a shorter period.
4. **Final EIR.** A Final EIR (FEIR) must include: a) the Draft EIR; b) copies of comments received during public review; c) list of persons and entities commenting; and, d) responses to comments.





CEQA Environmental Review Process

Figure 1-1

5. **Certification of FEIR.** Prior to making a decision on a proposed project, the lead agency must certify that: a) the FEIR has been completed in compliance with CEQA; b) the FEIR was presented to the decision-making body of the lead agency; and, c) the decision-making body reviewed and considered the information in the FEIR prior to approving a project (*CEQA Guidelines* Section 15090).
6. **Lead Agency Project Decision.** A lead agency may: a) disapprove a project because of its significant environmental effects; b) require changes to a project to reduce or avoid significant environmental effects; or, c) approve a project despite its significant environmental effects, if the proper findings and statement of overriding considerations are adopted (*CEQA Guidelines* Sections 15042 and 15043).
7. **Findings/Statement of Overriding Considerations.** For each significant impact of the project identified in the EIR, the lead or responsible agency must find, based on substantial evidence, that either: a) the project has been changed to avoid or substantially reduce the magnitude of the impact; b) changes to the project are within another agency's jurisdiction and such changes have or should be adopted; or c) specific economic, social, or other considerations make the mitigation measures or project alternatives infeasible (*CEQA Guidelines* Section 15091). If an agency approves a project with unavoidable significant environmental effects, it must prepare a written Statement of Overriding Considerations that sets forth the specific social, economic, or other reasons supporting the agency's decision.
8. **Mitigation Monitoring Reporting Program.** When an agency makes findings on significant effects identified in the EIR, it must adopt a reporting or monitoring program for mitigation measures that were adopted or made conditions of project approval to mitigate significant effects.
9. **Notice of Determination.** An agency must file a Notice of Determination within five working days after deciding to approve a project for which an EIR is prepared (*CEQA Guidelines* Section 15094). A local agency must file the Notice with the County Clerk. The Notice must be posted for 30 days and sent to anyone previously requesting notice. Posting of the Notice starts a 30-day statute of limitations on CEQA legal challenges [Public Resources Code Section 21167(c)].



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## 2.0 PROJECT DESCRIPTION

The proposed project involves conversion of an existing 31,006 square foot church building 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. The project also includes construction of a 12-space parking lot on an adjacent parcel. Both properties are located in the Bluff Heights Historic District of Long Beach. This section describes the project location, major characteristics of the site and the proposed development, project objectives, and approvals needed to implement the project.

### 2.1 PROJECT APPLICANT

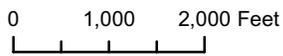
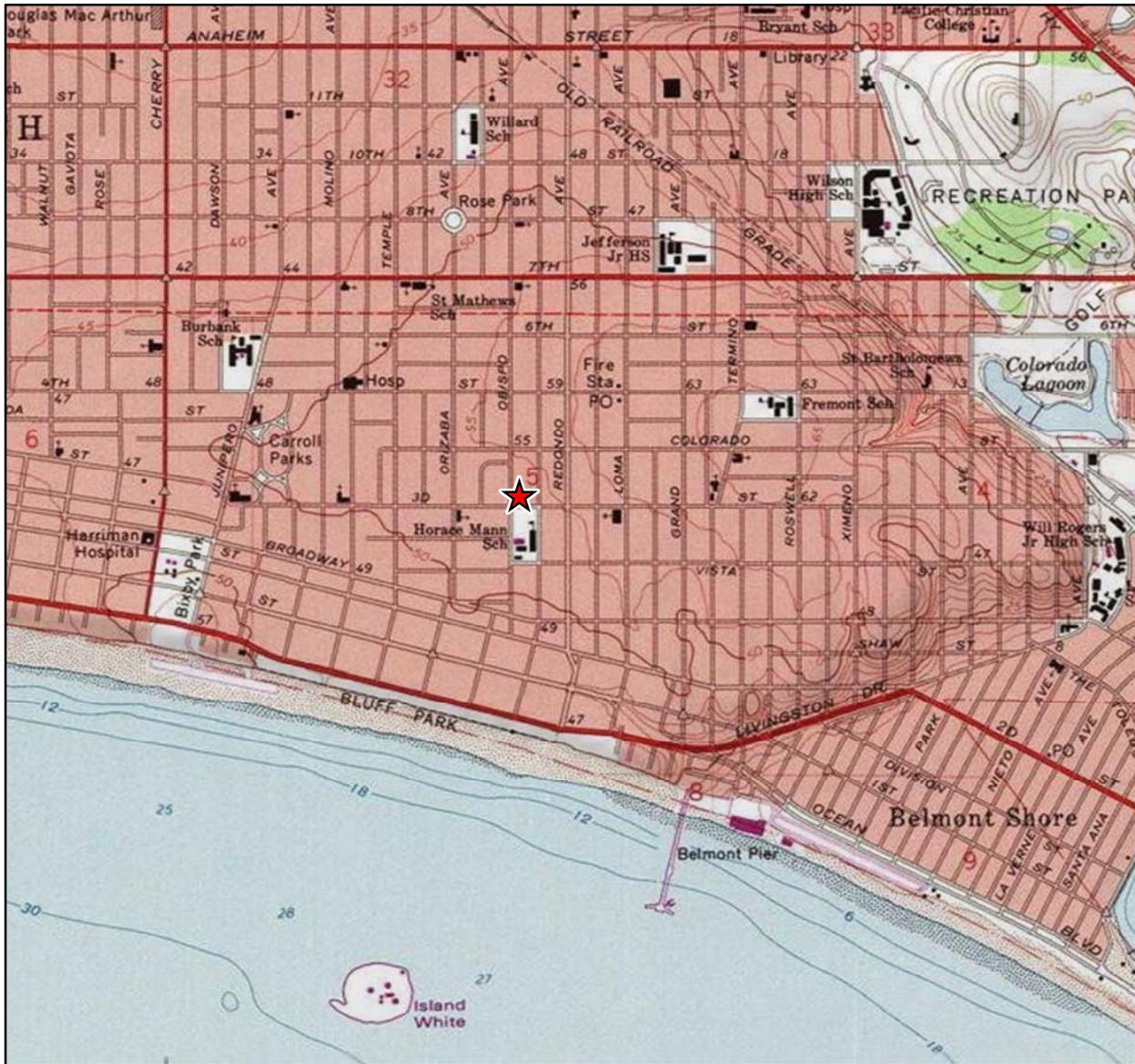
Thomas Safran & Associates  
11812 San Vicente Boulevard, Suite 600  
Los Angeles, California 90049  
Phone: (310) 820-4888      Fax: (310) 207-6986

### 2.2 PROJECT LOCATION

The project site consists of two adjoining parcels at 3215 East 3<sup>rd</sup> Street and 304 Obispo Avenue in the City of Long Beach, County of Los Angeles. Both properties are located in the City's Bluff Heights Historic District. East 3<sup>rd</sup> Street runs along the southern boundary of the site, Obispo Avenue runs along the western boundary of the site, and single- and multiple-family residences border the site on its northern and eastern sides. As shown on Figure 2-1 (Regional Location), the project site is located in southeast Long Beach, about ½ mile from the Pacific Ocean. The site is regionally accessible from Interstate 710 (the Long Beach Freeway), Interstate 405 (the San Diego Freeway), and State Route 1 (Pacific Coast Highway, or PCH). Figure 2-2 presents an aerial view of the project site and surrounding uses. Figure 2-3 provides street-level photographs of the site, and Figures 2-4(a) and 2-4(b) provide street-level photographs of nearby land uses.



Safran Senior Housing Project EIR  
 Section 2.0 Project Description



★ Project Location



Map images copyright © 2011 ESRI and its licensors. All rights reserved.  
 Used by permission. USGS Topo, Copyright: © 2011 National Geographic Society.

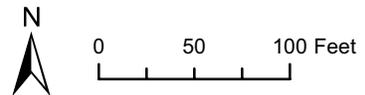
Regional Location

Figure 2-1



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

 Project Boundaries



Aerial View of Project Site and Surrounding Uses

Figure 2-2



Photo 1 - Former Immanuel Community Church building.



Photo 2 - Residence at 304 Obispo Ave, with former church building to right.





**Photo 1** - Neighboring single-family residence at northwest corner of East 3rd Street and Obispo Avenue.

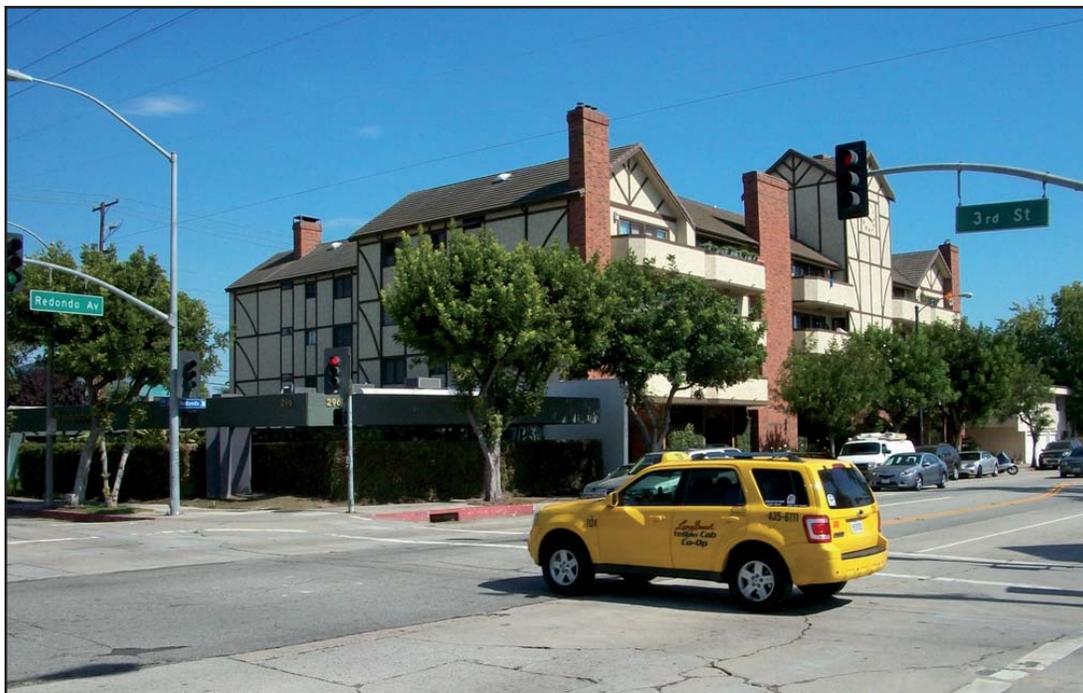


**Photo 2** - Neighboring multiple-family residence at southwest corner of East 3rd Street and Obispo Avenue.





**Photo 3** - Horace Mann School, Coronado Avenue entrance, with former Immanuel Community Church building (far right of picture) in background.



**Photo 4** - Commercial building at southeast corner of East 3rd Street and Redondo Avenue.



## 2.3 CURRENT LAND USE AND REGULATORY SETTING

Table 2-1 summarizes the existing characteristics of the project site, which are also described below.

**Table 2-1  
Existing Site Characteristics**

|                                    | <b>3215 East 3<sup>rd</sup> Street</b>   | <b>304 Obispo Avenue</b>   |
|------------------------------------|--|--|
| Assessor's Parcel Number           | 7257-020-025   | 7257-020-022   |
| Site Size                          | 0.35 gross acres   | 0.13 gross acres   |
| General Plan Land Use Designations | Mixed Style Homes (LUD No. 2)  | Mixed Style Homes (LUD No. 2)                                    |
| Zoning Designations                | R-2-A, Two-family Residential, accessory second unit   | R-2-A, Two-family Residential, accessory second unit             |
| Current Use and Development        | 1 currently unoccupied former church building  | 1 occupied detached single family residence with detached garage |
| Surrounding Land Use Designations  | North, East, and West: same as site<br>South: Institutional and School (LUD 10)  | Same as 3215 East 3 <sup>rd</sup> Street                         |
| Surrounding Zoning Designations    | North, East, and West: R-2-A, Two-family Residential, accessory second unit<br>South: I (Institutional)  | R-2-A, Two-family Residential, accessory second unit             |
| Regional Access                    | Interstate 405 (San Diego Freeway), Interstate 710 (Long Beach Freeway), and State Route 1 (Pacific Coast Highway)   |  |
| Local Access                       | East 3 <sup>rd</sup> Street, Redondo Avenue, East 7 <sup>th</sup> Street, East Ocean Boulevard   |  |
| Public Services                    | Water: Long Beach Water Department<br>Sewer: Long Beach Water Department<br>Fire: Long Beach Fire Department<br>Police: City of Long Beach Police Department |  |

### 2.3.1 Current Land Use

The two parcels that make up the project site are roughly rectangular and generally flat, and together total 0.48 acres. The 0.35-acre parcel at 3215 East 3<sup>rd</sup> Street is currently developed with one currently unoccupied building, the former Immanuel Community Church. The 0.13-acre parcel at 304 Obispo Avenue is currently developed with one occupied detached single family residence and a detached garage.

The project site is within the Bluff Heights Historic District. 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 a contributor to the historic district. See Section 4.3 *Cultural Resources* for a full discussion of this topic.

### **2.3.2 Surrounding Land Uses**

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.

### **2.3.3 Land Use Regulatory Overview**

Both parcels that make up the project site have a General Plan Land Use designation of Mixed Style Homes (Land Use Designation 2), with a corresponding zoning designation of Two-Family Residential, accessory second unit (R-2-A). The project site is also subject to the Bluff Heights Historic District Ordinance, which contains general guidelines and standards for changes to properties within the District. These policies, regulations, guidelines, and standards are discussed in Section X, *Land Use and Planning*, of the Initial Study for the proposed project (Appendix A), and other sections of the Initial Study and this EIR relevant to their respective issue areas.

## **2.4 PROJECT CHARACTERISTICS**

### **2.4.1 Proposed Land Uses and Development**

The proposed project would involve conversion of an existing 31,006 square foot church building 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. The project also includes demolition of the existing single family home and detached garage on the adjacent parcel at 304 Obispo Avenue and construction of a 12-space parking lot serving the project. Table 2-2 provides a summary of proposed development, Figure 2-5 shows the proposed site plan, Figures 2-6a and 2-6b show the proposed elevations, and Figure 2-7 shows a rendering of the completed project in the context of its surroundings.

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). The primary pedestrian access to the proposed building would be from East 3<sup>rd</sup> Street. The current wooden doors on Obispo Avenue would be removed and replaced with ten lite doors with transoms, which would serve as private entries for units. There would be additional entries to the ground floor and lower level on the north side of the existing church, accessible from the parking lot. The primary changes to the exterior of the building would consist of the following (also shown on Figures 2-6a and 2-6b):

West Elevation

1. New window at area well.
2. New doors to replace the existing entry doors.
3. New window at north tower.
4. Guardrails added at 2<sup>nd</sup> floor units.
5. Wall and gate added at parking lot.

South Elevation

1. New window at area well.
2. New windows and door at Lobby.
3. New mechanical platform and screen.

North Elevation

1. New doors at lower level units and new windows at area well.
2. New doors to replace existing.
3. Various openings infilled and new lightwell opening added.
4. Removing existing stairs.

East Elevation

1. New area well and opening.
2. Existing door and window openings infilled, add new window.
3. New mechanical platform and screen.

**Table 2-2  
Project Summary**

| Land Use                            | Size<br>(square feet) | Quantity  |
|-------------------------------------|-----------------------|-----------|
| Senior Housing Residential          | 15,176                | 24 units  |
| Manager's Unit                      | 750                   | 1 unit    |
| Amenities/Common and<br>Other Areas | 15,080                | n/a       |
| Gross Building Area                 | 31,006                | n/a       |
| Parking Spaces                      | n/a                   | 12 spaces |

**2.4.2 Site Preparation and Construction**

The project would involve demolition of the existing single-family detached home and detached garage at 304 Obispo Avenue, and construction of the proposed project improvements. No excavation or cut and fill would be required to prepare the site for construction, but minor grading may be required for the proposed surface parking lot. Other site preparation activities would include utility and infrastructure improvements, paving, and landscaping. Construction is anticipated to begin in October 2013 and last approximately 15 months.



## 2.5 PROJECT OBJECTIVES

The project applicant's objective is to adaptively re-use the existing church building and parcel immediately to its north, which together make up the project site, for low- or very low- income senior housing. The City's objectives are to facilitate the construction of affordable housing in order to help meet its affordable housing objectives, while retaining the historic integrity of the Bluff Heights Historic District.

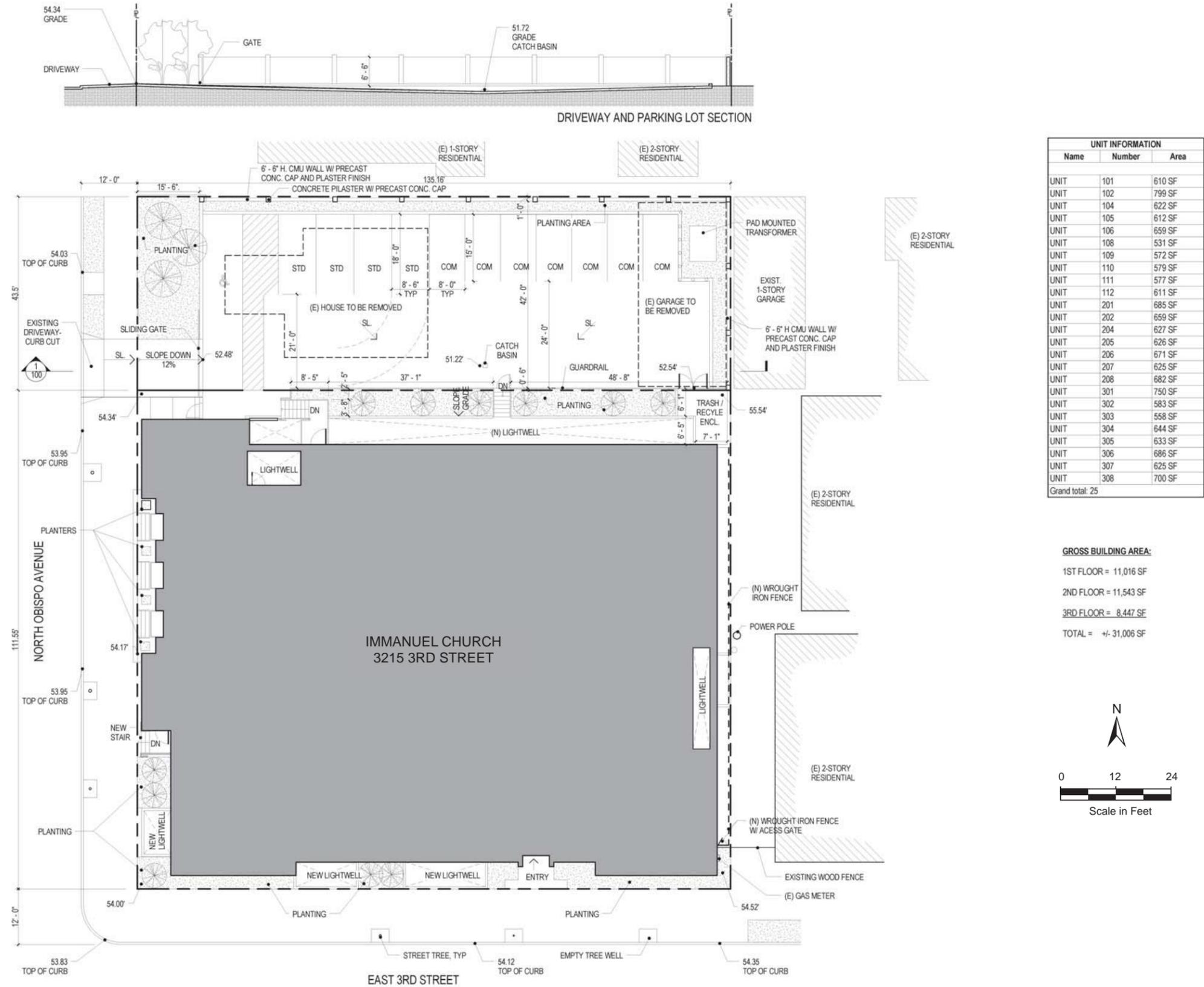
## 2.6 REQUIRED APPROVALS

Implementation of the proposed Safran Senior Housing Project would require the following discretionary approvals 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 variances 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.

The City has also expressed a desire that the applicant request designation as a historic landmark for the former church property. Approval of such a request would also require discretionary approval from the City.

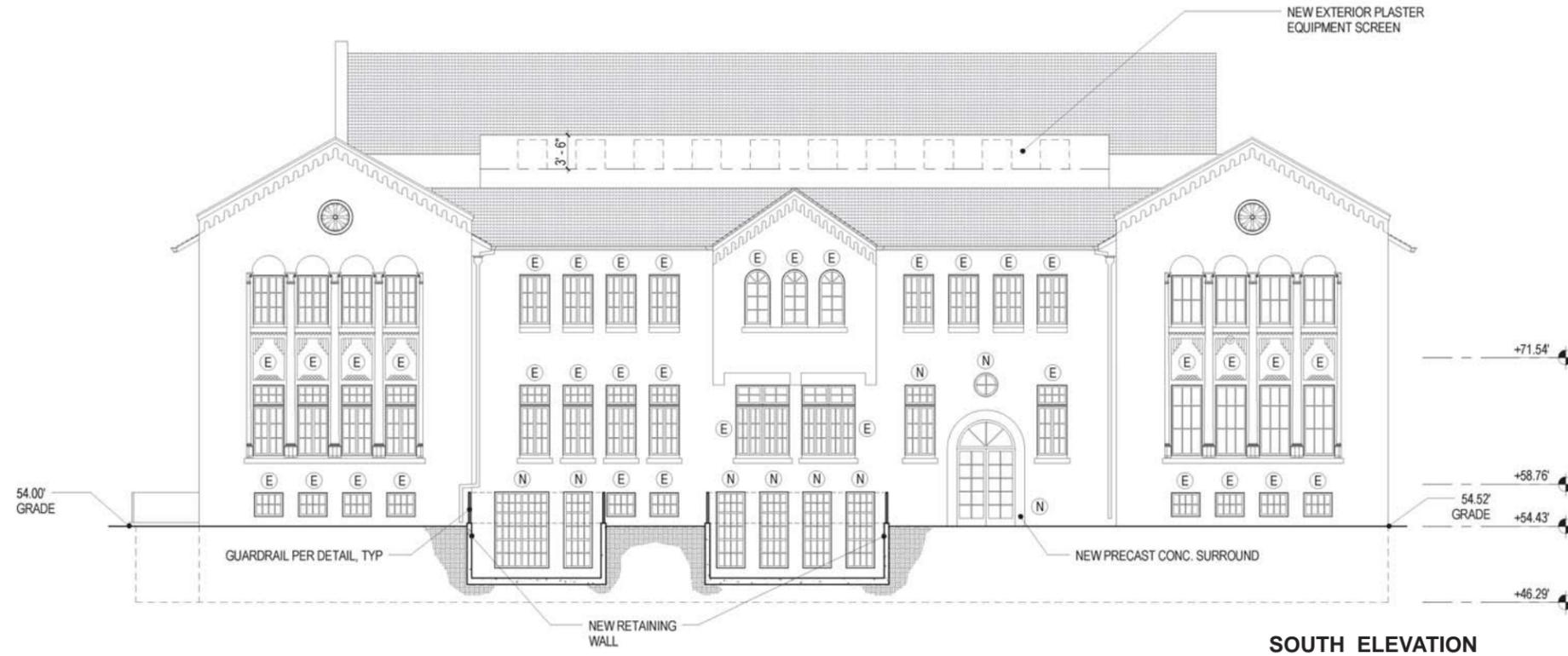




Site Plan

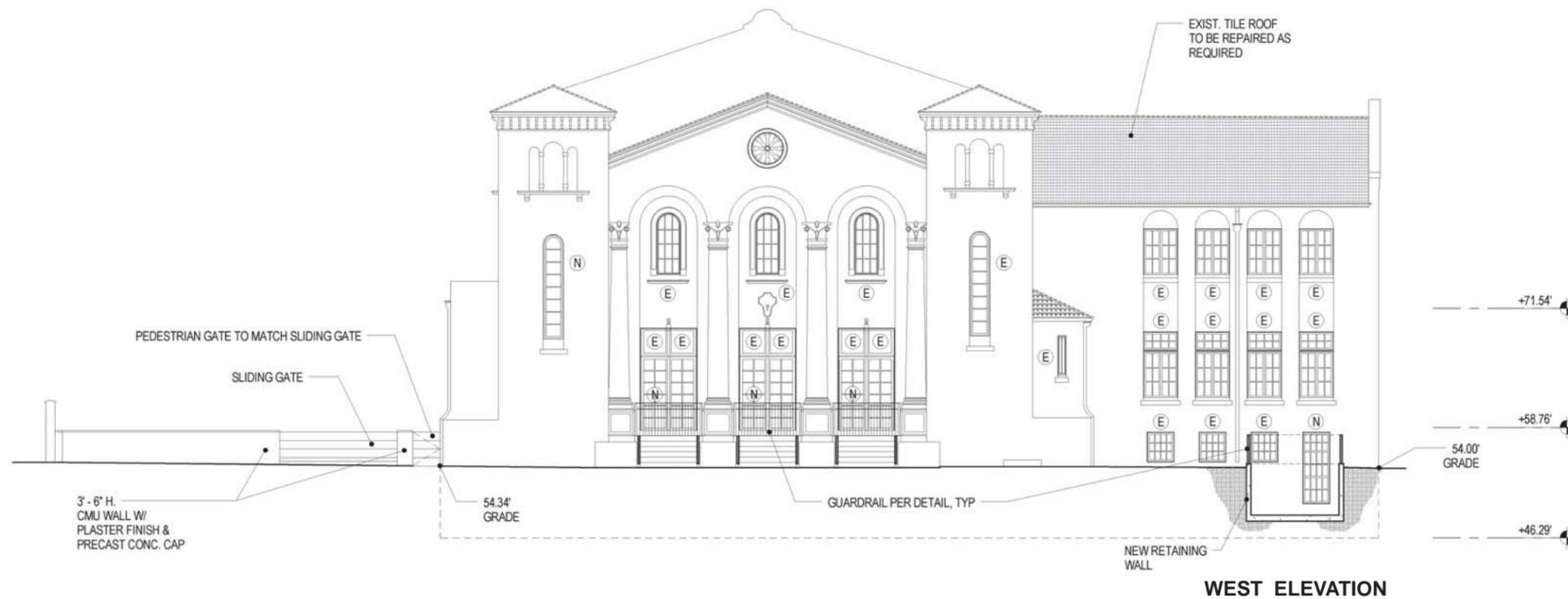
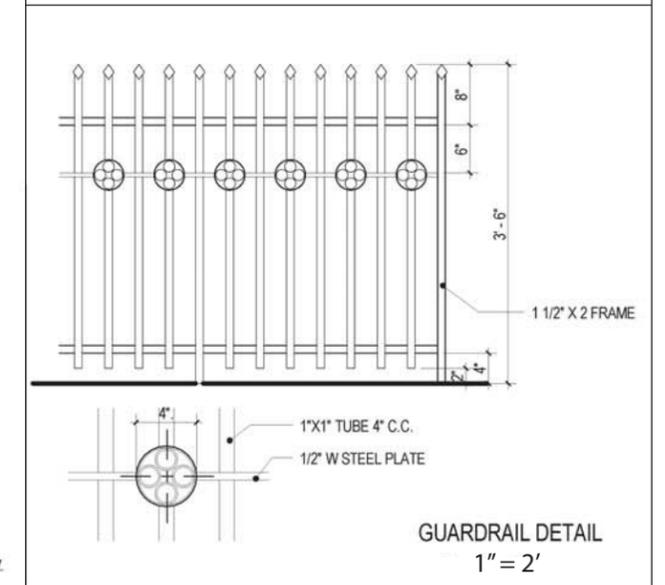
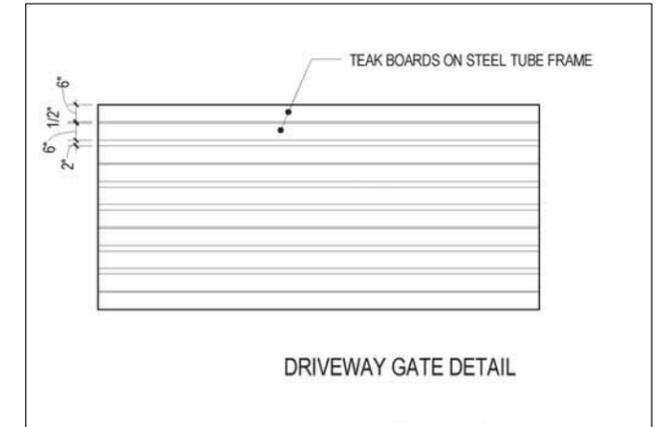
Figure 2-5

Source: Killefer Flammang Architects, September 2012.

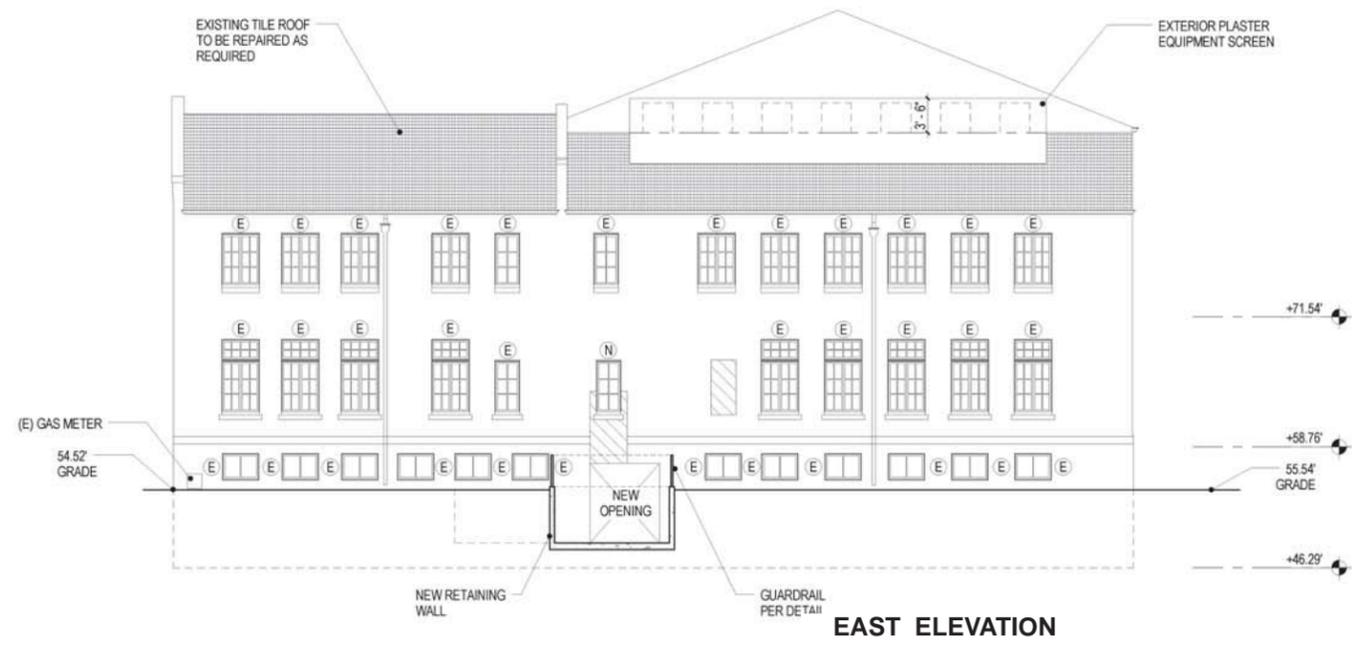
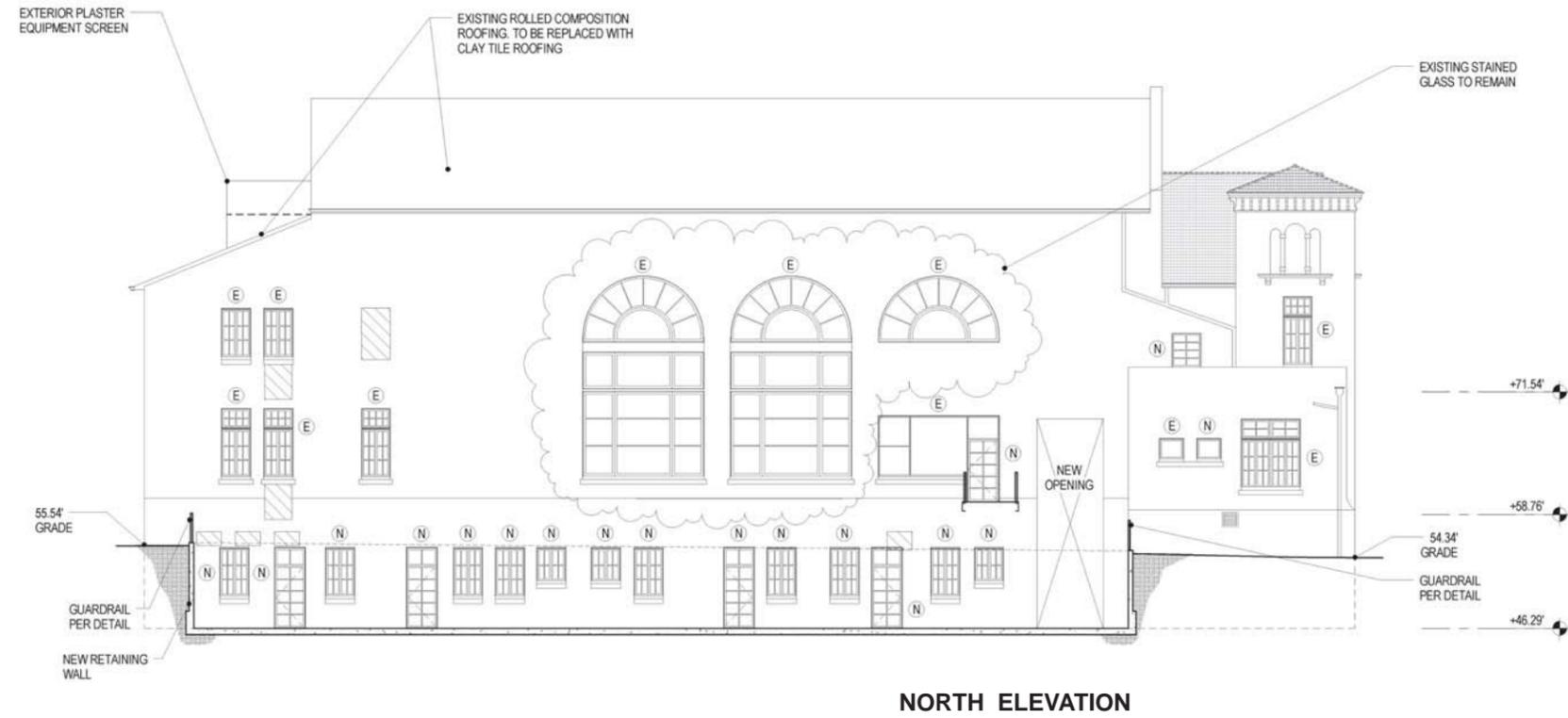


- (E) EXISTING WINDOW TO BE RESTORED & RE-GLAZED
- (N) NEW WINDOW TO MATCH EXISTING MATERIAL & DESIGN

NOTE: ALL ALUMINUM WINDOWS ARE TO BE REPLACED WITH WOOD WINDOWS TO MATCH EXISTING



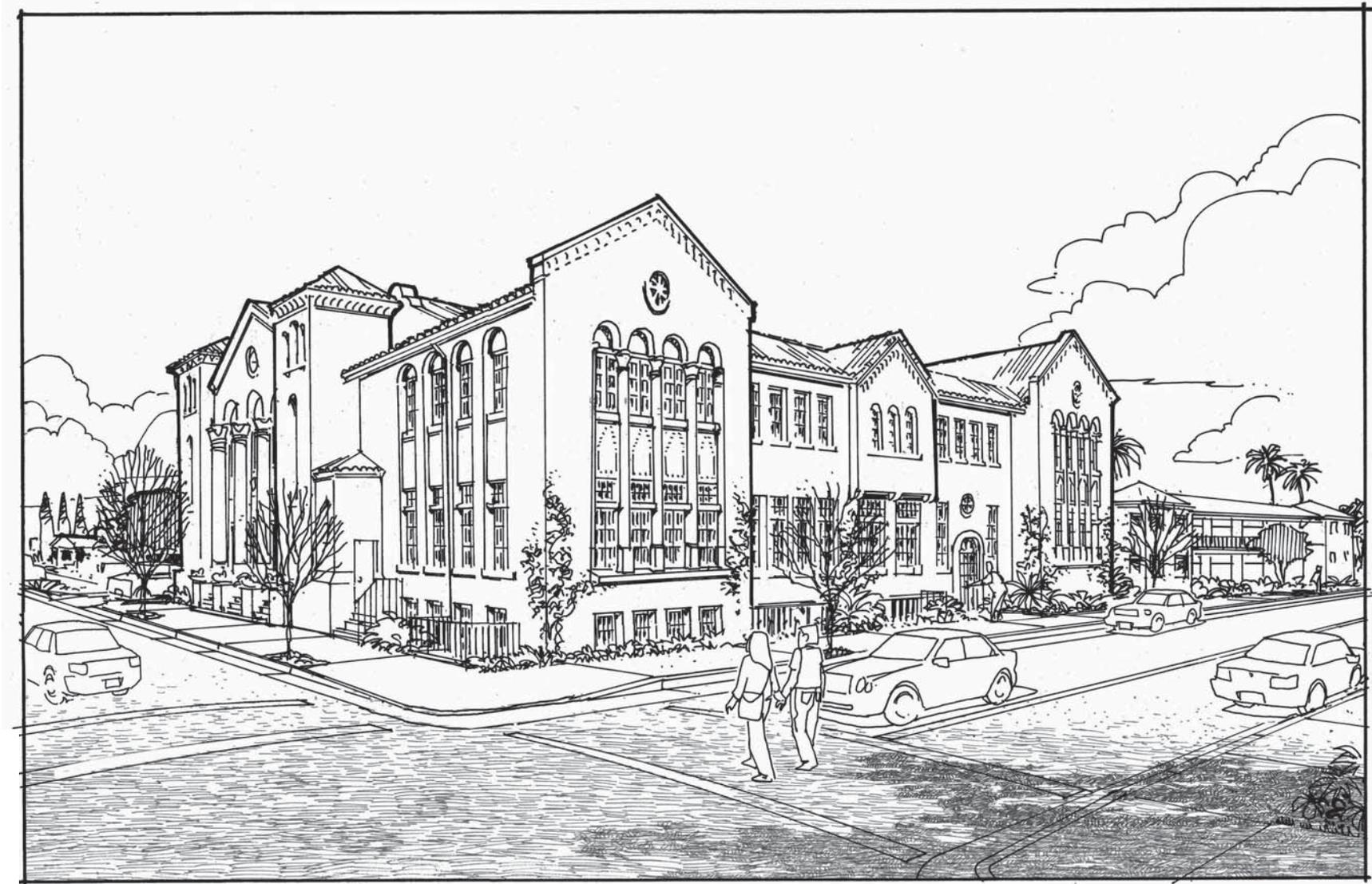
South and West Elevations



- EXISTING OPENING TO BE INFILLED
- EXISTING WINDOW TO BE RESTORED & RE-GLAZED
- NEW WINDOW TO MATCH EXISTING MATERIAL & DESIGN



North and East Elevations



Project Rendering

Source: Killefer Flammang Architects,  
erniemarjoram.com., August 31, 2012.

Figure 2-7

City of Long Beach



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## 3.0 ENVIRONMENTAL SETTING

### 3.1 REGIONAL SETTING

The project site is located in the City of Long Beach, in southern Los Angeles County, within the greater Los Angeles metropolitan area (refer to Figure 2-1, Regional Location, and Figure 2-2, Project Vicinity, both of which can be found in Section 2.0, *Project Description*). Long Beach is approximately 20 miles south of downtown Los Angeles and is located adjacent to the Pacific Ocean. The total area of the City is approximately 33,908 acres (53 square miles). Developed land comprises approximately 98.6% of Long Beach and about 473 acres, or 1.4%, of the City is undeveloped. Water-covered areas and miscellaneous land uses account for the remaining land. The Mediterranean climate of the region and coastal influence produce moderate temperatures year round, with rainfall concentrated in the winter months. The region is subject to various natural hazards, including earthquakes, tsunami and flooding.

### 3.2 PROJECT SITE SETTING

The project site consists of two adjoining parcels at 3215 East 3<sup>rd</sup> Street and 304 Obispo Avenue in the City of Long Beach. Both properties are located in the City's Bluff Heights Historic District. East 3<sup>rd</sup> Street runs along the southern boundary of the site, Obispo Avenue runs along the western boundary of the site, and single- and multiple-family residences border the site on its northern and eastern sides.

The two parcels that make up the project site are roughly rectangular and generally flat, and together total 0.48 acres. The 0.35-acre parcel at 3215 East 3<sup>rd</sup> Street is currently developed with one currently unoccupied building, the former Immanuel Community Church. The 0.13-acre parcel at 304 Obispo Avenue is currently developed with one occupied detached single family residence and a detached garage.

The project site is within the Bluff Heights Historic District. 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 a contributor to the historic district. See Section 4.3, *Cultural Resources* for a full discussion of this topic.

Currently, vehicular access to the Immanuel Community Church building is from parking on surrounding streets, and vehicular access to the 304 Obispo Avenue residence is from surrounding streets to an on-site driveway.

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.



### 3.3 CUMULATIVE PROJECTS SETTING

CEQA defines “cumulative impacts” as two or more individual events that, when considered together, are considerable or will compound other environmental impacts. Cumulative impacts are the changes in the environment that result from the incremental impact of development of the proposed project and other nearby projects. For example, traffic impacts of two nearby projects may be insignificant when analyzed separately, but could have a significant impact when analyzed together. Cumulative impact analysis allows the EIR to provide a reasonable forecast of future environmental conditions and can more accurately gauge the effects of a series of projects.

Cumulative impacts are discussed within each of the specific impact analysis discussions in Section 4.0, *Environmental Impact Analysis*. Section 15130 of the *CEQA Guidelines* states that an adequate discussion of cumulative impacts should include either a list of past, present, and probable future projects producing related or cumulative impacts; or a summary of projections contained in an adopted local, regional or statewide plan, or related planning document, that describes or evaluates conditions contributing to the cumulative effect. Because there are no projects currently planned or pending in the Bluff Heights Historic District or anywhere else in the vicinity of the project site (personal communication, Craig Chalfant, City of Long Beach, September 2012), the cumulative analysis in this EIR compares the projected population increase that would occur as a result of the proposed project to SCAG population forecasts for the City of Long Beach, as shown in Table 3-1.

**Table 3-1 Project Population and Housing Unit Growth Compared to SCAG Population Forecasts**

|              | Housing Units        | Population           |
|--------------|----------------------|----------------------|
| Current      |                      |                      |
| Project Site | 1                    | 3 <sup>1</sup>       |
| Long Beach   | 163,623 <sup>1</sup> | 464,662 <sup>1</sup> |
| 2020         |                      |                      |
| Project Site | 25                   | 50                   |
| Long Beach   | 175,600 <sup>2</sup> | 491,000 <sup>2</sup> |
| Increase     |                      |                      |
| Project Site | 24                   | 47                   |
| Long Beach   | 11,977               | 26,338               |

<sup>1</sup> Source: CA DOF E-5 Population and Housing Estimates, May 2012. Average household size in Long Beach is 2.786, and was rounded up to 3 for the single residential unit currently on the project site.

<sup>2</sup> Source: SCAG Adopted 2012 RTP Growth Forecast.



## 4.0 ENVIRONMENTAL IMPACT ANALYSIS

This section discusses the possible environmental effects of the proposed project for the specific issue areas that were identified through the Initial Study and NOP process as having the potential to experience significant impacts. “Significant effect” is defined by the *State CEQA Guidelines §15382* as “a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance.” An economic or social change by itself shall not be considered a significant effect on the environment, but may be considered in determining whether the physical change is significant.

The assessment of each issue area begins with a discussion of the setting relevant to that issue area. Following the setting is a discussion of the project’s impacts relative to the issue area. Within the impact analysis, the first subsection identifies the methodologies used and the “significance thresholds,” which are those criteria adopted by the City, other agencies, universally recognized, or developed specifically for this analysis to determine whether potential impacts are significant. The next subsection describes each impact of the proposed project, mitigation measures for significant impacts, and the level of significance after mitigation. Each impact under consideration for an issue area is separately listed in bold text, with the discussion of the impact and its significance following. Each bolded impact listing also contains a statement of the significance determination for the environmental impact as follows:

***Class I, Significant and Unavoidable:*** An impact that cannot be reduced to below the threshold level given reasonably available and feasible mitigation measures. Such an impact requires a Statement of Overriding Considerations to be issued if the project is approved.

***Class II, Significant but Mitigable:*** An impact that can be reduced to below the threshold level given reasonably available and feasible mitigation measures. Such an impact requires findings to be made.

***Class III, Not Significant:*** An impact that may be adverse, but does not exceed the threshold levels and does not require mitigation measures. However, mitigation measures that could further lessen the environmental effect may be suggested if readily available and easily achievable.

***Class IV, Beneficial:*** An impact that would reduce existing environmental problems or hazards.

Following each environmental impact discussion is a listing of recommended mitigation measures (if required) and the residual effects or level of significance remaining after the implementation of the measures. In those cases where the mitigation measure for an impact could have a significant environmental impact in another issue area, this impact is discussed as a residual effect.

The impact analysis concludes with a discussion of cumulative effects, which evaluates the impacts associated with the proposed project in conjunction with other future development in the area.



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## 4.1 AESTHETICS

### 4.1.1 Setting

**a. Visual Character of the Project Vicinity.** The project site is located in southeast Long Beach, approximately ½ mile northeast of the Pacific Ocean, one mile southwest of Colorado Lagoon, 1.4 miles west of Marine Stadium in Alamitos Bay, and two miles northeast of the channelized mouth of the Los Angeles River. The project site is not located along a designated scenic corridor. The site consists of two adjoining parcels at 3215 East 3<sup>rd</sup> Street and 304 Obispo Avenue. Both properties are located in the City's Bluff Heights Historic District. East 3<sup>rd</sup> Street runs along the southern boundary of the site, Obispo Avenue runs along the western boundary of the site, and single- and multiple-family residences border the site on its northern and eastern sides. Figures 2-1 and 2-2 in Section 2.0, *Project Description*, illustrate the location of the project site.

The project site is within the Bluff Heights Historic District. The surrounding area is built out with a variety of residential, commercial, and institutional uses in buildings generally ranging from one to three stories. 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. Photographs showing the existing visual character of the surrounding area are shown in Figures 2-4a and 2-4b in Section 2.0, *Project Description*.

**b. Visual Character of the Project Site.** The two parcels that make up the project site are roughly rectangular and generally flat, and together total 0.48 acres. The 0.35-acre parcel at 3215 East 3<sup>rd</sup> Street is currently developed with one unoccupied building, the former Immanuel Community Church. The 0.13-acre parcel at 304 Obispo Avenue is currently developed with one occupied detached single family residence and a detached garage. The project site is within the Bluff Heights Historic District. 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. See Section 4.2, *Cultural Resources*, for a full discussion of this topic.

Figure 2-3 in Section 2.0, *Project Description*, presents street-level views of both properties that make up the project site. The former Immanuel Community Church building is approximately 40 feet tall and consists of a half basement level, two above-ground levels, and an attic space. It occupies almost the entire parcel on which it is located. It is a blend of the Spanish Colonial Revival and Neoclassical architectural styles. Originally, the building was faced with tapestry brick and marble, but those materials were covered at a later date with two tones of beige textured stucco. The roofing is orange Spanish tile. The building, while generally in good physical condition, shows some signs of deferred maintenance such as aging and peeling exterior paint and rust stains.



The single family home and detached garage at 304 Obispo Avenue is one story in height and, like many homes in the surrounding neighborhood, Craftsman in style. Some architectural elements, such as textured stucco on the porch piers and aluminum and vinyl windows, have been added since its original construction. It does not exhibit any signs of disrepair or deferred maintenance. Further description of the history of both this property and the former Immanuel Community Church building is contained in Section 4.2, *Cultural Resources*.

**c. Regulatory Setting.** Citywide policies on scenic vistas focus on protecting views of the City's natural resources as well as views along significant streets and boulevards. The Scenic Routes Element, adopted in 1975, proposed five scenic route systems within the City. The Scenic Routes Element was adopted by the Long Beach City Council in 1975. The purpose of the Scenic Routes Element is to protect and enhance the scenic resources of the City of Long Beach, by establishing a system of scenic routes along existing roadways that traverse areas of scenic beauty and interest. There are no scenic routes in the immediate project site vicinity. The closest Scenic Route is Ocean Boulevard. The project site is not within the viewshed of Ocean Boulevard, which therefore would not be impacted by this project (personal communication, Craig Chalfant, City of Long Beach, September 2012).

Neighborhood aesthetics and character are addressed in several City policies, especially those contained in the Urban Design Analysis, Conclusions and Policy Directions Section of the Land Use Element and several in the Conservation and Scenic Routes Elements. These issues are further addressed in the City's Zoning Ordinance through a range of development standards that are applied by zoning district. In addition, because the project site is located within the Bluff Heights Historic District, and the structures on the project site have been identified as contributors to this District, they are subject to the City of Long Beach Bluff Heights District Ordinance (Ord. No. C-7937), which identifies general guidelines and standards for any changes to contributing properties within the District. The guidelines are used as standards for the City's Cultural Heritage Commission in making decisions about Certificates of Appropriateness as required by Chapter 2.63 of the Long Beach Municipal Code. The guidelines are an aid to property owners and others formulating plans for new construction, for rehabilitation or alteration of an existing structure, and for site development. The goal of the Certificate of Appropriateness review is to retain and preserve all original architectural materials and design features, to encourage rehabilitation that restores original historic fabric rather than remodels, and to ensure architectural compatibility between new and old.

Policies and design standards from the City's General Plan related to aesthetics that apply to the proposed project are discussed below. This section primarily focuses on those requirements most applicable to the design of the proposed project for the purpose of assessing whether any inconsistency with these standards creates a significant impact on the City's visual resources. The project's consistency with the City's Zoning Ordinance is discussed in the Initial Study (Appendix A), and its consistency with the Bluff Heights District Ordinance is discussed in Section 4.2, *Cultural Resources*. The ultimate determination of whether the proposed project is consistent with the General Plan, Zoning Ordinance, and City of Long Beach Bluff Heights District Ordinance resides exclusively with the decision-making bodies (Site Plan Review Committee, Planning Commission, and City Council).



The General Plan policies most applicable to the proposed project are listed below.

### **Land Use Element**

- *Affordable Housing: Long Beach views its existing housing stock as its greatest resource of affordable housing, and will stimulate and support continued maintenance and reinvestment in that housing stock. It will take advantage of every State and Federal program to make its housing affordable to its population, but it will not sacrifice long-term quality for short-term affordability in new or rehabilitated housing (p. 18).*
- *Neighborhood Emphasis: Long Beach recognizes a strong neighborhood to be the essential building block of a City-wide quality living environment and will assist and support the efforts of residents to maintain and strengthen their neighborhoods (p.18).*
- *Facilities Maintenance: Long Beach will maintain its physical facilities and public rights-of-way at a high level of functional and aesthetic quality, manifesting the pride of the citizens in their City and ensuring that future generations need not bear the burden of deferred maintenance (p. 18).*
- *Land Use (Eastside and Carroll Park): Maintaining the mix of commercial and residential uses is desirable. ...Continuing the preservation of the California bungalow and other architecturally significant and affordable housing stock through rehabilitation is warranted. ...The remainder of the Eastside [outside of Carroll Park, but including the Bluff Heights Historic District] should support a mix of primarily low and some moderate density housing. Problems caused by adjoining but different land use types and intensities should be lessened by an insistence on proper design (p. 123).*
- *Design Controls/Architectural Compatibility. ... Elsewhere in the Eastside [outside of Carroll Park, but including the Bluff Heights Historic District], conformance should be stressed with regards to scale of development, protection of views, sunlight, privacy and compatibility with California bungalow and Mediterranean architectural style (p. 123).*

### **Conservation Element**

- *To create and maintain a productive harmony between man and his environment through conservation of natural resources and protection of significant areas having environmental and aesthetic value (p.8).*
- *To identify and preserve sites of outstanding scenic, historic, and cultural significance or recreational potential (p. 11).*

## **4.1.2 Impact Analysis**

**a. Methodology and Significance Thresholds.** The assessment of aesthetic impacts involves qualitative analysis that is inherently subjective in nature. Different viewers react to



viewsheds and aesthetic conditions differently. This evaluation measures the existing visual resource against the proposed action, analyzing the nature of the anticipated change. The project site was observed and photographically documented, as was the surrounding area, to assist in the analysis.

An impact is considered significant if it can be reasonably argued that the project would:

- *Adversely affect a viewshed from a public viewing area (such as a park, scenic highway, roadway, or other scenic vista);*
- *Substantially damage an existing visual or scenic resource, including but not limited to trees, rock outcroppings or historic buildings;*
- *Substantially degrade the existing visual character or quality of the site and its surroundings; or,*
- *Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.*

As discussed in the Initial Study (Appendix A), project implementation would not significantly affect any scenic vistas or create a new source of substantial light or glare that would adversely affect day or nighttime views in the area (the first and fourth thresholds listed above). As such, these impacts would be less than significant and are not further discussed in this section. The Initial Study determined that the proposed project could result in potentially significant impacts with regard to scenic resources and visual character or quality (the second and third and thresholds listed above). For that reason, the EIR analyzes the potential impacts to scenic resources and the existing visual character and quality of the site and its surroundings under Impact AES-1. Additionally, the EIR analyzes the project's consistency with adopted policies of the City of Long Beach related to aesthetics under Impact AES-2.

#### **b. Project Impacts and Mitigation Measures.**

**Impact AES-1**     **The proposed project would involve replacing the existing single-family home at 304 Obispo Avenue with a surface parking lot, and making some changes to the exterior of the former Immanuel Community Church building at 3215 East 3<sup>rd</sup> Street. These changes would alter the visual character of the project site and would have the potential to damage scenic resources. However, due to the relatively limited scope of the proposed changes within a highly urbanized context, the project's impact would be Class III, less than significant. This impact discussion encompasses the second and third bullets shown in Section 4.1.2a above.**

The project site is located in an urban area in southeast Long Beach. Surrounding development consists primarily of one- to three-story structures, as well as the playground of Horace Mann Elementary School, which is directly across East 3<sup>rd</sup> Street to the south of the project site and is the largest open space in its immediate vicinity. Existing on-site development consists of a single family residence and the former Immanuel Community Church building. The Immanuel Community Church building, while generally in good physical condition, shows some signs of deferred maintenance such as aging and peeling exterior paint and rust stains. The single family



residence at 304 Obispo Avenue does not exhibit any signs of disrepair or deferred maintenance.

Development of the proposed project would change the visual condition of the site through demolition of the single family residence and replacement of the residence with a surface parking lot, and limited changes to the exterior of the former church building. The project site plan, elevations, and renderings are shown on Figures 2-5 through 2-7 in Section 2.0, *Project Description*.

Both the single family residence and the former church building located on the project site have been identified as contributing properties to the Bluff Heights Historic District and are therefore subject to the City of Long Beach Bluff Heights District Ordinance (Ord. No. C-7937), which identifies general guidelines and standards for any changes to contributing properties within the District (see Section 4.2, *Cultural Resources*, for detailed analysis of the historic significance of these properties). According to Ord. No. C-7937, the Bluff Heights Historic District is designated as a Historic Landmark District for the following reasons:

1. *It possesses a significant character, interest, and value attributable to the development, heritage and cultural characteristics of the City, the Southern California region, or the State of California. The district is a section of the Alamitos Beach Townsite which was originally planned by John W. Bixby in 1886 and annexed to Long Beach in 1905. The character of the district retains the building types that were part of the early history of Long Beach. The land was then subdivided into the Tichenor Tract, Cedar Rapids Tract, Graves Tract, Alamitos Tract, and Ocean Villa Tract. There was a substantial growth of structures in 1914.*
2. *It portrays the environment in an era of history characterized by a distinctive architectural style. The predominant architectural style of homes in this area is the Craftsman Bungalow style. More than 50% of the existing contributing homes today are Craftsman Bungalows. There are also a number of Prairie, Mediterranean and Spanish Revival homes in this district, as well as a few Tudor Revival and Neo-Traditional homes.*
3. *It is part of or related to a distinctive area and should be developed or preserved according to a specific historical, cultural or architectural motif. It was a part of the original development that was incorporated into the City of Long Beach in 1905. With a large number of the original homes still intact, it retains the scale, character and streetscape ambiance of an old Long Beach neighborhood.*

The properties located on the project site are within this area known for its architectural significance, and demolition of the single family residence and alteration of the façade of the former church building would affect the aesthetics of the site and its immediate surroundings. As discussed in Section 4.2, *Cultural Resources*, the single family residence located on the project site is not in itself historically significant. As stated in Ord. No. C-7937, over 50% of the existing contributing homes today are of the same architectural style, and several nearby homes in this style exist. The proposed surface parking lot would not be highly visible from surrounding properties, and the proposed project would not introduce any new structures onto the site that would be inconsistent with the visual character of the area. Finally, the residence does not retain all of its original architectural elements, because some elements, such as textured stucco on the porch piers and aluminum and vinyl windows, have been added since its original construction.



For these reasons, demolition of the residence would not substantially damage a scenic resource and would have a less than significant impact on the visual character of the site and its surroundings.

The primary changes proposed under the project for the exterior of the former church building would consist of the following (also shown on Figures 2-6a and 2-6b):

#### West Elevation

1. New window at area well.
2. New doors to replace the existing entry doors.
3. New window at north tower.
4. Guardrails added at 2<sup>nd</sup> floor units.
5. Wall and gate added at parking lot.

#### South Elevation

1. New window at area well.
2. New windows and door at Lobby.
3. New mechanical platform and screen.

#### North Elevation

1. New doors at lower level units and new windows at area well.
2. New doors to replace existing.
3. Various openings infilled and new lightwell opening added.
4. Removing existing stairs.

#### East Elevation

1. New area well and opening.
2. Existing door and window openings infilled, add new window.
3. New mechanical platform and screen.

As can be seen by comparing the elevations (Figures 2-6a and 2-6b) and rendering (Figure 2-7) of the proposed project to photos of the former church building as it currently exists (Figure 2-3), the proposed project would not represent a major aesthetic change to the exterior of this building. The scale and architectural style of the building would remain the same. Additionally, the project would improve the aesthetic appearance of the exterior of the building by repairing areas of deferred maintenance such as aging and peeling exterior paint and rust stains. The alterations to this property proposed under the project would therefore incrementally change but not degrade the visual character of the site and its surroundings, and would not substantially damage a scenic resource.

The aesthetic quality of the design and aesthetic implications of the proposed project would be addressed during the project's required Site Plan Review approval process. The aesthetic quality of the design and aesthetic implications of the proposed project would also be addressed through the Certificate of Appropriateness process, which would consider the project's aesthetic impacts as they relate to the requirements of the Bluff Heights Historic District Ordinance (Ord. No. C-7937), listed in Section 4.1.1c, *Regulatory Setting*.



In summary, although the project would alter the visual character of the project site, this change in visual character would not be significantly adverse and the project would not substantially damage a scenic resource.

Mitigation Measures. None required.

Significance After Mitigation. With required approval through the Site Plan Review and Certificate of Appropriateness processes, impacts would be less than significant without mitigation.

**Impact AES-2    The proposed changes would not conflict with adopted policies of the City of Long Beach related to aesthetics, and would therefore produce a Class III, less than significant, impact.**

The various regulations and policies relating to aesthetics that would apply to the proposed project are listed above in Section 4.1.1c, *Regulatory Setting*. These include policies from the Land Use Element and Conservation Element of the City's Beach General Plan. The project's consistency with applicable provisions of the City's Zoning Ordinance was already analyzed in the Initial Study (Appendix A), which found that the project would have a less than significant impact in this regard with approval of the various entitlements requested under the project. The project's consistency with the regulations and policies contained in the Bluff Heights Historic Landmark District Ordinance is discussed in Section 4.2, *Cultural Resources*.

Review of the policies from the Land Use and Conservation Elements reveals that these policies are meant to maintain and strengthen neighborhoods; maintain and enhance the City's public facilities (including public rights-of-way); preserve and promote quality affordable housing; preserve historic neighborhoods; protect areas of high aesthetic value; and preserve sites of outstanding scenic, historic, and cultural significance or recreational potential. The regulations contained in the Bluff Heights Historic Landmark District Ordinance are generally designed to protect the overall aesthetic character of this neighborhood, and promote the preservation and maintenance of historic properties within it. One of the Land Use policies states (in part) that "Continuing the preservation of the California bungalow and other architecturally significant and affordable housing stock through rehabilitation is warranted". While the project would eliminate the existing Craftsman-style single family residence at 304 Obispo Avenue and replace it with a surface parking lot, this action has been found to have a less than significant impact on cultural resources in Section 4.2, *Cultural Resources*, of this EIR. As discussed under Impact AES-1, the elimination of this residence would not have a significant negative impact on the aesthetics of the overall neighborhood. Also, this same land use policy states that "The remainder of the Eastside [outside the Carroll Park neighborhood] should support a mix of primarily low and some moderate density housing." The proposed senior housing project would replace low density housing with moderate density housing, and is therefore consistent with this policy. Additionally, the project would provide affordable housing, which would help achieve the Land Use policy relating to provision of affordable housing. Impact AES-1 found that the project would have a less than significant impact on the visual character of the site and its surroundings, and the project would therefore not conflict with any of the policies relating to visual character and overall aesthetic quality. The project also would not have a negative impact on any City facilities, including public rights-of-way.



In summary, for the reasons discussed above, the changes to the project site and its surroundings that would be produced by the proposed project would not be inconsistent with applicable policies of the City's General Plan relating to aesthetics.

Mitigation Measures. None required.

Significance After Mitigation. Impacts would be less than significant without mitigation.

**c. Cumulative Impacts.** Future projects in Long Beach will be required to adhere to specific development standards in the City's Zoning Ordinance and General Plan designed to protect and enhance the area's aesthetic and visual resources. As shown in Table 3-1 in Section 3.3, *Cumulative Project Setting*, growth created by the proposed project would constitute a small portion of the growth forecast for the City of Long Beach by the Southern California Association of Governments (SCAG). Additionally, there are no planned or pending projects within any viewshed from which the project site can be seen. Though cumulative development may, over time, alter the visual character of Southeast Long Beach to a somewhat denser urban environment, the project's contribution to the overall visual effect of cumulative development in the area would be less than significant.



## 4.2 CULTURAL RESOURCES

### 4.2.1 Setting

**a. Historic Resources Surveys.** San Buenaventura Research Associates prepared an historical resources survey and report for the project (Historic Resources Report 304 Obispo Avenue and 3215 E. 3<sup>rd</sup> Street Long Beach, CA) in October 2012. The purpose of this technical report was to identify and evaluate any historic resources that may be affected by implementation of the proposed Safran Senior Housing Project, to assess any potential impacts of the project on historic resources, and to recommend mitigation measures where appropriate. The report included record searches for previously identified historic resources, including listings in the National Register of Historic Places (NRHP) and determinations of eligibility for the NRHP and local landmark listings. A site inspection was made to document and photograph existing conditions, and to define the historic resources study area. Neighborhood and site-specific research was conducted in order to evaluate the properties within their historic context. NRHP and California Register of Historical Resources (CRHR) and City of Long Beach Landmark criteria were employed to assess the significance and eligibility of potentially impacted properties. Project impacts on historic resources were evaluated, and mitigation measures recommended. The 2012 San Buenaventura Research Associates report is included in its entirety in Appendix B.

**b. Overview of Historical Context of the Safran Senior Housing Project Site.** A summary of the history of the area and the project site is provided below. The San Buenaventura Research Associates report in Appendix B provides a more detailed overview of the historical context of the buildings located on the project site, at 3215 E. 3<sup>rd</sup> Street and 304 Obispo Avenue.

General Historical Context. The study area is within the ethnographically recorded territory of the Gabrielino, a Shoshonean speaking group of American Indians who inhabited the area beginning approximately 500 BC and who were present in 1769 when the first Spanish land expedition passed through the area. The historic period begins in 1769, when the first Spanish land expedition, led by Gaspar de Portolá, left San Diego in an attempt to establish a trail to the Port of Monterey. Portolá's party entered present day Los Angeles County on July 30, 1769.

The Spanish Mission Period began with the first Spanish presence in the area (1769) until 1821, when Mexico gained independence from Spain. In California, only about 25 Spanish Mission Period land grants were made, and the project area is located within the *Rancho los Nietos* grant, one of the few grants made during this period. The *Rancho los Nietos* grant, the single largest Spanish or Mexican Period grant, was made in November 1784 by Governor Pedro Fages to Manuel Nieto for 68 square leagues, or over 300,000 square acres.

The period from 1821–1848 is known as the Mexican Rancho Period. During the Mexican Rancho Period, the original Spanish Mission Period *Rancho los Nietos* grant was divided among Nieto's five heirs by Governor Figueroa in May 1834 to become five separate ranchos including *Rancho Los Alamitos* and *Rancho Cerritos* on which Long Beach would later be established.



*Rancho Cerritos* was purchased in 1840 by real estate speculator and cattleman Abel Stearns, who was in the process of amassing one of the largest land-holdings in Southern California, known collectively as Stearn's Ranchos. *Rancho Los Alamitos* was purchased in 1843 by Los Angeles merchant John Temple. Both Stearns and Temple became victims of the prolonged droughts of the early 1860s, eventually selling the two ranchos to Jotham Bixby.

The first effort to develop the ranchos was attempted by William E. Wilmor, in 1880, on a portion of the Bixby landholdings. He called his townsite the "American Colony" or "Willmore City." Willmore was a few years too early to benefit from the enormous railroad-inspired Southern California land boom of the late 1880s, and was undercapitalized. His efforts failed, but Willmore's 1882 subdivision formed the precursor to modern Long Beach. The townsite was purchased in 1884 by the Long Beach Land and Water Company, which began making significant improvements, including the construction of a wharf and hotel, and connecting the town to the Southern Pacific Railroad's Wilmington branch. The elements for growth now in place, the expansion was explosive, especially after the opening of a Pacific Electric line to the city in 1902. Long Beach, which had become one of the region's premier seaside resorts, was incorporated as a city in 1908.

The city began to take on a more commercial and industrial character with the construction of harbor facilities, beginning with the relocation of the Craig Shipbuilding Company to Long Beach in 1907. The Port of Long Beach continued to expand as oceanfront lands were reclaimed, particularly after the discovery of major oil fields at nearby Signal Hill in 1921. The 1920s would be a defining decade for Long Beach, as it expanded rapidly on the twin pillars of tourism and commerce, emerging as a city rivaling Los Angeles for regional stature and importance.

The devastating 1933 Long Beach earthquake was a major setback for Long Beach, particularly coming as it did at the nadir of the Great Depression. The city's fortunes would return fairly quickly, however, with the continued development of local oil resources during the 1930s, and the establishment of the Long Beach Navy Base and Shipyard in 1940. Growth continued to be driven in the postwar period by the waterfront and Cold War defense industries.

Site Specific Context. The present Bluff Heights neighborhood was originally developed in 1886 by John W. Bixby as the community of Alamitos Beach. Located approximately two miles east of Long Beach, it was only sparsely developed by the turn of the century. The area grew rapidly with a series of re-subdivisions after 1902, the year when interurban streetcar service was extended to Long Beach. The Bluff Heights area was absorbed by the city in 1905 and participated fully in the vast building boom that ensued, particularly after 1910. The rapid growth of the area is reflected by the construction of Horace Mann Elementary School in 1914.

The project site is located in a portion of the neighborhood subdivided in 1904 as the Densmore Tract, covering the blocks bounded by Obispo Avenue on the west, Loma Avenue on the east, Fourth Street on the north, and Eliot Street (now, E. 3rd Street) on the south. Roughly the western half of this tract, including the project site, is located within the Bluff Heights Historic District. Although predominantly developed before 1920, the neighborhood continued to fill in during the 1920s and afterwards. Consequently, a wide variety of domestic and institutional architectural styles are represented.



The single family character of the neighborhood began to change in the postwar period, as the demand for housing led to the construction of apartment buildings, often replacing single family homes. An effort to preserve the historic character of the neighborhood was advanced first by downzoning, and then in 2004, with the establishment of the Bluff Heights Historic District. The District is comprised of over 600 contributing properties, mainly single family residences constructed between 1910 and 1920.

**c. Criteria for Evaluation of Historic Resources.** CEQA requires evaluation of project impacts on historic resources, including properties “listed in, or determined eligible for listing in, the California Register of Historical Resources [or] included in a local register of historical resources or identified as significant in an historical resource survey.” In analyzing the historic significance of properties located within the project site, various criteria for designation under federal, state, and local landmark programs were considered and applied, as described below. It should be noted, however, that pursuant to CEQA Section 15064.5(a)(4), “[t]he fact that a resource is not listed in, or determined to be eligible for listing in the California Register of Historical Resources, not included in a local register of historical resources...or identified in an historical resources survey...does not preclude a lead agency from determining that the resource may be an historical resource as defined in Public Resources Code sections 5020.1(j) or 5024.1.”

Federal Regulatory Setting. The criteria for determining eligibility for listing on the National Register of Historic Places (NRHP) have been developed by the National Park Service. Properties may qualify for NRHP listing if they:

- a. *Are associated with events that have made a significant contribution to the broad patterns of our history; or*
- b. *Are associated with the lives of persons significant in our past; or*
- c. *Embody the distinctive characteristics of a type, period, or method of construction or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or*
- d. *Have yielded, or may be likely to yield, information important in prehistory or history.*

According to the NRHP guidelines, the “essential physical features” of a property must be present for it to convey its significance. Further, in order to qualify for the NRHP, a resource must retain its integrity, or “the ability of a property to convey its significance.” The seven aspects of integrity are:

1. *Location (the place where the historic property was constructed or the place where the historic event occurred)*
2. *Design (the combination of elements that create the form, plan, space, structure, and style of a property)*
3. *Setting (the physical environment of a historic property)*



4. *Materials (the physical elements that were combined or deposited during a particular period of time and in a particular pattern or configuration to form a historic property)*
5. *Workmanship (the physical evidence of the crafts of a particular culture or people during any given period of history or prehistory)*
6. *Feeling (a property's expression of the aesthetic or historic sense of a particular period of time)*
7. *Association (the direct link between an important historic event or person and a historic property).*

The relevant aspects of integrity depend upon the National Register criteria applied to a property. For example, a property nominated under Criterion A (events), would be likely to convey its significance primarily through integrity of location, setting and association. A property nominated solely under Criterion C (design) would usually rely primarily upon integrity of design, materials and workmanship.

The minimum age criterion for the NRHP is 50 years. Properties less than 50 years old may be eligible for listing on the NRHP if they can be regarded as “exceptional,” as defined by the NRHP procedures.

State of California Regulatory Setting. A resource is eligible for listing on the California Register of Historical Resources (CRHR) if it:

1. *Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;*
2. *Is associated with the lives of persons important in our past;*
3. *Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or*
4. *Has yielded, or may be likely to yield, information important in prehistory or history.*

The California Register procedures include similar language to the NRHP with regard to integrity. The minimum age criterion for the CRHR is 50 years. A property less than 50 years old may be eligible for listing on the CRHR “if it can be demonstrated that sufficient time has passed to understand its historical importance” (Chapter 11, Title 14, §4842(d)(2)).

By definition, the CRHR also includes all “properties formally determined eligible for, or listed in, the National Register of Historic Places,” and certain specified State Historical Landmarks. The majority of “formal determinations” of NRHP eligibility occur when properties are evaluated by the State Office of Historic Preservation in connection with federal environmental review procedures (Section 106 of the National Historic Preservation Act of 1966). Formal determinations of eligibility also occur when properties are nominated to the NRHP, but are not listed due to a lack of owner consent.

Historic resources as defined by CEQA also include properties listed in “local registers” of historic properties. A “local register of historic resources” is broadly defined in §5020.1 (k) of



the Public Resources Code, as “a list of properties officially designated or recognized as historically significant by a local government pursuant to a local ordinance or resolution.” Local registers of historic properties come essentially in two forms: (1) surveys of historic resources conducted by a local agency in accordance with Office of Historic Preservation procedures and standards, adopted by the local agency and maintained as current, and (2) landmarks designated under local ordinances or resolutions. These properties are “presumed to be historically or culturally significant... unless the preponderance of the evidence demonstrates that the resource is not historically or culturally significant.” (Public Resources Code §§ 5024.1, 21804.1, 15064.5)

Local Regulatory Setting. The City of Long Beach has a historic preservation ordinance that defines landmark criteria and a designation process for historically significant properties in the community. According to the Long Beach Municipal Code (Chapter 2.63, Cultural Heritage Commission), landmark properties may be any site or improvement, manmade or natural, which has special character or special historical, cultural, architectural, community or aesthetic value as part of the heritage of the City, State, or the United States. The City's criteria for the identification or designation of landmarks, including landmark historic districts are as follows. A cultural resource may be recommended for designation if it manifests one or more of the following criteria:

- a. *It possesses a significant character, interest or value attributable to the development, heritage or cultural characteristics of the city, the southern California region, the state or the nation; or*
- b. *It is the site of a historic event with a significant place in history; or*
- c. *It is associated with the life of a person or persons significant to the community, city, region or nation; or*
- d. *It portrays the environment in an era of history characterized by a distinctive architectural style; or*
- e. *It embodies those distinguishing characteristics of an architectural type or engineering specimen; or*
- f. *It is the work of a person or persons whose work has significantly influenced the development of the city or the southern California region; or*
- g. *It contains elements of design, detail, materials, or craftsmanship which represent a significant innovation or*
- h. *It is a part of or related to a distinctive area and should be developed or preserved according to a specific historical, cultural or architectural motif; or*
- i. *It represents an established and familiar visual feature of a neighborhood or community due to its unique location or specific distinguishing characteristic; or*
- j. *It is, or has been, a valuable information source important to the prehistory or history of the city, the southern California region or the state; or*
- k. *It is one of the few remaining examples in the city, region, state or nation possessing distinguishing characteristics of an architectural or historical type; or*



- l. In the case of the designation of a tree(s) based on historic significance, that the tree(s) is (are) associated with individuals, places and/or events that are deemed significant based on their importance to national, state and community history; or*
- m. In the case of the designation of a tree(s) based on cultural contribution, that the tree(s) is (are) associated with a particular event or adds (add) significant aesthetic or cultural contribution to the community. (Ord. ORD-09-0003, Sec. 1, 2009; ORD-05-0026 § 1, 2005; Ord. C-6961 § 1 (part), 1992).*

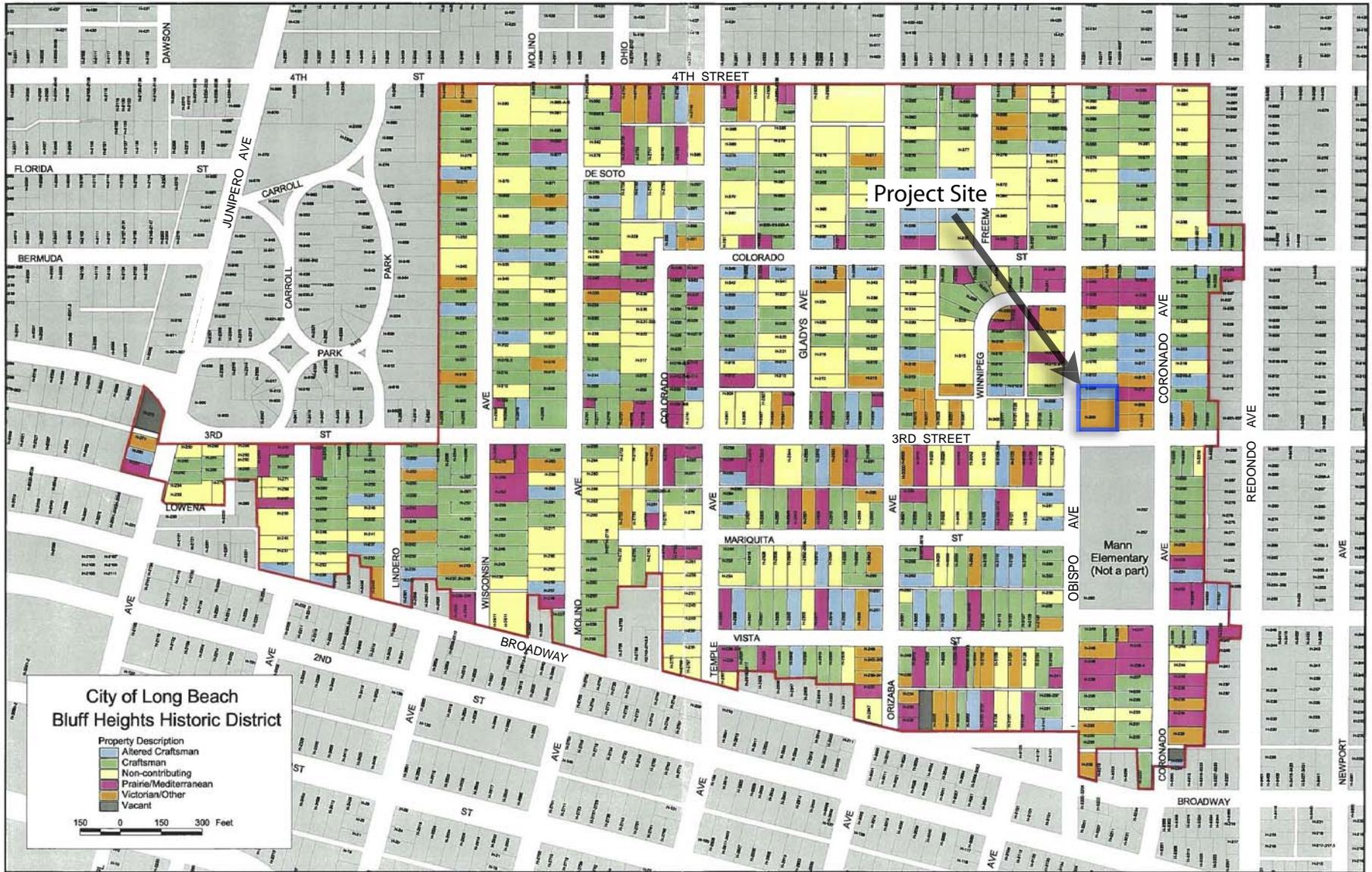
**d. Specific History of the Surveyed Project Area Properties.** Below is a discussion of properties surveyed within the project site. Figure 4.2-1 shows the location of these properties within the Bluff Heights Historic District. Photographs of these properties are shown in Section 2.0, *Project Description*.

3215 E. 3rd Street. The Immanuel Baptist Church (later renamed the Immanuel Community Church) building is two stories in height, not including the partially above-ground basement, and occupies four parcels at the northeastern corner of 3rd Street and Obispo Avenue. The western Obispo Avenue elevation features the main entry, located off the corner and organized in three arched bays flanked by square towers. The bays are two stories in height and defined by large engaged Corinthian columns. Three pairs of double entry doors with transoms above are set within the bays above a platform stepped back from the sidewalk. Arched multi-paned windows are located above the doors and within the bays. A rosette vent is centered on the gable end above. The gabled roof is medium-pitched with shallow, coved eaves. The towers are characterized by tall, inset, arched niches and a tripartite blind arcade above, defined by small Corinthian columns. The tower roofs feature bracketing under the shallow eaves.

The building's nearly symmetrical southern elevation is organized as a central mass covered by a shed roof, flanked by two slightly projecting gable-roofed wings. The wings feature four two-story inset, arched bays separated by engaged Corinthian columns. The bays feature pairs of multi-paned wood casement windows at the ground and second-story levels, with multi-paned transoms above the windows on the ground floor. Abstract relief panels are located in the bays between the windows. The parapeted gable ends feature arched relief under the very shallow cornice line. Rosette vents are centered within the gable ends. The central mass features bands of windows matching the treatment within the flanking bays. Centered on this elevation is a second-story projecting bay with a gable roof and three deeply inset arched windows. A minor entry door is located off-center to the east.

Windows on the western and southern elevations are mainly multi-pane wood frame fixed or casements with white and orange slag glass lights. Stained glass windows face non-street elevations. The roof covering is Spanish tile. The building's cornerstone appears to have been covered or removed.

Safran Senior Housing Project EIR  
 Section 4.2 Cultural Resources



Bluff Heights Historic District with  
 Project Location Indicated

Source: San Buenaventura Research Associates,  
 Historic Resources Report, October, 2012

Figure 4.2-1  
 City of Long Beach

The organization of the Immanuel Baptist Church congregation began with the meeting of a prayer group in an East Long Beach home in 1912, leading to the chartering of the church the following year with 64 members. It became the second Baptist congregation in Long Beach, following the First Baptist Church, which was organized in 1893. Construction of a church for the congregation started later that year with the assistance of the First Baptist Church, and was completed in 1913. This one-story building occupied the northern half of the site covered by the church building as it exists today. This building was either replaced or fully incorporated into a larger church, with sanctuary seating for 1,000 congregants. Completed in 1923, the new church was designed by Long Beach architect W. Horace Austin.

As constructed, the two-story church featured a decorative brick and marble-clad exterior. The building was damaged in the 1933 Long Beach Earthquake, and repaired. Little is currently known about the extent of the damage other than it required the congregation to find temporary quarters during the repairs for perhaps a year or more. The specific alterations to the building that may have occurred with these repairs, if any, are unknown. A substantial interior alteration occurred in 1953, with the installation of a massive, ten-ton Aeolian-Skinner pipe organ in the sanctuary. The current exterior stucco coating appears to have been applied during a major building renovation in 1969. A building permit issued in that year refers to sandblasting and stucco, and the replacement of windows. The aluminum frame windows seen on a portion of the southern elevation may have replaced wood casement windows at this time. The main entry doors on the western elevation are also non-original.

In term of architectural style, this building's original brick and marble-clad exterior probably suggested the Italian Renaissance Revival style, as characterized by the repeated motif of deeply-set window bays defined by engaged classical columns and the use of Romanesque arches. References to the Mission Revival style can be seen in the towers flanking the main entry, although it reads more definitely of this style now than it likely did before 1969, the year when the building was apparently clad in stucco. Today this building appears more nearly Spanish Revival or Mission Revival in style than when it was constructed. This property is assigned to the "Victorian/Other" classification on the Bluff Heights Historic District map.

304 Obispo Avenue. This single family residence is one story in height and roughly rectangular in plan. It features a front-facing gable roof with exposed rafter tails projecting from under moderately deep eaves. A full-front raised porch is located under an inset gable roof supported by truncated columns set atop square piers. The essentially symmetrical western street elevation consists of a centered entry door flanked by wide windows. Both are surrounded by wide, wood casings featuring angled, exposed lintels. The paneled entry door is contemporary and the windows on this elevation are aluminum frame, apparently within original window openings. The street elevation is clad with medium-width lap siding. All of the secondary elevations appear to be clad in stucco and windows on these elevations are mainly aluminum frame. The columns and piers are also stucco-clad.

This residence was constructed circa 1920 as a parsonage for the adjacent Immanuel Baptist Church, and was used for this purpose into the mid-1920s. The first known resident was Rev. William H. Galbraith, the first pastor of the Immanuel Baptist Church, and his wife Christina. By the mid-1920s it was occupied by the church caretaker but by the late 1920s was rented. The property was then occupied by a series of renters through the 1950s. More details on some of



these individuals are available in the Historic Resources Report (Appendix B, see page 4.2-1). The home had been sold by the church by 1935.

The architectural style of this residence is California Bungalow as it was commonly constructed in its later stages after World War I, when the style became abstracted and reduced to gable roof forms with open eaves and full-front porches, but had otherwise been stripped of much of the deliberately expressed structural detailing that had characterized the earlier phases of the style. This property is assigned to the “Altered Craftsman” category on the Bluff Heights Historic District map.

**e. Eligibility of Project Site Properties.** Below is a discussion of the eligibility of properties located on the project site for the local, California, and National Registers.

3215 E. 3rd Street. This property does not appear to be eligible for listing under NRHP Criterion A or CRHR Criterion 1 (associations with historic events). While it is associated with the historical theme of the development of the Bluff Heights district of Long Beach, it appears to be only generally associated with this theme, and represents no known, notable role in this theme. The property does not appear to be eligible for listing under NRHP Criterion B or CRHR Criterion 2 (associations with historically significant individuals). This property does not appear to be eligible for listing under NRHP Criterion C or CRHR Criterion 3 (an example of a type, period, or method of construction or association with a master designer). Although it was designed by W. Horace Austin, one of the more important architects in Long Beach during this time period, the building’s architectural style and appearance have been altered substantially, to the extent that it is no longer representative of his work.

304 Obispo Avenue. This property does not appear to be eligible for listing under NRHP Criterion A or CRHR Criterion 1 (associations with historic events). While it is associated with the historical theme of the development of the Bluff Heights district of Long Beach, it appears to be only generally associated with this theme, and represents no known, notable role in this theme. The property does not appear to be eligible for listing under NRHP Criterion B or CRHR Criterion 2 (associations with historically significant individuals). Of the known owners or occupants of the property for whom any substantive biographical information was found, none appear to have made a significant contribution towards the historical development of the state, nation or community. This property does not appear to be eligible for listing under NRHP Criterion C or CRHR Criterion 3 (an example of a type, period, or method of construction or association with a master designer). It is a typical example of a common architectural style, of which numerous and more fully-realized and more intact examples can be found in Long Beach.

Local Significance and Eligibility. The implication of the available data from the Bluff Heights Historic District listing is that both properties should be regarded as contributors to the district. In terms of individual eligibility for City Landmark designation, the criteria for designation in general are functionally similar to the NRHP and CRHR criteria, with some notable exceptions. In particular, Criterion I permits the designation of a property that “represents an established and familiar visual feature of a neighborhood or community due to its unique location or specific distinguishing characteristic.” The City Landmark ordinance does not contain explicit integrity criteria. It appears that 3215 E. 3rd Street, due to its mass and



substantial presence in the neighborhood, may qualify for individual listing under this criterion. The property at 304 Obispo Avenue does not appear to be eligible for designation under any City of Long Beach criteria.

Conclusions. The property at 3215 E. 3rd Street is a contributor to a designated historic district and may be individually eligible for City Landmark designation. Therefore, it should be regarded as a historic resource for purposes of CEQA. The property at 304 Obispo Avenue is a contributor to a designated historic district. Therefore, it should also be regarded as a historic resource for purposes of CEQA.

#### 4.2.2 Impact Analysis

**a. Methodology and Significance Thresholds.** In support of the EIR, San Buenaventura Research Associates prepared an historic resources technical report for the proposed project in October 2012. The conclusions as to the significance of the effects of the proposed project on historic resources are based on the findings of this Historic Resources Report, which is included in Appendix B.

Per the CEQA Guidelines, impacts created by the project would be significant if project implementation would:

- *Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5;*
- *Cause a substantial adverse change in the significance of an archaeological resource as defined in §15064.5;*
- *Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature; or,*
- *Disturb any human remains, including those interred outside of formal cemeteries.*

The Initial Study for the proposed project (Appendix A) found that impacts to archaeological resources, paleontological resources, or human remains would be less than significant. Therefore these potential impacts are not discussed in this EIR.

According to PRC §21084.1, “a project that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment.” This section broadly defines a threshold for determining if the impacts of a project on an historic property would be significant and adverse. By definition, a substantial adverse change means, “demolition, destruction, relocation, or alterations,” such that the significance of an historical resource would be impaired (PRC §5020.1(6)). For purposes of NRHP eligibility, reductions in a resource’s integrity (the ability of the property to convey its significance) should be regarded as potentially adverse impacts.

Furthermore, according to the CEQA Guidelines Section 15064.5(b)(2), “an historical resource is materially impaired when a project... [d]emolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register of Historical Resources [or] that account for its inclusion in a local register of historical resources pursuant to



section 5020.1(k) of the Public Resources Code or its identification in an historical resources survey meeting the requirements of section 5024.1(g) of the Public Resources Code, unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant.”

The lead agency is responsible for the identification of “potentially feasible measures to mitigate significant adverse changes in the significance of an historical resource.” The specified methodology for determining if impacts are mitigated to less than significant levels are the Secretary of the Interior’s Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings and the Secretary of the Interior’s Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings (1995), publications of the National Park Service (CEQA Guidelines §15064.5(b)(3-4)).

**b. Project Impacts and Mitigation Measures.**

**Impact CR-1 The proposed Safran Senior Housing Project would involve demolition of the single family residence at 304 Obispo Avenue and construction of a surface parking lot on the property, as well as changes to the exterior of the former Immanuel Community Church building at 3215 E. 3rd Street. These properties are contributors to a designated historic district, and the project would result in a reduction to the design integrity of the historic district. While impacts to the former church building could be mitigated to a less than significant level, demolition of the residence would lead to the complete loss of a contributor to a historic district, and this impact would be Class I, *significant and unavoidable*.**

The project would involve the demolition of the single family residence located at 304 Obispo Avenue and the construction of a surface parking lot on the property. This property is located within a designated historic district, and is a contributor to the district. Due to the size of the district, the loss of one contributing property would not result in the district becoming ineligible. However, the loss of this property as a contributor would constitute a slight reduction to the design integrity of the district. This impact is therefore significant and adverse.

The project would result in alterations to the property at 3215 E. 3rd Street to accommodate its adaptive reuse as senior housing. The project plans include infilling of some window and door openings, creation of new door and window openings, replacement of doors in existing openings, replacement of stained glass and slag glass windows with new windows units with clear glazing, and installation of rooftop heating and ventilating equipment. Because some of these features, such as the stained glass and slag windows, are character-defining features of the former church building, the result of these actions could be a loss of design integrity sufficient to cause the property to become a non-contributor to the historic district or ineligible for individual landmark designation. This impact is therefore significant and adverse.

Mitigation Measures. The following mitigation measures would reduce project impacts on historic resources.



- CR-1(a) 304 Obispo Avenue Documentation Report.** In consultation with the Planning Bureau of the Long Beach Development Services Department, a historic preservation professional qualified in accordance with the Secretary of the Interior's Standards shall be selected to complete a Documentation Report on the property at 304 Obispo Avenue. The property shall be documented with archival quality photographs of a type and format approved by the City of Long Beach. This documentation, along with historical background for this property, shall be submitted to an appropriate repository approved by the City of Long Beach. The documentation reports shall be completed and approved by the City of Long Beach prior to the issuance of demolition permits.
- CR-1(b) Immanuel Community Church Certificate of Appropriateness.** The proposed alterations to the former Immanuel Community Church building at 3215 E. 3rd Street shall be subject to the issuance of a Certificate of Appropriateness by the City of Long Beach Cultural Heritage Commission, which shall find that the proposed alterations conform to the *Secretary of the Interior's Standards* prior to the issuance of the Certificate of Appropriateness. All provisions of Ordinance C-7937, "An Ordinance of the City Council of the City of Long Beach Designating the Bluff Heights Historic Landmark District," particularly with respect to retaining and preserving all original architectural materials and design features, shall apply to this review.

Significance after Mitigation. Implementation of Mitigation Measure CR-1(b) would reduce historic resources impacts of the project on the former Immanuel Community Church building to a less than significant level. However, while Mitigation Measure CR-1(a) would reduce historic resources impacts of the project related to the demolition of the residence at 304 Obispo Avenue, and the Historic Resources Report (Appendix B) found that this mitigation measure would mitigate this impact to a less than significant level, the City of Long Beach has determined that the loss of a contributor to a historic district cannot be mitigated to a less than significant level by this mitigation, and this impact remains significant and unavoidable. Section 6.0, *Alternatives*, considers alternatives that would preserve the structure at 304 Obispo Avenue and minimize exterior alterations to the former Immanuel Community Church building.

**c. Cumulative Impacts.** Implementation of the proposed project, in combination with past, present, and potential future cumulative development in the area, could continue to alter the historic character of the City and the Bluff Heights Historic District and result in substantial loss of extant historic resources. Specifically, cumulative impacts could involve projects affecting local resources with a similar level or type of evaluation or designation; projects affecting other properties located within similar federal, state, or locally evaluated or designated groupings or historic districts; or projects that involve resources that are significant within the same historic context as the resources associated with the project. Where historic properties have been demolished or degraded, mitigation measures such as those proposed in this EIR are not always sufficient to reduce project-specific impacts to less than significant levels. It has been determined in this EIR that the impacts of the project on historic resources cannot be mitigated to a less than significant level, and are therefore significant and unavoidable. While there may



be development within the Bluff Heights Historic District in the future that would, in combination with the project, cumulatively impact historic resources, no such proposals are currently before the City. The policies and regulations mentioned in this section of the EIR protecting historic resources in this area would apply to future development. Because the project itself has a significant, unavoidable impact on historic resources, cumulative impacts to historic resources would also be significant and unavoidable.



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## 5.0 OTHER CEQA-REQUIRED DISCUSSIONS

### 5.1 GROWTH INDUCEMENT

Section 15126(d) of the *CEQA Guidelines* requires a discussion of a proposed project's potential to foster economic or population growth, including ways in which a project could remove an obstacle to growth. Growth does not necessarily create significant physical changes to the environment. However, depending upon the type, magnitude, and location of growth, it can result in significant adverse environmental effects. The proposed project's growth inducing potential is therefore considered significant if it could result in significant physical effects in one or more environmental issue areas. The most commonly cited example of how an economic effect might create a physical change is where economic growth in one area could create blight conditions elsewhere by causing existing competitors to go out of business and buildings to be left vacant for extended periods.

#### 5.1.1 Safran Senior Housing Project Site

The proposed project involves conversion of an existing 31,006 square foot church building 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. The project also includes demolition of an existing single family residence and construction of a 12-space parking lot serving the senior housing project on an adjacent parcel. The project would generate temporary employment opportunities during construction, which would be expected to draw workers from the existing regional work force. Therefore, construction of the project would not be considered growth inducing from a temporary employment standpoint.

Any increase in permanent jobs in the City associated with the project would result from jobs associated with this residential use. The project has no commercial or industrial component, and would create one full-time, permanent job for a property manager. In 2008 the City of Long Beach had 168,100 jobs, and by 2035 it is projected to have 184,800 jobs, for an increase of 16,700 jobs (SCAG, October 2012). The one job generated by the project would represent approximately 0.06% of this increase. Therefore, project-generated employment growth would be well within projected employment growth for the City of Long Beach.

As shown in Table 3-1 of Section 3.3, *Cumulative Projects Setting*, the potential population increase generated by the project, which is estimated at a maximum of two persons for each of the 25 new units proposed under the project, minus 3 persons for the one residence to be demolished at 304 Obispo Avenue, would be approximately 47 persons. Based on Long Beach's estimated 2012 population of 464,662 residents, an increase of 47 residents would increase the City's population by about 0.01%, and this increase would make up about 0.1% of the projected population growth for the City of 26,338 residents by 2020. An increase of 24 housing units would represent an increase of about 0.02% over the 163,623 existing units within the City, and would make up about 0.2% of the projected increase of 11,977 housing units expected by 2020. Although this is an increase in population and housing within the city, the increase is well within projected growth.

According to SCAG data, in 2008 (the most recent year for which SCAG data is available) Long Beach had a jobs-housing ratio of 1.03:1 (SCAG, October 2012). This indicates that there are 1.03



jobs for every housing unit. A jobs-housing ratio over 1.5:1 is considered high and may indicate an increasing imbalance between jobs and housing (i.e., new residential construction has not kept up with job creation), while a ratio below 1:1 is considered low. The new housing units, population growth and employment opportunities that would be added by the project are well within SCAG's projections for the City. The project-related increase of 24 housing units and one job would only incrementally alter the existing job-housing ratio in the City of Long Beach from 1.0281:1 to 1.0280:1. Impacts related to the jobs-housing ratio would not be significant.

### 5.1.2 Removal of Obstacles to Growth

The proposed project would be located in a fully urbanized area, generally served by existing infrastructure. The Initial Study (Appendix A) found that the project would not create the need for any upgrades of, or new connections to, the area's existing water, sewer, circulation and drainage connection infrastructure. However, if any such improvements were necessary, they would be sized to accommodate the project's contribution to existing service needs.

The proposed project does not provide for any substantially capacity-increasing transportation and circulation improvements. No new roadways or bike/pedestrian pathways are proposed. The project constitutes infill development within an urbanized area and does not require the extension of new infrastructure through undeveloped areas.

## 5.2 IRREVERSIBLE ENVIRONMENTAL EFFECTS

The *CEQA Guidelines* require that EIRs evaluating projects involving amendments to public plans, ordinances, or policies contain a discussion of significant irreversible environmental changes. CEQA also requires decisionmakers to balance the benefits of a proposed project against its unavoidable environmental risks in determining whether to approve a project. This section addresses non-renewable resources, the commitment of future generations to the proposed uses, and irreversible impacts associated with the proposed project.

Conversion of the project site from a former church building and single family residence to a senior housing development housed in the former church building and an associated surface parking lot would likely result in a long-term commitment of the site to such uses. Development of the project would result in the loss of the single family residence and alteration of the former church building, both of which are contributors to the Bluff Heights Historic District. These actions would alter the urban built environment in ways that have been found in this EIR to be significant and unavoidable, less than significant, or less than significant with mitigation incorporated, and which would most likely be irreversible. The project would involve the use of building materials and energy, some of which are non-renewable resources. Consumption of these resources would occur with any development in the region and are not unique to the project. The increased intensity of residential development would also irreversibly increase local demand for non-renewable energy resources such as petroleum products and natural gas. However, increasingly efficient building fixtures and automobile engines are expected to offset this demand to some degree.

The project would require a commitment of law enforcement, fire protection, water supply, wastewater treatment, and solid waste disposal services. However, as discussed in the Initial Study (Appendix A), impacts to these service systems would be less than significant. The



additional vehicle trips associated with buildout of the project site would increase traffic in the vicinity of the project site. As discussed in the Initial Study, air pollutant emissions associated with construction would be less than significant. Although impacts would be less than significant, air pollutants emissions associated with construction and operation of the project would contribute to the degradation of air quality associated with this and all other cumulative development. The project would also create greenhouse gas emissions incrementally contributing to global climate change. This impact was found to be less than significant in Section VII, *Greenhouse Gas Emissions* of the Initial Study (Appendix A), which includes an analysis of the cumulative nature of this impact. Finally, the project would result in the irreversible removal and alteration of structures contributing to a historic district. This impact is discussed in Section 4.2, *Cultural Resources*, and has been found to be significant and unavoidable.



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## 6.0 ALTERNATIVES

As required by Section 15126.6 of the *CEQA Guidelines*, this EIR examines a range of reasonable alternatives to the proposed project that would attain most of the basic objectives of the project but would avoid or substantially lessen any of its significant effects. Included in this analysis are three alternatives, including the CEQA-required “no project” alternative, that involve changes to the project to help reduce its environmental impacts as identified in this EIR. This section also identifies the Environmentally Superior Alternative.

The following alternatives are evaluated in this EIR:

- *Alternative 1: No Project (no senior housing project and associated surface parking lot)*
- *Alternative 2: Relocate 304 Obispo Avenue Residence*
- *Alternative 3: Minimize Exterior Changes to Former Church Building*

The potential environmental impacts of each alternative are analyzed in Sections 6.1 through 6.4. Because the alternatives analysis is intended to focus on alternatives that would substantially lessen any of the significant effects of the project, and because this EIR focuses only on impact areas with the potential for such effects, the potential impacts of each alternative are analyzed in the areas of Aesthetics, Cultural Resources, and Noise, which are the only areas identified in the Initial Study (Appendix A) and EIR as having potentially significant effects. Section X, *Land Use and Planning*, of the Initial Study also identified policy consistency with the Bluff Heights Historic District Ordinance as a potentially significant impact, but this issue is covered under the Cultural Resources section of this analysis.

Table 6-1 provides a summary comparison of the development characteristics of the proposed project and the alternatives. A more detailed description of the alternatives is included in the impact analysis for each alternative.

**Table 6-1  
 Comparison of Project Alternatives Buildout Characteristics**

| Characteristic              | Alternatives     |                        |  |   |
|-----------------------------|------------------|------------------------|--|---|
|                             | Proposed Project | No Project Alternative | Relocate 304 Obispo Avenue Residence Alternative | Minimize Exterior Changes to Former Church Building Alternative |
| <b>304 Obispo Ave.</b>      |                  |                        |  |   |
| Residential Unit            | 0 units          | 1 unit                 | 1 unit   | 0 units   |
| Historic Structure          | Demolition       | No change              | Relocation                                       | Demolition  |
| <b>3215 E. Third Street</b> |                  |                        |  |   |
| Residential Units           | 25 units         | Vacant                 | 25 units   | 25 units  |
| Historic Structure          | Adaptive Reuse   | No change              | Adaptive Reuse                                   | Adaptive Reuse  |



## 6.1 NO PROJECT

This alternative assumes that the proposed improvements are not implemented and that the site remains in its present condition, occupied by one single family residence and a vacant former church building. This alternative would not meet the objectives of the proposed project because it would not provide new opportunities for low- or very low- income senior housing in Long Beach that would help the City achieve its affordable housing objectives, and it would not provide for the adaptive reuse of the former Immanuel Community Church building while retaining the historic integrity of the Bluff Heights Historic District. Implementation of the No Project alternative would not preclude future development on the site and/or renovations or expansions of existing structures or uses. However, in Long Beach, any exterior alterations to a building within a designated historic district require a Certificate of Appropriateness, which is a form of discretionary review.

### 6.1.1 Aesthetics

The No Project Alternative would not change the aesthetics of the project site or area, and would thus avoid the project's less than significant impacts on aesthetics. One of the policies from the City's General Plan Land Use Element states (in part) that "Continuing the preservation of the California bungalow and other architecturally significant and affordable housing stock through rehabilitation is warranted". This alternative would avoid demolition of the Craftsman-style residence at 304 Obispo Avenue, as well as any exterior alterations to the former Immanuel Community Church building and would therefore avoid the project's less than significant impacts associated with consistency with City policies related to aesthetics. Overall, this alternative would have less impact than the proposed project with respect to aesthetics.

### 6.1.2 Cultural Resources

This alternative would avoid demolition of the Craftsman-style residence at 304 Obispo Avenue, as well as any exterior alterations to the former Immanuel Community Church building, both of which have been determined in this EIR to be contributors to the Bluff Heights Historic District. This alternative would therefore have no impact on cultural resources, and would avoid the project's significant, unavoidable impact on cultural resources related to the demolition of the residence at 304 Obispo Avenue. Therefore, this alternative's cultural resource impacts would be less than those of the proposed project and the mitigation measures recommended for the project would not apply.

### 6.1.3 Noise

The Initial Study (Appendix A) identified construction noise and vibration impacts to sensitive receptors as potentially significant but mitigable. This impact was due to the potential for trucks used during construction at the site to pass near classroom buildings at Horace Mann Elementary School. This alternative would not involve any construction on the project site or any construction traffic on surrounding streets. It would therefore avoid the project's significant but mitigable impacts related to construction noise and vibration. Overall, this alternative would have less construction noise impact than the proposed project and the mitigation measures recommended for the project would not apply.



## 6.2 RELOCATE 304 OBISPO AVENUE RESIDENCE ALTERNATIVE

This alternative involves relocating rather than demolishing the existing single family residence at 304 Obispo Avenue. The intent of this alternative is to avoid the project's significant, unavoidable impacts associated with the loss of this structure, which is a contributor to the Bluff Heights Historic District. This alternative would meet the objectives of the proposed project, but would require identification of a suitable and available site for the purpose of relocation of the residence. In order to fully avoid the impact to historic resources through this alternative, it would be necessary to relocate the residence within the Bluff Heights Historic District, which is the area to which this property is a contributor and which provides the residence with the context that gives it significance. This alternative would achieve the project objectives to a slightly greater degree than the project because it would retain one more housing unit than the project (see "Affordable Housing" policy listed below in Section 6.2.1), while still achieving the objective of providing for the adaptive reuse of the former Immanuel Community Church building and retaining the historic integrity of the Bluff Heights Historic District.

### 6.2.1 Aesthetics

Under this alternative, the project site's appearance after its development would be the same as under the project. All aesthetic impacts of the project would therefore be the same at this location. Relocation of the residence at 304 Obispo Avenue to another location would change the aesthetic character of that location, and could create impacts at that location related to visual character and quality or scenic views. However, it is anticipated that the residence would be relocated to a site in which it would be visually compatible with surrounding development. Relocation of this residence could also incrementally increase light and glare at the relocation site and in its vicinity, but this impact would be expected to be less than significant because of the fully built-out nature of the City of Long Beach, which would mean that any feasible relocation site would already be a well-lit location that would not be substantially altered by the addition of a single residence.

Consistency of this alternative with adopted policies of the City of Long Beach related to aesthetics would be the same at the project site as under the project. Policy consistency at the relocation site would depend in part on its location, but preservation of this residence would comply more fully with the following policy of the City's Land Use Element:

- *Affordable Housing: Long Beach views its existing housing stock as its greatest resource of affordable housing, and will stimulate and support continued maintenance and reinvestment in that housing stock. It will take advantage of every State and Federal program to make its housing affordable to its population, but it will not sacrifice long-term quality for short-term affordability in new or rehabilitated housing (p. 18).*

Overall, this alternative's impacts related to aesthetics would be slightly reduced compared to the project because of its greater compliance with the affordable housing policy listed above.



## 6.2.2 Cultural Resources

This alternative would avoid demolition of the existing residence at 304 Obispo Avenue, and would therefore avoid the project's significant, unavoidable impact on this cultural resource. Therefore, cultural resources impacts to this property under this alternative would be reduced in comparison with the project. If the residence could be relocated within the Bluff Heights Historic District, impacts to the integrity of the District would also be reduced. All changes to the former church building proposed under the project would remain the same under this alternative. However, all mitigation measures recommended for the former church building under the proposed project would apply to this alternative and would reduce impacts on this cultural resource to a less than significant level, as with the proposed project. Overall, this alternative would have less impact on cultural resources than the project.

## 6.2.3 Noise

The Initial Study (Appendix A) identified construction noise and vibration impacts to sensitive receptors as potentially significant but mitigable due to the potential for trucks used during construction at the site to pass near classroom buildings at Horace Mann Elementary School. Under this alternative, the residence at 304 Obispo Avenue would not be demolished, but it would be relocated, and the site of the proposed parking lot would still need to be cleared and graded. All other construction activities proposed under the project would remain the same. Construction trucks would still need to use local streets, and this alternative would not significantly reduce this impact. However, Mitigation Measure N-1 from the Initial Study, which prohibits heavy trucks from driving on either Obispo Avenue or Coronado Avenue south of East 3<sup>rd</sup> Street would still apply and would reduce the impact to a less than significant level, as with the proposed project. Overall, this alternative's impacts related to construction noise would be roughly equal to those of the project.

## 6.3 MINIMIZE EXTERIOR CHANGES TO FORMER CHURCH BUILDING ALTERNATIVE

This alternative involves minimizing exterior changes to the former Immanuel Community Church building in order to reduce project impacts associated with alterations to character-defining features of the building. Section 4.2, *Cultural Resources*, identifies character-defining features of the building to include such features as the stained glass and slag glass windows, although other features to be changed under the project, such as doorways, may also be character-defining. The primary changes to the exterior of the building would consist of the following (also shown on Figures 2-6a and 2-6b):

### West Elevation

1. New window at area well
2. New doors to replace the existing entry doors
3. New window at north tower
4. Guardrails added at 2<sup>nd</sup> floor units
5. Wall and gate added at parking lot



### South Elevation

1. New window at area well
2. New windows and door at Lobby
3. New mechanical platform and screen

### North Elevation

1. New doors at lower level units and new windows at area well
2. New doors to replace existing
3. Various openings infilled and new lightwell opening added
4. Removing existing stairs

### East Elevation

1. New area well and opening
2. Existing door and window openings infilled, add new window
3. New mechanical platform and screen

Among these changes, those that could be considered to affect non-character-defining features include changes that would not be visible, or not be highly visible, from public viewpoints, such as changes made partially below grade and on non-street facing elevations. For example, new windows at area wells would be located in the basement level partially below grade. Also, changes made to the east elevation would be minimally visible from any public viewpoint because of the proximity of the neighboring apartment building to its east. However, the stained glass and slag glass windows on the north elevation would still be considered character-defining because they are visible from Obispo Street (and would remain so under the project). The stained glass windows on this elevation are particularly character-defining because they are a visually prominent feature of this façade of the church. However, these stained glass windows would remain under the project. The addition of screened mechanical equipment on the roof of the building would not be highly visible, and would thus not affect a character-defining feature. Therefore, for the purposes of this analysis, this alternative would involve eliminating the following actions to be carried out under the project:

### West Elevation

2. New doors to replace the existing entry doors
3. New window at north tower

### South Elevation

2. New windows and door at Lobby

This alternative would meet the City's objective to facilitate the construction of affordable housing in order to help meet its affordable housing objectives, while retaining the historic integrity of the Bluff Heights Historic District through preservation of the former Immanuel Community Church building. This alternative would meet the project applicant's objective to adaptively re-use the project site for low- or very low- income senior housing. This alternative would avoid the significant but mitigable impact to the former church building that would result from implementation of the project, but it would not avoid the project's significant, unavoidable cultural resources impact related to the demolition of the residence at 304 Obispo Avenue. The feasibility of this alternative may be limited by certain factors. For example, the project applicant has stated that the new doors at the south elevation are required to make the



building ADA accessible; and the new, glass paneled doors at the west elevation that would replace the existing solid wood entry doors are necessary because they would be the only source of daylight for the residential units behind these doors (Will Cipes, Thomas Safran & Associates, personal communication, October 2012).

### 6.3.1 Aesthetics

Under this alternative, the overall appearance and massing of the former church building from street-level public viewpoints would be similar to the proposed project. However, this alternative would retain slightly more of the original architectural features of the building and would retain all of the features that would be changed under the project that have been determined to be character-defining features in this analysis. Thus, impacts associated with the change to the visual character of the site would be reduced, and would be less than significant, as for the proposed project.

Consistency of this alternative with adopted policies of the City of Long Beach related to aesthetics would be roughly the same as under the project. However, this policy would comply somewhat more fully with the following policy of the Conservation Element because it would preserve slightly more of the character-defining features of the former church building:

- *To identify and preserve sites of outstanding scenic, historic, and cultural significance or recreational potential (p. 11).*

Overall, this alternative's impacts related to aesthetics would be slightly less than those of the project.

### 6.3.2 Cultural Resources

This alternative would preserve slightly more of the character-defining features of the former church building, which would help reduce the project's potential inconsistency with the Bluff Heights Historic District Ordinance, but it would not avoid the project's significant, unavoidable cultural resources impact related to the demolition of the residence at 304 Obispo Avenue. Therefore, cultural resources impacts under this alternative would be reduced in comparison with the project, but would still be significant and unavoidable. All changes to non-character-defining features of the former church building proposed under the project would remain the same under this alternative. Therefore, Mitigation Measure CR-1(b), which requires any alterations to the former church building to be subject to the issuance of a Certificate of Appropriateness by the City of Long Beach Cultural Heritage Commission, would still apply and would reduce cultural resources impacts to the former Immanuel Community Church building to a less than significant level. Overall, this alternative would have slightly less impact on cultural resources than the proposed project.

### 6.3.3 Noise

The Initial Study (Appendix A) identified construction noise and vibration impacts to sensitive receptors as potentially significant but mitigable due to the potential for trucks used during construction at the site to pass near classroom buildings at Horace Mann Elementary School. Under this alternative, the amount of construction at the project site would remain essentially



the same. Therefore, this alternative's impacts related to construction noise and vibration would be the same as those of the proposed project and all mitigation measures recommended for the project would apply.

## 6.4 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

Because the proposed project has significant, unavoidable impacts on cultural resources related to the proposed demolition of the residence at 304 Obispo Avenue, adoption of a project alternative would be necessary in order to avoid this significant environmental impact. Each of the alternatives would incrementally reduce one or more the proposed project's impacts, as discussed below.

The No Project alternative would avoid all of the project's impacts. Consequently, the No Project alternative is considered environmentally superior. However, the No Project alternative would not fulfill the basic objectives of the project stated in Section 2.0, *Project Description*, and discussed throughout this alternatives analysis.

Among the other alternatives being considered, Alternative 2, the Relocate 304 Obispo Avenue Residence alternative, would be considered environmentally superior because it would avoid the project's significant and unavoidable impact on cultural resources related to the proposed demolition of the residence at 304 Obispo Avenue. It would not avoid the project's significant but mitigable impacts on cultural resources related to the proposed changes to the exterior of the Immanuel Community Church building. This alternative would reduce but not completely avoid the project's significant but mitigable impacts related to land use and planning (policy consistency with the Bluff Heights Historic District Ordinance), or its less than significant impacts related to aesthetics. All of the alternatives except the No Project alternative would have the same significant but mitigable impacts related to construction noise and vibration. Alternative 2 would generally meet the project objectives, but would require identification of a suitable and available site for the purpose of relocation of the residence.

Table 6-2 indicates whether each alternative's environmental impact is greater, lesser, or similar to the proposed project.



**Table 6-2  
 Comparison of Environmental Impacts of Alternatives**

| <b>Issue</b>       | <b>Proposed Project</b> | <b>Alternative 1:<br/>No Project</b> | <b>Alternative 2:<br/>Relocate 304<br/>Obispo Avenue<br/>Residence</b> | <b>Alternative 3:<br/>Minimize Exterior<br/>Changes to<br/>Former Church<br/>Building</b> |
|--------------------|-------------------------|--------------------------------------|--|---|
| Aesthetics         | =                       | +                                    | +  | +   |
| Cultural Resources | =                       | +                                    | +  | +   |
| Noise              | =                       | +                                    | =  | =   |
| Overall            | =                       | +                                    | +  | +   |

*+ Superior to the proposed project  
 - Inferior to the proposed project  
 = Similar impact to the proposed project*



## 7.0 REFERENCES AND REPORT PREPARERS

### 7.1 REFERENCES

#### 7.1.1 Bibliography

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#### 7.1.2 Persons Contacted

Craig Chalfant. Long Beach Development Services, Planning Bureau. August-October 2012.

Will Cipes. Thomas Safran & Associates. October 2012.

### 7.2 REPORT PREPARERS

This EIR was prepared by the City of Long Beach, with the assistance of Rincon Consultants, Inc. Consultant staff involved in the preparation of the EIR are listed below.

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## 8.0 COMMENTS and RESPONSES

This section includes comments received during the circulation of the Draft Environmental Impact Report (EIR) for the Safran Senior Housing Project; responses to the comments on the Draft EIR; and corrections and information added to the Final EIR, where appropriate, in response to comments related to the proposed project's environmental effects. Corrections or additional text discussed in the responses to comments are also shown in the text of the Final EIR in ~~striketrough~~ (for deleted text) and underline (for added text) format. (Other minor clarifications and corrections to typographical errors are also shown as corrected in this format, including corrections not based on responses to comments. These changes do not introduce new information or otherwise affect the analysis or conclusions of the EIR).

The Draft EIR was circulated for a 47-day public review period that began on October 18, 2012 and concluded on December 3, 2012. The City received two comment letters on the Draft EIR. Commenters and the page number on which each commenter's letter can be found are listed below.

|    | <b><u>Commenter</u></b>   | <b><u>Page #</u></b> |
|----|---|----------------------|
| 1. | Carol Roland-Nawi, PhD, State Historic Preservation Officer, California State Office Of Historic Preservation | 8-2                  |
| 2. | John Thomas, President, Bluff Heights Neighborhood Association  | 8-6                  |

The comment letters and the City's responses follow. Each comment letter has been numbered sequentially and each separate issue raised by the commenter, if more than one, has also been assigned a number. The responses to each comment identify first the number of the comment letter, and then the number assigned to each issue (Response 2.1, for example, indicates that the response is for the first issue raised in Comment Letter 2).



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Letter 1

November 06, 2012

Craig Chalfant  
City of Long Beach  
Department of Development Services  
333 W. Ocean Boulevard, 5<sup>th</sup> Floor  
Long Beach, CA 90802

RE: Comments on the Cultural Resources Section of the Draft Environmental Impact Report for the Safran Senior Housing Project (SCH#2012091026)

Dear Mr. Chalfant:

Thank you for the opportunity to comment on the above Draft Environmental Impact Report (DEIR) issued under the California Environmental Quality Act (CEQA). I am specifically writing to provide comments in regards to the impact of the proposed project on historical resources. As the State Historic Preservation Officer, my responsibility is to promote the protection of California's irreplaceable heritage resources which includes encouraging the adaptive reuse of built environment resources. I want to commend the City of Long Beach Development Services for considering the rehabilitation of the Immanuel Community Church. My comments are provided in response to the DIER I received from the State Clearinghouse.

Safran & Associates is proposing to convert the Immanuel Community Church building at E. 3<sup>rd</sup> Street in Long Beach to 24 low-income or very low income senior dwelling units, one manager's unit, and associated amenities/common areas. The project also includes demolition of the existing family home and detached garage on the adjacent parcel at 304 Obispo Avenue and construction of a 12-space parking lot serving the project. Both the Immanuel Community Church and residence at 304 Obispo Avenue are contributors to the locally listed Bluff Heights Historic District and are historical resources for the purposes of CEQA. Additionally, the Church is eligible for local listing as an individually eligible local landmark.

The City determined the proposed project would have a significant impact on historical resources because of the demolition 304 Obispo Avenue. In addition, changes to the exterior of the Church could be a significant impact but could be mitigated to less than significant if the changes to the exterior meet the *Secretary of the Interior's Standards for the Treatment of Historic Properties*. I agree with these conclusions.

1.1

Three alternatives are also under consideration to reduce impacts of this proposed project and they include: no project, relocating 304 Obispo Avenue residence, and minimizing exterior changes to the church. After reviewing these alternatives, I strongly

1.2

recommend that Safran & Associates relocate 304 Obispo Avenue within the Bluff Heights Historic District and continue its use as a residence. I am in agreement that demolition would be a significant impact and if the project applicant feels the project cannot proceed without construction of the parking lot, relocating the residence is acceptable mitigation. However, I would also recommend that in addition to siting the residence on a parcel within the historic district that has similar site condition as the current parcel, I would also suggest retaining the use of 304 Obispo Avenue as a residence. By retaining its current use, the building retains an additional important aspect of its significance.



1.2

In addition to supporting the relocation alternative, I would also encourage the applicant to incorporate the alternative to minimize the exterior alterations to the Church. The description and plans provided in the DEIR are not sufficient for me to agree they meet the *Secretary of the Interior's Standards for the Treatment of Historic Properties (SOI Standards)*, however, if the proposed work to the Church includes the identification of character defining features of the building and retention of as many of those features as possible, it is likely it would meet the *SOI Standards*. To further ensure the work meets the *SOI Standards*, the applicant should hire an architect who meets the *Secretary of the Interior's Historic Preservation Qualification Standards* to prepare plans and specifications prior to review by the City of Long Beach's Cultural Heritage Commission.

1.3

In conclusion, my comments are not meant to take a position in support of or against this project, but to encourage the best outcome for historical resources. By incorporating relocation of 304 Obispo Avenue and a rehabilitation project that meets the *SOI Standards*, I feel the project would help mitigate potential significant impacts to these historical resources.

1.4

We thank you for the opportunity to comment on the above project. If you have any further questions, please do not hesitate to contact Amanda Blosser, Historian II, CEQA Coordinator, Local Government Unit at (916) 445-7048 or at [ablosser@parks.ca.gov](mailto:ablosser@parks.ca.gov).

Sincerely,

Carol Roland-Nawi, PhD  
State Historic Preservation Officer

cc: City of Long Beach Cultural Heritage Commission  
Lynette Ferenczy, City of Long Beach Historic Preservation Officer

*Letter 1*

**COMMENTER:** Carol Roland-Nawi, PhD, State Historic Preservation Officer, California State Office of Historic Preservation

**DATE:** December 1, 2012

**RESPONSE:**

In the first two paragraphs of this comment letter, the commenter states their responsibility as the State Historic Preservation Officer to promote the protection of California's irreplaceable heritage resources, thanks the City for considering the rehabilitation of the Immanuel Community Church building, and summarizes the proposed project.

Response 1.1

The commenter agrees with the conclusions of the DEIR regarding the significance of the project's impacts to cultural resources. This comment does not question or otherwise indicate changes to the analysis or conclusions of the Draft EIR.

Response 1.2

The commenter recommends that the project applicant relocate the 304 Obispo Avenue residence within the Bluff Heights Historic District and continue its use as a residence, agreeing with the DEIR that demolition of this residence would be a significant impact, and recommending relocation of this residence per DEIR Alternative 2 (the "Relocate 304 Obispo Avenue Residence" alternative).

The DEIR acknowledges that relocation, rather than demolition, of the residence at 304 Obispo Avenue would avoid the significant impacts to this historic resource caused by the project. However, no suitable and available parcel for relocation of this residence has been identified by the City, the applicant, or the commenter. The City acknowledges this comment and will consider relocation of the residence if a suitable, available parcel is identified in time for such relocation. Unless a feasible relocation site is identified, the project's impact would be unavoidably significant as identified in the DEIR.

Response 1.3

The commenter encourages the applicant to incorporate DEIR Alternative 3 (the "Minimize Exterior Changes to Former Church Building" alternative) into the project, and states that if the proposed work to the Church includes the identification of character defining features of the building and retention of as many of those features as possible, it is likely that the project would meet the Secretary of the Interior's Standards for the Treatment of Historic Properties (SOI Standards).

Section 6.3 of the DEIR fully analyzes Alternative 3, including an analysis of character-defining features of the church building. It concludes that although eliminating certain changes to character-defining features of the exterior of the building would help avoid the project's



significant but mitigable impacts to this cultural resource, the feasibility of this alternative may be limited by certain factors. For example, the project applicant has stated that the new doors at the south elevation are required to make the building ADA accessible. Also, the new glass paneled doors at the west elevation that would replace the existing solid wood entry doors are necessary because they would be the only source of daylight for the residential units behind these doors.

Response 1.4

The commenter states that they are not for or against the project but are instead simply advocating for the best outcome for historical resources, and summarizes their previous comments, as analyzed above.



To: Craig Chalfant

City of Long Beach

Department of Development Services

RE: Public Comments for DEIR for Safran Senior Housing Project

3215 E. 3<sup>rd</sup> Street and 304 Obispo Avenue

From: Bluff Heights Neighborhood Association (BHNA)/Historic District

Sent via Email December 3, 2012

Date: December 1, 2012

The BHNA has been in favor of the adaptive reuse of the former Immanuel Church Building. We had met with representatives of the developer and provided comments relative to the project and the potential impacts to both the church and the home located at 304 Obispo Ave. The developer was also present at a neighborhood meeting where the proposed project was introduced to the BHNA.

2.1

Recently, the BHNA provided both written and verbal comments to the Long Beach Cultural Heritage Commission (CHC) regarding the project urging the following considerations to alleviate potential negative impacts to both the church and the SFR; both considered contributing to our Historic District. The BHNA encourages support of the Alternate #2 as described in the DEIR.

2.2

- 1. Mitigate impacts to the church via a Certificate of Appropriateness from the Long Beach Cultural Heritage Commission in accordance with the Secretary of Interior Standards.
- 2. Relocate the SFR at 304 Obispo Ave avoiding demolition.

The BHNA remains committed to assist the developer to seek relocation options for the SFR at 304 Obispo Ave. We disagree with the findings of the DEIR that the "No Project" alternative would be the only position to mitigate the impacts to these historic and cultural resources within the BHNA Historic District. The SFR does not necessarily have to be relocated within the BHNA Historic District. The positive adaptive reuse project can be achieved by working with the CHC with minimal exterior alterations. Furthermore, the developer must demonstrate what attempts has been made toward the relocation of the SFR.

2.3

2.4

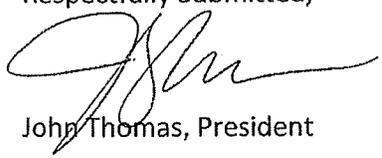
2.5

2.6

The BHNA has confidence that working with the City of Long Beach Cultural Heritage Commission, minimal alterations to the exterior of the church can be achieved while ensuring the success of the worthy project. With respect to the SFR at 304 Obispo Ave, the BHNA has also have made recommendations for alternative appropriate sites for consideration to the developer.

2.7

Respectfully Submitted,



John Thomas, President

Bluff Heights Neighborhood Association

*Letter 2*

**COMMENTER:** John Thomas, President, Bluff Heights Neighborhood Association

**DATE:** December 1, 2012

**RESPONSE:**

Response 2.1

The commenter summarizes the BHNA's involvement with the project to date. This comment does not question or otherwise indicate changes to the analysis or conclusions of the Draft EIR.

Response 2.2

The commenter states that they support the following actions:

1. Mitigate impacts to the church via a Certificate of Appropriateness from the Long Beach Cultural Heritage Commission in accordance with the Secretary of the Interior Standards.
2. Relocating the single-family residence (SFR) at 304 Obispo Avenue to avoid its demolition (DEIR Alternative #2).

This comment does not question or otherwise indicate changes to the analysis or conclusions of the Draft EIR.

Response 2.3

The commenter states that they are committed to assisting the developer of the project to seek relocation options for the residence. The City acknowledges this comment and will consider relocation of the residence if a suitable, available parcel is identified in time for such relocation.

The commenter also states that they disagree with the DEIR finding that the "No Project" alternative would be the only "position" that would mitigate the project's impacts to cultural resources. However, the DEIR does not make such a finding. Rather, the DEIR concludes that Alternative 2, (the "Relocate 304 Obispo Avenue Residence" alternative), would mitigate impacts to the 304 Obispo Avenue residence, and that Alternative 3, (the "Minimize Exterior Changes to Former Church Building" alternative), would help avoid the project's significant but mitigable impacts to this cultural resource .

Response 2.4

The commenter states that the 304 Obispo Avenue residence does not have to be relocated within the BHNA Historic District. The DEIR acknowledges this fact, although Section 6.2 of the DEIR does state that, in order to *fully* avoid impacts to historic resources through this alternative, it would be necessary to relocate the residence within the Bluff Heights Historic District, which is the area to which this property is a contributor and which provides the residence with the context that gives it significance.



Response 2.5

The commenter states that the project can be carried out with minimal exterior alterations to the church building. Section 6.3 of the DEIR fully analyzes the “Minimize Exterior Changes to Former Church Building Alternative”, including an analysis of character-defining features of the church building. It concludes that although eliminating certain changes to character-defining features of the exterior of the building would help avoid the project’s significant but mitigable impacts to this cultural resource, the feasibility of this alternative may be limited by certain factors. For example, the project applicant has stated that the new doors at the south elevation are required to make the building ADA accessible. Also, the new glass paneled doors at the west elevation that would replace the existing solid wood entry doors are necessary because they would be the only source of daylight for the residential units behind these doors.

Response 2.6

The commenter states that the developer must demonstrate what attempts have been made toward the relocation of the single family residence, and that the BHNA has made recommendations to the developer for appropriate alternative sites. No suitable and available parcel for relocation of this residence has been identified by the City or the applicant, and the commenter does not identify such sites. The City acknowledges this comment and will consider relocation of the residence if a suitable, available parcel is identified in time for such relocation.

Response 2.7

The commenter expresses confidence that minimal changes to the exterior of the church can be made while ensuring success of the project, and reiterates that they have made recommendations to the developer for alternative appropriate sites for relocation of the SFR at 304 Obispo Avenue. Again, while the City acknowledges this comment and will consider relocation of the residence if a suitable, available parcel is identified in time for such relocation, no suitable and available parcel for relocation of this residence has been identified by the City or the applicant, and the commenter does not identify such sites.



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## **Appendix A to the Final EIR**

Initial Study, Notice of Preparation (NOP),  
and NOP Comment Letters

City of Long Beach

# **Safran Senior Housing Project**

## **Initial Study**

**September 2012**



*Environmental Scientists Planners Engineers*

---

# Safran Senior Housing Project

## Initial Study

*Prepared by:*

**City of Long Beach**  
**Development Services Department, Planning Division**  
333 West Ocean Boulevard, 5<sup>th</sup> Floor  
Long Beach, CA 90802  
Contact: Craig Chalfant  
Planner

*Prepared with the assistance of:*

**Rincon Consultants, Inc.**  
180 North Ashwood Avenue  
Ventura, California 93003

*September 2012*

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- Appendix A Air Quality/Greenhouse Gas Emissions Modeling Results
- Appendix B Traffic Technical Memorandum
- Appendix C Noise Measurement and Modeling Results



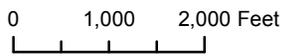
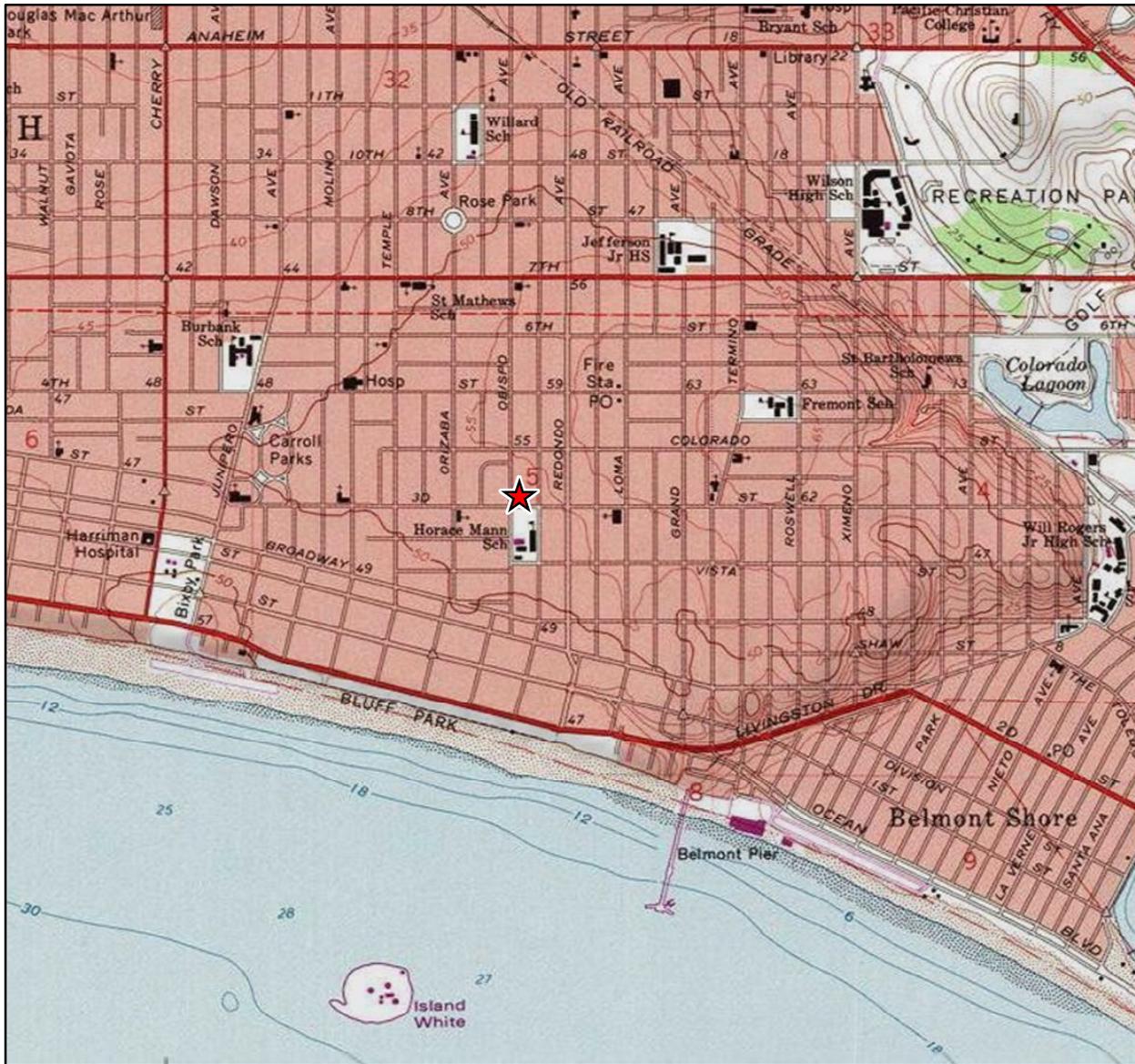
## INITIAL STUDY

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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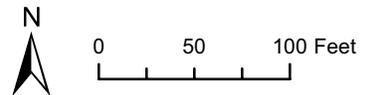
Regional Location

Figure 1



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

 Project Boundaries

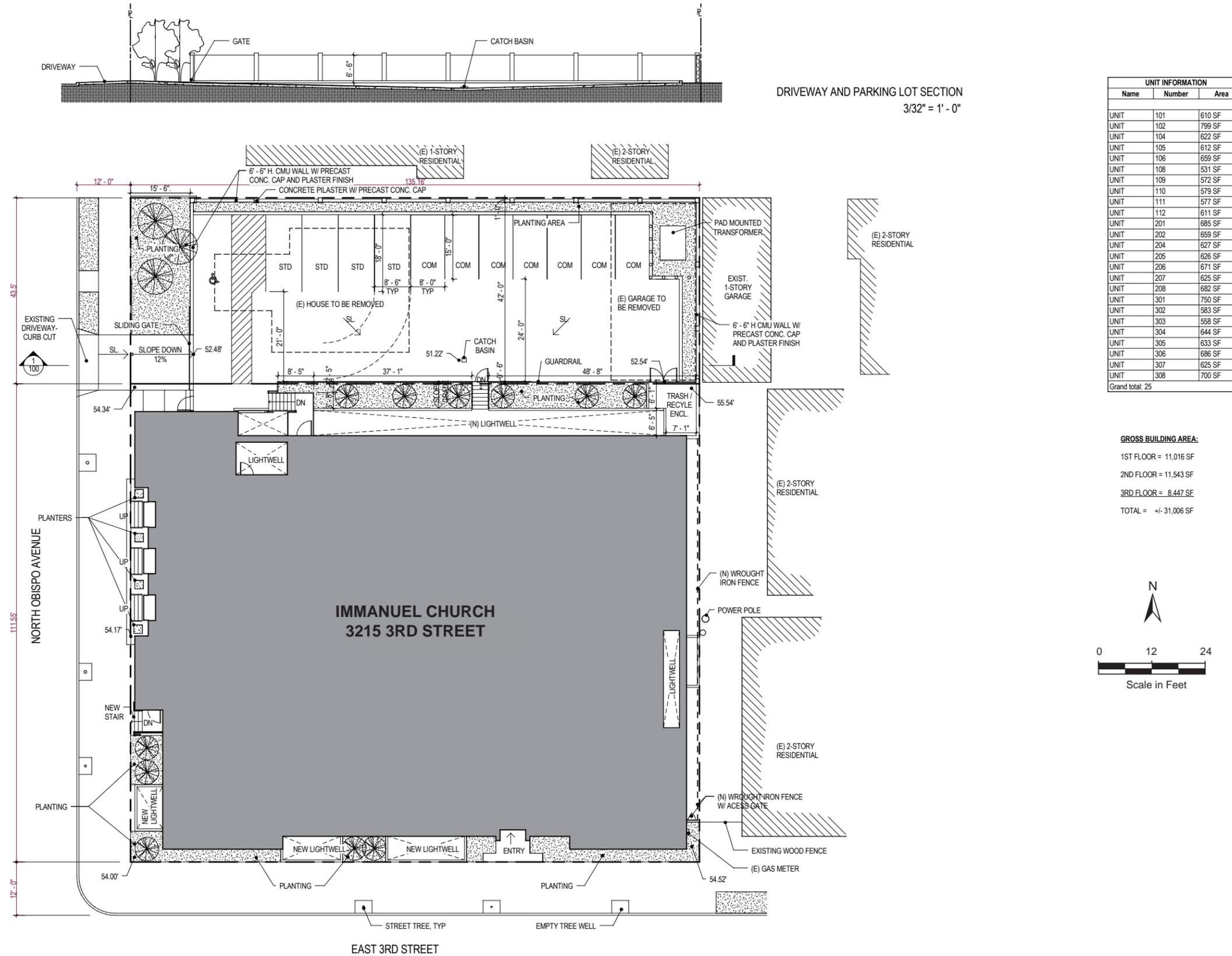


Aerial View of Project Site and Surrounding Uses

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.
- **Variances** – The project would require approval of variances 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<br>Significant<br>Impact | Potentially<br>Significant<br>Unless<br>Mitigation<br>Incorporated | Less than<br>Significant<br>Impact | No<br>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 -- Would the Project:</b>   |                                |  |                                     |                                     |
| 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  $NO_x$
- 550 pounds per day CO
- 150 pounds per day of  $PM_{10}$
- 55 pounds per day of  $PM_{2.5}$
- 150 pounds per day  $SO_x$

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  $NO_x$ , CO,  $PM_{10}$  and  $PM_{2.5}$ . 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.

|  |                                       |   |                                     |                  |
|--|---------------------------------------|---|-------------------------------------|------------------|
|  | <b>Potentially Significant Impact</b> | <b>Potentially Significant Unless Mitigation Incorporated</b> | <b>Less than Significant Impact</b> | <b>No Impact</b> |
|--|---------------------------------------|---|-------------------------------------|------------------|

**IV. BIOLOGICAL RESOURCES --**

Would the Project:

- |   |                          |                          |                          |                                     |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| <p>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?</p> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| <p>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?</p>   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| <p>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?</p>   | <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 |
|--|--------------------------------|--|------------------------------|-----------|
|--|--------------------------------|--|------------------------------|-----------|

**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 |
|--|--------------------------------|--|------------------------------|-----------|
|--|--------------------------------|--|------------------------------|-----------|

**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 |
|--|--------------------------------|--|------------------------------|-----------|
|--|--------------------------------|--|------------------------------|-----------|

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<br>Significant<br>Impact | Potentially<br>Significant<br>Unless<br>Mitigation<br>Incorporated | Less than<br>Significant<br>Impact | No<br>Impact |
|--------------------------------------|--|------------------------------------|--------------|
|--------------------------------------|--|------------------------------------|--------------|

**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 |
|--------------------------------|--|------------------------------|-----------|
|--------------------------------|--|------------------------------|-----------|

**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?

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**

| <b>Emission Source</b> | <b>Annual Emissions</b>    |
|------------------------|----------------------------|
| <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**.

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

**VIII. HAZARDS AND HAZARDOUS MATERIALS** - Would the Project:

|  |                          |                          |                                     |                                     |
|--|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?  | <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 |
|--|--------------------------------|--|------------------------------|-----------|
|--|--------------------------------|--|------------------------------|-----------|

**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"/> |
|--------------------------|--------------------------|--------------------------|-------------------------------------|

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 |
|--|--------------------------------|--|------------------------------|-----------|
|--|--------------------------------|--|------------------------------|-----------|

**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 |
|--|--------------------------------|--|------------------------------|-----------|
|--|--------------------------------|--|------------------------------|-----------|

**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<br>Significant<br>Impact | Potentially<br>Significant<br>Unless<br>Mitigation<br>Incorporated | Less than<br>Significant<br>Impact | No<br>Impact                        |
|---|--------------------------------------|--|------------------------------------|-------------------------------------|
| <b>X. <u>LAND USE AND PLANNING</u> --</b><br>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<br>Significant<br>Impact | Potentially<br>Significant<br>Unless<br>Mitigation<br>Incorporated | Less than<br>Significant<br>Impact | No<br>Impact                        |
|---|--------------------------------------|--|------------------------------------|-------------------------------------|
| <b>XII. NOISE – Would the Project result in:</b>  |                                      |  |                                    |                                     |
| 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.

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

**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 |
|--|--------------------------------|--|------------------------------|-----------|
|--|--------------------------------|--|------------------------------|-----------|

**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 |
|--|--------------------------------|--|------------------------------|-----------|
|--|--------------------------------|--|------------------------------|-----------|

**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 |
|--|--------------------------------|--|------------------------------|-----------|
|--|--------------------------------|--|------------------------------|-----------|

**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"/> |
|--------------------------|--------------------------|-------------------------------------|--------------------------|

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 |
|--|--------------------------------|--|------------------------------|-----------|
|--|--------------------------------|--|------------------------------|-----------|

**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"/> |
|--------------------------|--------------------------|--------------------------|-------------------------------------|

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"/> |
|--------------------------|--------------------------|--------------------------|-------------------------------------|

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"/> |
|--------------------------|--------------------------|--------------------------|-------------------------------------|



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

**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<br>Significant<br>Impact | Potentially<br>Significant<br>Unless<br>Mitigation<br>Incorporated | Less than<br>Significant<br>Impact | No<br>Impact |
|--|--------------------------------------|--|------------------------------------|--------------|
|--|--------------------------------------|--|------------------------------------|--------------|

**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 |
|--|--------------------------------|--|------------------------------|-----------|
|--|--------------------------------|--|------------------------------|-----------|

**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<br>Significant<br>Impact | Potentially<br>Significant<br>Unless<br>Mitigation<br>Incorporated | Less than<br>Significant<br>Impact | No<br>Impact |
|--|--------------------------------------|--|------------------------------------|--------------|
|--|--------------------------------------|--|------------------------------------|--------------|

**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 to the Initial Study**

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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

---

### 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

---

### 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        |
| 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        |
| 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> |

### 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         |
| 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         | 2.37      | 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> |
|-----------------------|---------------------------|

**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 to the Initial Study**

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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.

| 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

# **Appendix C to the Initial Study**

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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 |



# CITY OF LONG BEACH

DEPARTMENT OF DEVELOPMENT SERVICES

333 W. Ocean Blvd. Long Beach, CA 90802 (562) 570-6458 - FAX (562) 570-6068

## NOTICE OF PREPARATION

**TO:** Agencies, Organizations and Interested Parties

**SUBJECT:** Notice of Preparation of a Draft Environmental Impact Report in Compliance with Title 14, Section 15082(a) of the California Code of Regulations

Pursuant to Public Resources Code Section 21165 and the Guidelines for the California Environmental Quality Act (CEQA) Section 15050, the City of Long Beach is the Lead Agency responsible for preparation of an Environmental Impact Report (EIR) addressing potential impacts associated with the project identified below.

**AGENCIES:** The purpose of this notice is to serve as a Notice of Preparation (NOP) of an EIR pursuant to the State CEQA Guidelines Section 15082, and solicit comments and suggestions regarding the scope and content of the EIR to be prepared for the proposed project. Specifically, the City of Long Beach requests input on the environmental information that is germane to your agency's statutory responsibility in connection with the proposed project. Your agency may rely on the Draft EIR prepared by the City when considering permits or other approvals for this project.

**ORGANIZATIONS AND INTERESTED PARTIES:** The City of Long Beach requests your comments and concerns regarding the proposed scope and content of the environmental information to be included in the EIR.

**PROJECT TITLE:** Safran Senior Housing Project

**PROJECT LOCATION:** 3215 E. 3<sup>rd</sup> Street and 304 Obispo Avenue

**PROJECT DESCRIPTION:** The proposed project involves conversion of the building that formerly housed the Immanuel Community Church, located at 3215 E. 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 of floor area. The project also involves demolition of the existing single-family home and detached garage, located at 304 Obispo Avenue, for construction of a surface parking lot to serve this project. Both properties are located in the Bluff Heights Historic District of Long Beach.

**PROBABLE ENVIRONMENTAL EFFECTS OF THE PROJECT:** Based on the findings of the Initial Study, the proposed project could have potentially significant impacts on the following environmental factors:

- Aesthetics**
- Cultural/Historic Resources**
- Land Use/Planning**
- Noise**

**PUBLIC REVIEW PERIOD:** This NOP is available for public review and comment pursuant to California Code of Regulations, Title 14, Section 15082(b). The public review and comment period during which the City of Long Beach will receive comments on the NOP for this proposed project is:

**Beginning:** Thursday, September 13, 2012      **Ending:** Friday, October 12, 2012

**THE NOP AND INITIAL STUDY ARE AVAILABLE FOR PUBLIC REVIEW AT THE FOLLOWING LOCATIONS:**

City Hall, 333 W. Ocean Boulevard, 5<sup>th</sup> Floor  
Long Beach Main Library, 101 Pacific Avenue  
Online at: [www.lbds.info/planning/environmental\\_planning/environmental\\_reports.asp](http://www.lbds.info/planning/environmental_planning/environmental_reports.asp)

**RESPONSES AND COMMENTS:** Please list a contact person for your agency or organization, include U.S. mail and email addresses, and send your comments to:

Craig Chalfant  
Planning Bureau, Development Services Department  
City of Long Beach  
333 W. Ocean Boulevard, 5<sup>th</sup> Floor  
Long Beach, CA 90802

Or via email to: [craig.chalfant@longbeach.gov](mailto:craig.chalfant@longbeach.gov)



EDMUND G. BROWN JR.  
GOVERNOR

STATE OF CALIFORNIA  
GOVERNOR'S OFFICE of PLANNING AND RESEARCH  
STATE CLEARINGHOUSE AND PLANNING UNIT



KEN ALEY  
DIRECTOR

**Notice of Preparation**

September 13, 2012

To: Reviewing Agencies

Re: Safran Senior Housing Project  
SCH# 2012091026

Attached for your review and comment is the Notice of Preparation (NOP) for the Safran Senior Housing Project draft Environmental Impact Report (EIR).

Responsible agencies must transmit their comments on the scope and content of the NOP, focusing on specific information related to their own statutory responsibility, within 30 days of receipt of the NOP from the Lead Agency. This is a courtesy notice provided by the State Clearinghouse with a reminder for you to comment in a timely manner. We encourage other agencies to also respond to this notice and express their concerns early in the environmental review process.

Please direct your comments to:

**Craig Chalfant**  
**City of Long Beach, Development Services/Planning Bureau**  
**333 W. Ocean Boulevard, 5th Floor**  
**Long Beach, CA 90802**

with a copy to the State Clearinghouse in the Office of Planning and Research. Please refer to the SCH number noted above in all correspondence concerning this project.

If you have any questions about the environmental document review process, please call the State Clearinghouse at (916) 445-0613.

Sincerely,

Scott Morgan  
Director, State Clearinghouse

Attachments

cc: Lead Agency

**Document Details Report  
State Clearinghouse Data Base**

**SCH#** 2012091026  
**Project Title** Safran Senior Housing Project  
**Lead Agency** Long Beach, City of

---

**Type** NOP Notice of Preparation

**Description** The proposed project would involve conversion of the building that formerly housed the Immanuel Community Church, located at 3215 East 3rd Street, into a senior housing project consisting of 24 independent low or very low income senior dwelling units, one manger's unit and associated amenities/common areas in 31,006 sf. 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. Vehicular access to the senior housing project would be from Obispo Avenue into the proposed parking lot (or to street parking on East 3rd Street, Obispo Avenue, or other local streets), while pedestrian access would be from East 3rd Street, Obispo Avenue, and the proposed parking lot on the north side of the building.

---

**Lead Agency Contact**

**Name** Craig Chalfant  
**Agency** City of Long Beach, Development Services/Planning Bureau  
**Phone** (562) 570-6368 **Fax**  
**email**  
**Address** 333 W. Ocean Boulevard, 5th Floor  
**City** Long Beach **State** CA **Zip** 90802

---

**Project Location**

**County** Los Angeles  
**City** Long Beach  
**Region**  
**Cross Streets** East 3rd Street and Obispo Avenue  
**Lat / Long** 33° 46' 5" N / 118° 09' 15" W  
**Parcel No.** 7257-020-025 & 7257-020-022

| <b>Township</b> | <b>Range</b> | <b>Section</b> | <b>Base</b> |
|-----------------|--------------|----------------|-------------|
|-----------------|--------------|----------------|-------------|

---

**Proximity to:**

**Highways** Hwy 1, 19, 22  
**Airports** No  
**Railways**  
**Waterways** Alamitos Bay, Los Cerritos Channel, Pacific Ocean  
**Schools** Horace Mann; Fremont...  
**Land Use** Vacant church, single family home  
Z: Two-Family Residential; GPD: Mixed Style Homes

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**Project Issues** Aesthetic/Visual; Agricultural Land; Air Quality; Archaeologic-Historic; Biological Resources; Coastal Zone; Drainage/Absorption; Flood Plain/Flooding; Forest Land/Fire Hazard; Geologic/Seismic; Minerals; Noise; Population/Housing Balance; Public Services; Recreation/Parks; Schools/Universities; Septic System; Sewer Capacity; Soil Erosion/Compaction/Grading; Solid Waste; Toxic/Hazardous; Traffic/Circulation; Vegetation; Water Quality; Water Supply; Wetland/Riparian; Growth Inducing; Landuse; Cumulative Effects

---

**Reviewing Agencies** Resources Agency; California Coastal Commission; Office of Historic Preservation; Department of Parks and Recreation; Department of Water Resources; Department of Fish and Game, Region 5; Native American Heritage Commission; California Highway Patrol; Department of Housing and Community Development; Caltrans, District 7

**Document Details Report  
State Clearinghouse Data Base**

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**Date Received** 09/13/2012

**Start of Review** 09/13/2012

**End of Review** 10/12/2012

Resources Agency

- Resources Agency  
Nadell Gayou
- Dept. of Boating & Waterways  
Nicolle Wong
- California Coastal Commission  
Elizabeth A. Fuchs
- Colorado River Board  
Gerald R. Zimmerman
- Dept. of Conservation  
Elizabeth Carpenter
- California Energy Commission  
Eric Knight
- Cal Fire  
Dan Foster
- Central Valley Flood Protection Board  
James Herola
- Office of Historic Preservation  
Ron Parsons
- Dept of Parks & Recreation Environmental Stewardship Section
- California Department of Resources, Recycling & Recovery  
Sue O'Leary
- S.F. Bay Conservation & Dev't. Comm.  
Steve McAdam
- Dept. of Water Resources Agency  
Nadell Gayou

Fish and Game

- Dept. of Fish & Game  
Scott Flint
- Environmental Services Division  
Donald Koch
- Fish & Game Region 1  
Donald Koch

Fish & Game Region 1E

- Laurie Harnsberger
- Fish & Game Region 2  
Jeff Drongesen
- Fish & Game Region 3  
Charles Armor
- Fish & Game Region 4  
Julie Vance
- Fish & Game Region 5  
Leslie Newton-Reed
- Habitat Conservation Program
- Fish & Game Region 6  
Gabrina Gatchel
- Habitat Conservation Program
- Fish & Game Region 6 IM  
Brad Henderson
- Inyo/Mono, Habitat Conservation Program
- Dept. of Fish & Game M  
George Isaac
- Marine Region

Native American Heritage Comm.

- Debbie Treadway
- Public Utilities Commission  
Leo Wong
- Santa Monica Bay Restoration  
Guangyu Wang
- State Lands Commission  
Jennifer Deleong
- Tahoe Regional Planning Agency (TRPA)  
Cherry Jacques

Business, Trans & Housing

- Caltrans - Division of Aeronautics  
Philip Crimmins
- Caltrans - Planning  
Terri Pencovic
- California Highway Patrol  
Suzann Ikeuchi
- Office of Special Projects  
Housing & Community Development  
CEQA Coordinator  
Housing Policy Division

Other Departments

- Food & Agriculture  
Sandra Schubert
- Dept. of Food and Agriculture  
Ron Parsons
- Dept. of General Services  
Public School Construction
- Dept. of General Services  
Anna Garbeff
- Environmental Services Section
- Dept. of Public Health  
Jeffery Worth
- Dept. of Health/Drinking Water
- Delta Stewardship Council  
Kevan Samsam

Independent Commissions/Boards

- Delta Protection Commission  
Michael Machado
- Cal EMA (Emergency Management Agency)  
Dennis Castrillo

Caltrans, District 8

- Dan Kopulsky
- Caltrans, District 9  
Gayle Rosander
- Caltrans, District 10  
Tom Dumas
- Caltrans, District 11  
Jacob Armstrong
- Caltrans, District 12  
Marlon Regisford

Cal EPA

- Air Resources Board  
Airport/Energy Projects  
Jim Lerner
- Transportation Projects  
Douglas Ito
- Industrial Projects  
Mike Tollstrup
- State Water Resources Control Board  
Regional Programs Unit  
Division of Financial Assistance
- State Water Resources Control Board  
Student Intern, 401 Water Quality Certification Unit  
Division of Water Quality
- State Water Resources Control Board  
Phil Crader  
Division of Water Rights
- Dept. of Toxic Substances Control  
CEQA Tracking Center
- Department of Pesticide Regulation  
CEQA Coordinator

Regional Water Quality Control Board (RWQCB)

- RWQCB 1  
Cathleen Hudson  
North Coast Region (1)
- RWQCB 2  
Environmental Document Coordinator  
San Francisco Bay Region (2)
- RWQCB 3  
Central Coast Region (3)
- RWQCB 4  
Teresa Rodgers  
Los Angeles Region (4)
- RWQCB 5S  
Central Valley Region (5)
- RWQCB 5F  
Central Valley Region (5)  
Fresno Branch Office
- RWQCB 5R  
Central Valley Region (5)  
Redding Branch Office
- RWQCB 6  
Lahontan Region (6)
- RWQCB 6V  
Lahontan Region (6)  
Victorville Branch Office
- RWQCB 7  
Colorado River Basin Region (7)
- RWQCB 8  
Santa Ana Region (8)
- RWQCB 9  
San Diego Region (9)

Other

Conservancy

**NATIVE AMERICAN HERITAGE COMMISSION**

915 CAPITOL MALL, ROOM 364  
SACRAMENTO, CA 95814  
(916) 653-6251  
Fax (916) 657-5390  
Web Site [www.nahc.ca.gov](http://www.nahc.ca.gov)  
ds\_nahc@pacbell.net



September 26, 2012

Mr. Craig Chalfant, Planner

**City of Long Beach Development Services Department,  
Planning Bureau**

333 West Ocean Boulevard, 5<sup>th</sup> Floor  
Long Beach, CA 90802

Re: SCH#2012091026; CEQA Notice of Preparation (NOP); draft Environmental Impact Report (DEIR); for the "Safran Senior Housing Project;" located in the City of Long Beach; Los Angeles County, California

Dear Mr. Chalfant:

The Native American Heritage Commission (NAHC) is the State of California 'Trustee Agency' for the protection and preservation of Native American cultural resources pursuant to California Public Resources Code §21070 and affirmed by the Third Appellate Court in the case of EPIC v. Johnson (1985: 170 Cal App. 3<sup>rd</sup> 604).

This letter includes state and federal statutes relating to Native American historic properties or resources of religious and cultural significance to American Indian tribes and interested Native American individuals as 'consulting parties' under both state and federal law. State law also addresses the freedom of Native American Religious Expression in Public Resources Code §5097.9.

The California Environmental Quality Act (CEQA – CA Public Resources Code 21000-21177, amendments effective 3/18/2010) requires that any project that causes a substantial adverse change in the significance of an historical resource, that includes archaeological resources, is a 'significant effect' requiring the preparation of an Environmental Impact Report (EIR) per the CEQA Guidelines defines a significant impact on the environment as 'a substantial, or potentially substantial, adverse change in any of physical conditions within an area affected by the proposed project, including ... objects of historic or aesthetic significance.' In order to comply with this provision, the lead agency is required to assess whether the project will have an adverse impact on these resources within the 'area of potential effect (APE), and if so, to mitigate that effect. The NAHC recommends that the lead agency request that the NAHC do a Sacred Lands File search as part of the careful planning for the proposed project.

The NAHC "Sacred Sites," as defined by the Native American Heritage Commission and the California Legislature in California Public Resources Code §§5097.94(a) and 5097.96. Items in the NAHC Sacred Lands Inventory are confidential and exempt from the Public Records Act pursuant to California Government Code §6254 (r).

Early consultation with Native American tribes in your area is the best way to avoid unanticipated discoveries of cultural resources or burial sites once a project is underway. Culturally affiliated tribes and individuals may have knowledge of the religious and cultural significance of the historic properties in the project area (e.g. APE). We strongly urge that you make contact with the list of Native American Contacts on the attached list of Native American contacts, to see if your proposed project might impact Native American cultural resources and to obtain their recommendations concerning the proposed project. Pursuant to CA Public Resources Code § 5097.95, the NAHC requests cooperation from other public agencies in order that the Native American consulting parties be provided pertinent project information. Consultation with Native American communities is also a matter of environmental justice as defined by California Government Code §65040.12(e). Pursuant to CA Public Resources Code §5097.95, the NAHC requests that pertinent project information be provided consulting tribal parties, including archaeological studies. The NAHC recommends *avoidance* as defined by CEQA Guidelines §15370(a) to pursuing a project that would damage or destroy Native American cultural resources and California Public Resources Code Section 21083.2 (Archaeological Resources) that requires documentation, data recovery of cultural resources, construction to avoid sites and the possible use of covenant easements to protect sites.

Furthermore, the NAHC if the proposed project is under the jurisdiction of the statutes and regulations of the National Environmental Policy Act (e.g. NEPA; 42 U.S.C. 4321-43351). Consultation with tribes and interested Native American consulting parties, on the NAHC list, should be conducted in compliance with the requirements of federal NEPA and Section 106 and 4(f) of federal NHPA (16 U.S.C. 470 *et seq*), 36 CFR Part 800.3 (f) (2) & .5, the President's Council on Environmental Quality (CSQ, 42 U.S.C 4371 *et seq.* and NAGPRA (25 U.S.C. 3001-3013) as appropriate. The 1992 *Secretary of the Interiors Standards for the Treatment of Historic Properties* were revised so that they could be applied to all historic resource types included in the National Register of Historic Places and including cultural landscapes. Also, federal Executive Orders Nos. 11593 (preservation of cultural environment), 13175 (coordination & consultation) and 13007 (Sacred Sites) are helpful, supportive guides for Section 106 consultation. The aforementioned Secretary of the Interior's *Standards* include recommendations for all 'lead agencies' to consider the historic context of proposed projects and to "research" the cultural landscape that might include the 'area of potential effect.'

Confidentiality of "historic properties of religious and cultural significance" should also be considered as protected by California Government Code §6254(r) and may also be protected under Section 304 of the NHPA or at the Secretary of the Interior discretion if not eligible for listing on the National Register of Historic Places. The Secretary may also be advised by the federal Indian Religious Freedom Act (cf. 42 U.S.C., 1996) in issuing a decision on whether or not to disclose items of religious and/or cultural significance identified in or near the APEs and possibility threatened by proposed project activity.

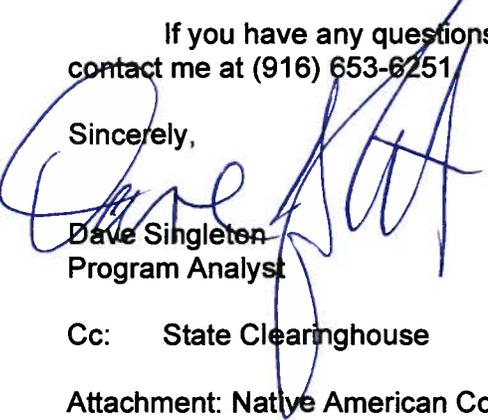
Furthermore, Public Resources Code Section 5097.98, California Government Code §27491 and Health & Safety Code Section 7050.5 provide for provisions for inadvertent discovery of human remains mandate the processes to be followed in the event of a discovery of human remains in a project location other than a 'dedicated cemetery'.

To be effective, consultation on specific projects must be the result of an ongoing relationship between Native American tribes and lead agencies, project proponents and their contractors, in the opinion of the NAHC. Regarding tribal consultation, a relationship built around regular meetings and informal involvement with local tribes will lead to more qualitative consultation tribal input on specific projects.

Finally, when Native American cultural sites and/or Native American burial sites are prevalent within the project site, the NAHC recommends 'avoidance' of the site as referenced by CEQA Guidelines Section 15370(a).

If you have any questions about this response to your request, please do not hesitate to contact me at (916) 653-6251

Sincerely,



Dave Singleton  
Program Analyst

Cc: State Clearinghouse

Attachment: Native American Contact List

**Native American Contacts  
Los Angeles County  
September 26, 2012**

LA City/County Native American Indian Comm  
Ron Andrade, Director  
3175 West 6th St, Rm. 403  
Los Angeles , CA 90020  
randrade@css.lacounty.gov  
(213) 351-5324  
(213) 386-3995 FAX

Ti'At Society/Inter-Tribal Council of Pimu  
Cindi M. Alvitre, Chairwoman-Manisar  
3094 Mace Avenue, Apt. B Gabrielino  
Costa Mesa, , CA 92626  
calvitre@yahoo.com  
(714) 504-2468 Cell

Tongva Ancestral Territorial Tribal Nation  
John Tommy Rosas, Tribal Admin.  
Private Address Gabrielino Tongva  
,  
**tattnlaw@gmail.com**  
310-570-6567

Gabrieleno/Tongva San Gabriel Band of Mission  
Anthony Morales, Chairperson  
PO Box 693 Gabrielino Tongva  
San Gabriel , CA 91778  
GTTribalcouncil@aol.com  
(626) 286-1632  
(626) 286-1758 - Home  
(626) 286-1262 -FAX

Gabrielino Tongva Nation  
Sam Dunlap, Cultural Resources Director  
P.O. Box 86908 Gabrielino Tongva  
Los Angeles , CA 90086  
samdunlap@earthlink.net  
  
(909) 262-9351 - cell

Gabrielino Tongva Indians of California Tribal Council  
Robert F. Dorame, Tribal Chair/Cultural Resources  
P.O. Box 490 Gabrielino Tongva  
Bellflower , CA 90707  
**gtongva@verizon.net**  
562-761-6417 - voice  
562-761-6417- fax

Gabrielino-Tongva Tribe  
Bernie Acuna  
1875 Century Pk East #1500 Gabrielino  
Los Angeles , CA 90067  
(619) 294-6660-work  
(310) 428-5690 - cell  
(310) 587-0170 - FAX  
bacuna1@gabrieinotribe.org

Gabrielino-Tongva Tribe  
Linda Candelaria, Chairwoman  
1875 Century Pk East #1500 Gabrielino  
Los Angeles , CA 90067  
lcandelaria1@gabrielinoTribe.org  
626-676-1184- cell  
(310) 587-0170 - FAX

**This list is current only as of the date of this document.**

**Distribution of this list does not relieve any person of the statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.**

**This list is applicable for contacting local Native Americans with regard to cultural resources for the proposed SCH#2012091026; CEQA Notice of Preparation (NOP); draft Environmental Impact Report (DEIR) for the Safran Senior Housing Project; located in the City of Long Beach; Los Angeles County, California.**

**Native American Contacts  
Los Angeles County  
September 26, 2012**

Gabrieleno Band of Mission Indians  
Andrew Salas, Chairperson  
P.O. Box 393                      Gabrielino  
Covina                      , CA 91723  
(626) 926-4131  
gabrielenoindians@yahoo.  
com

**This list is current only as of the date of this document.**

**Distribution of this list does not relieve any person of the statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.**

**This list is applicable for contacting local Native Americans with regard to cultural resources for the proposed SCH#2012091026; CEQA Notice of Preparation (NOP); draft Environmental Impact Report (DEIR) for the Safran Senior Housing Project; located in the City of Long Beach; Los Angeles County, California.**



September 27, 2012

Mr. Craig Chalfant  
Planning Bureau, Development Services Department  
City of Long Beach  
333 W. Ocean Boulevard, 5<sup>th</sup> floor  
Long Beach, CA 90802

Subject: **RESPONSE TO INITIAL STUDY FOR  
SAFRAN SENIOR HOUSING PROJECT  
Draft Environmental Impact Report/September 2012**

Long Beach Heritage concurs that the conversion of the church (originally the Immanuel Baptist Church) at 300 Obispo Avenue/3215 East Third Street into senior citizens' housing units is a good example of adaptive reuse. However, we believe that the Craftsman home directly to the north at 304 Obispo Avenue should not be demolished because it also has historic value. Like the church, it is a contributing structure in the Bluff Heights Historic District. Although it has suffered some alterations, this bungalow (built in 1920/22) should be moved, rather than razed, to another site where it can be restored.

In April 1921 the *Southwest Builder and Contractor* stated that W. Horace Austin, the "dean of Long Beach architects," was preparing plans for the Immanuel Baptist Church at the corner of Obispo and Eliot Street (now Third). It would have brick construction and enameled brick facing, measure approximately 100'x135', and have an auditorium seating 900 parishioners. In February 1922 a permit was issued for \$80,000 and J. D. Sherer was the contractor. The building was damaged in the 1933 earthquake and required around \$20,000 in repairs that were completed in 1934. According to the *Press-Telegram*, a new pipe organ was installed in 1938 to commemorate the 25<sup>th</sup> anniversary of the church. In August 1953 Long Beach architect James R. Friend removed the canopy behind the chancel, installed another organ, and constructed new plaster curtain walls in this area. Seven years later in November 1960 a non-bearing interior partition was removed and replaced by a new one. The exterior was renovated in

## BOARD OF DIRECTORS

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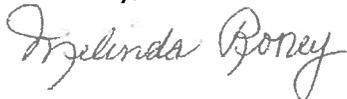
## EXECUTIVE DIRECTOR

MARY KAY NOTTAGE

August 1968 according to the plans of Francis G. Merchant, another local architect. The walls were plastered and both the west (Obispo) and south (Third) entrances were altered, as were the window sills. New planters, railings, and fire escapes were added and the sidewalks were replaced.

Although the brick exterior walls of Immanuel Lutheran Church have been stuccoed and painted, the building still retains most of its character defining Romanesque Revival elements. These include twin towers with triple blind arches above long, narrow arched stained glass windows, a rose window in the gable, and three more large arches supported by round columns projecting in front of the entrance on Obispo Avenue. In typical Romanesque style, all of these arches have round heads. The monumental columns stand on bases and have leafy art stone capitals. Long Beach Heritage believes that all of these architectural details should be preserved in the future development of the Safran Senior Housing Project.

Sincerely,

A handwritten signature in cursive script that reads "Melinda Roney".

Melinda Roney, President  
Long Beach Heritage

Contact person:

Louise Ivers  
1837 E. 6<sup>th</sup> Street  
Long Beach, CA 90802  
livers@csudh.edu



# COUNTY SANITATION DISTRICTS OF LOS ANGELES COUNTY

1955 Workman Mill Road, Whittier, CA 90601-1400  
Mailing Address: P.O. Box 4998, Whittier, CA 90607-4998  
Telephone: (562) 699-7411, FAX: (562) 699-5422  
[www.lacsd.org](http://www.lacsd.org)

GRACE ROBINSON CHAN  
*Chief Engineer and General Manager*

October 10, 2012

Ref. File No: 2359327

Mr. Craig Chalfant  
Development Services Department  
City of Long Beach  
333 West Ocean Boulevard, 5<sup>th</sup> Floor  
Long Beach, CA 90802

Dear Mr. Chalfant:

## **Safran Senior Housing Project**

The County Sanitation Districts of Los Angeles County (Districts) received a Notice of Preparation of a Draft Environmental Impact Report for the subject project on September 14, 2012. The proposed development is located within the jurisdictional boundaries of District No. 3. We offer the following comments regarding sewerage service:

1. The wastewater flow originating from the proposed project will discharge to a local sewer line, which is not maintained by the Districts, for conveyance to the Districts' Anaheim Street Trunk Sewer, located in Orange Avenue at 11<sup>th</sup> Street. This 36-inch diameter trunk sewer has a design capacity of 19.7 million gallons per day (mgd) and conveyed a peak flow of 4.8 mgd when last measured in 2008.
2. The wastewater generated by the proposed project will be treated at the Joint Water Pollution Control Plant located in the City of Carson, which has a design capacity of 400 mgd and currently processes an average flow of 265.4 mgd.
3. The expected increase in average wastewater flow from the project site is 3,030 gallons per day. For a copy of the Districts' average wastewater generation factors, go to [www.lacsd.org](http://www.lacsd.org), Wastewater & Sewer Systems, Will Serve Program, and click on the [Table 1, Loadings for Each Class of Land Use](#) link.
4. The Districts are authorized by the California Health and Safety Code to charge a fee for the privilege of connecting (directly or indirectly) to the Districts' Sewerage System or increasing the strength or quantity of wastewater attributable to a particular parcel or operation already connected. This connection fee is a capital facilities fee that is imposed in an amount sufficient to construct an incremental expansion of the Sewerage System to accommodate the proposed project. Payment of a connection fee will be required before a permit to connect to the sewer is issued. For a copy of the Connection Fee Information Sheet, go to [www.lacsd.org](http://www.lacsd.org), Wastewater & Sewer Systems, Will Serve Program, and click on the appropriate link. For more specific

information regarding the connection fee application procedure and fees, please contact the Connection Fee Counter at extension 2727.

5. In order for the Districts to conform to the requirements of the Federal Clean Air Act (CAA), the design capacities of the Districts' wastewater treatment facilities are based on the regional growth forecast adopted by the Southern California Association of Governments (SCAG). Specific policies included in the development of the SCAG regional growth forecast are incorporated into clean air plans, which are prepared by the South Coast and Antelope Valley Air Quality Management Districts in order to improve air quality in the South Coast and Mojave Desert Air Basins as mandated by the CAA. All expansions of Districts' facilities must be sized and service phased in a manner that will be consistent with the SCAG regional growth forecast for the counties of Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial. The available capacity of the Districts' treatment facilities will, therefore, be limited to levels associated with the approved growth identified by SCAG. As such, this letter does not constitute a guarantee of wastewater service, but is to advise you that the Districts intend to provide this service up to the levels that are legally permitted and to inform you of the currently existing capacity and any proposed expansion of the Districts' facilities.

If you have any questions, please contact the undersigned at (562) 908-4288, extension 2717.

Very truly yours,

Grace Robinson Chan



Adriana Raza  
Customer Service Specialist  
Facilities Planning Department

AR: ar

From: John Thomas <[jthomas@dslextreme.com](mailto:jthomas@dslextreme.com)>  
To: "[craig.chalfant@longbeach.gov](mailto:craig.chalfant@longbeach.gov)" <[craig.chalfant@longbeach.gov](mailto:craig.chalfant@longbeach.gov)>  
Cc: John Thomas <[jthomas@dslextreme.com](mailto:jthomas@dslextreme.com)>  
Date: 10/12/2012 09:06 AM  
Subject: NOP for Safran Senior Housing Project

---

On behalf of the Bluff Heights Neighborhood Association (BHNA), Please accept this email as comments regarding the NOP for the project noted above.

The BHNA is very supportive of the proposed adaptive reuse of the former Immanuel Community Church at 3215 East Third Street. The reuse target occupancy as a senior housing project appears to be a perfect match for our neighborhood which will reduce negative impacts from other potential uses including noise, traffic and other negative environmental impacts.

We encourage the reuse of the church with very little alterations to the exterior of the building allowing the existing character defining features to remain intact. We understand that some changes to the building exterior may be necessary and look forward to final renderings and any mitigation methods in accordance with the Secretary Of Interior Standards to present the building in its original form.

We understand that the disposition of the SFR at 304 Opispo is in question. The required site is slated to support the adaptive reuse project as a parking lot. The house is noted as a contributor to our Historic District and while the house has been altered, we encourage the developer to relocate the home rather than demolition. We are committed to assist the developer in seeking creative approaches regarding the home including site locations within Long Beach.

We understand that the next phase of the entitlement process will be the EIR which well examine alternate projects and approaches including mitigation measures dealing with both the exterior alterations of the church and the disposition of the Opispo home.

Respectfully submitted,  
John Thomas  
President  
Bluff Heights Neighborhood Association

Sent from my iPad

# **Appendix B to the Final EIR**

Historic Resources Report



# **Historic Resources Report**

## **304 Obispo Avenue and 3215 E. 3rd Street**

### **Long Beach, CA**

2 October 2012

*Prepared by:*



*Prepared for:*

Rincon Consultants, Inc.  
180 North Ashwood Avenue  
Ventura CA, 93003

## Executive Summary

This report was prepared for the purpose of assisting the City of Long Beach in their compliance with the California Environmental Quality Act (CEQA) as it relates to historic resources, in connection with the proposed conversion of an existing 31,006 square foot church building constructed in 1923 into a senior housing project. The project also includes the demolition of a single family residence constructed circa 1920 on an adjacent parcel for a 12-space parking lot. [Figure 1]

This report assesses the historical and architectural significance of potentially significant historic properties in accordance with the National Register of Historic Places (NRHP), the California Register of Historical Resources (CRHR) Criteria for Evaluation, and City of Long Beach Landmark criteria. A determination will be made as to whether adverse environmental impacts on historic resources, as defined by CEQA and the CEQA Guidelines, may occur as a consequence of the proposed project, and recommend the adoption of mitigation measures, as appropriate.

This report was prepared by San Buenaventura Research Associates of Santa Paula, California, Judy Triem, Historian; and Mitch Stone, Preservation Planner, for Rincon Consultants, Inc., and is based on a field investigation and research conducted in September, 2012. The conclusions contained herein represent the professional opinions of San Buenaventura Research Associates, and are based on the factual data available at the time of its preparation, the application of the appropriate local, state and federal regulations, and best professional practices.

### *Summary of Findings*

The proposed project was found to have the potential for significance and adverse impacts on two historic resources located on the project site (Class II). Mitigation measures have been proposed to reduce these impacts. The residual impacts after mitigation were found to be less than significant.

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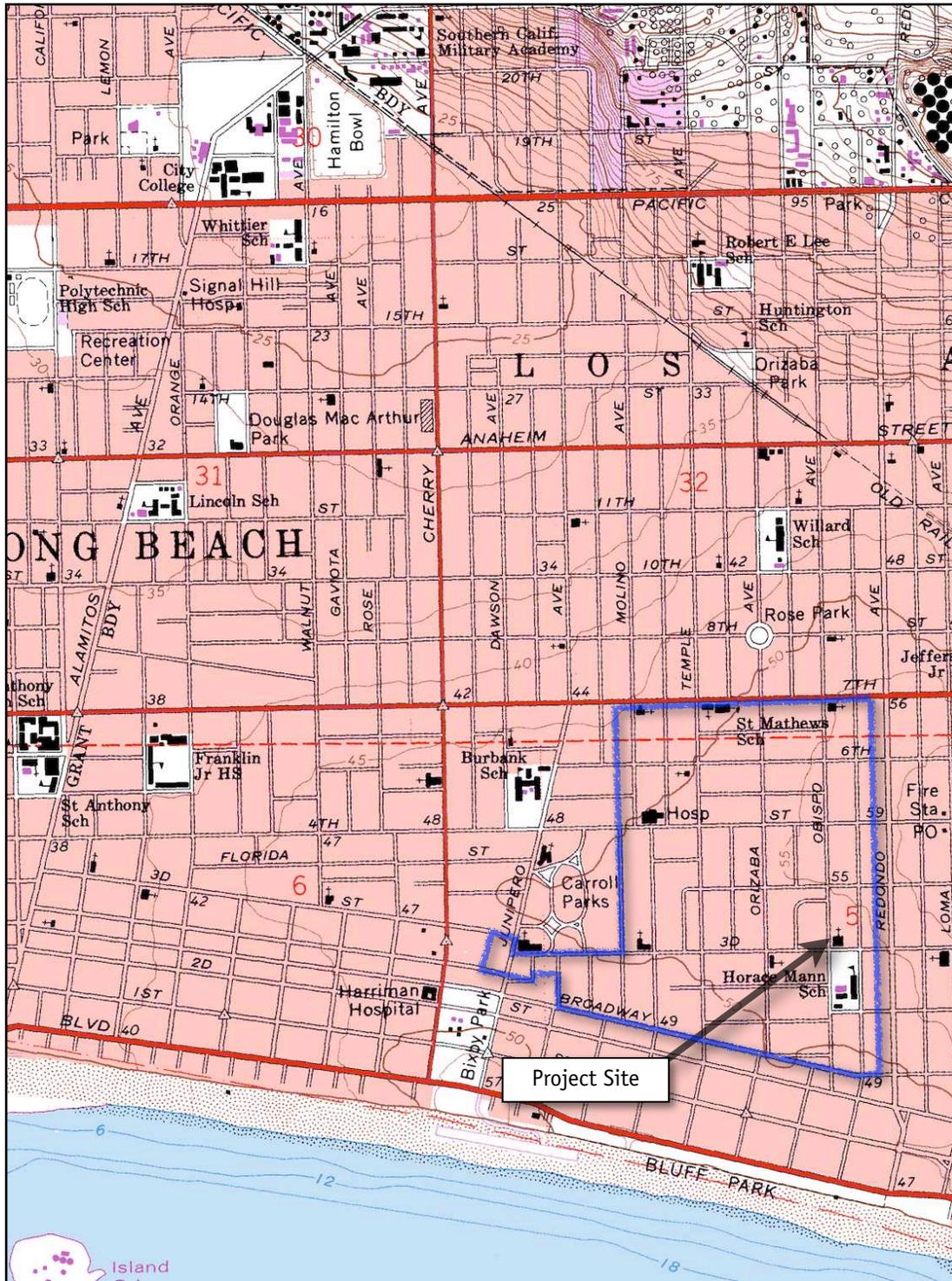


Figure 1. Project Location and Approximate Boundaries of Bluff Heights Historic District [Source: USGS 7.5' Quadrangle, Long Beach, CA 1964]

## 1. Administrative Setting

The California Environmental Quality Act (CEQA) requires evaluation of project impacts on historic resources, including properties “listed in, or determined eligible for listing in, the California Register of Historical Resources [or] included in a local register of historical resources.” A resource is eligible for listing on the California Register of Historical Resources if it meets any of the criteria for listing, which are:

1. Is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage;
2. Is associated with the lives of persons important in our past;
3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
4. Has yielded, or may be likely to yield, information important in prehistory or history. (PRC §5024.1(c))

By definition, the California Register of Historical Resources (CRHR) also includes all “properties formally determined eligible for, or listed in, the National Register of Historic Places,” (NRHP) and certain specified State Historical Landmarks. The majority of “formal determinations” of NRHP eligibility occur when properties are evaluated by the State Office of Historic Preservation in connection with federal environmental review procedures (Section 106 of the National Historic Preservation Act of 1966). Formal determinations of eligibility also occur when properties are nominated to the NRHP, but are not listed due to a lack of owner consent.

The criteria for determining eligibility for listing on the NRHP have been developed by the National Park Service. Eligible properties include districts, sites, buildings and structures,

- A. That are associated with events that have made a significant contribution to the broad patterns of our history; or
- B. That are associated with the lives of persons significant in our past; or
- C. That embody the distinctive characteristics of a type, period, or method of construction or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- D. That have yielded, or may be likely to yield, information important in prehistory or history.

According to the NRHP standards, in order for a property which is found to significant under one or more of the criteria to be considered eligible for listing, the “essential physical features” which define the property’s significance must be present. The standard for determining if a property’s essential physical features exist is known as *integrity*, which is defined as “the ability of a property to convey its significance.” The integrity evaluation is broken down into seven “aspects.”

The seven aspects of integrity are: *Location* (the place where the historic property was constructed or the place where the historic event occurred); *Design* (the combination of elements that create the form, plan, space, structure, and style of a property); *Setting* (the physical environment of a historic property); *Materials* (the physical elements that were combined or deposited during a particular period of time and in a particular pattern or configuration to form a historic property); *Workmanship* (the physical evidence of the crafts of a particular culture or people during any given period of history or prehistory); *Feeling* (a property’s expression of the aesthetic or historic sense of a particular period of time), and; *Association* (the direct link between an important historic event or person and a historic property).

The relevant aspects of integrity depend upon the NRHP criteria applied to a property. For example, a property nominated under Criterion A (events), would be likely to convey its significance primarily through integrity of

location, setting and association. A property nominated solely under Criterion C (design) would usually rely primarily upon integrity of design, materials and workmanship. The California Register regulations include similar language with regard to integrity, but also state that “it is possible that historical resources may not retain sufficient integrity to meet the criteria for listing in the National Register, but they may still be eligible for listing in the California Register.” Further, according to the NRHP guidelines, the integrity of a property must be evaluated at the time the evaluation of eligibility is conducted. Integrity assessments cannot be based on speculation with respect to historic fabric and architectural elements which may exist but are not visible to the evaluator, or on restorations which are theoretically possible but which have not occurred. (CCR §4852 (c))

The minimum age criterion for the NRHP and the CRHR is 50 years. Properties less than 50 years old may be eligible for listing on the NRHP if they can be regarded as “exceptional,” as defined by the NRHP procedures, or in terms of the CRHR, “if it can be demonstrated that sufficient time has passed to understand its historical importance” (Chapter 11, Title 14, §4842(d)(2))

Historic resources as defined by CEQA also includes properties listed in “local registers” of historic properties. A “local register of historic resources” is broadly defined in §5020.1 (k) of the Public Resources Code, as “a list of properties officially designated or recognized as historically significant by a local government pursuant to a local ordinance or resolution.” Local registers of historic properties come essentially in two forms: (1) surveys of historic resources conducted by a local agency in accordance with State Office of Historic Preservation procedures and standards, adopted by the local agency and maintained as current, and (2) landmarks designated under local ordinances or resolutions. These properties are “presumed to be historically or culturally significant... unless the preponderance of the evidence demonstrates that the resource is not historically or culturally significant.” (PRC §§ 5024.1, 21804.1, 15064.5)

#### *Long Beach Landmark Criteria*

According to §2.63.050 of the Long Beach Municipal Code (Criteria for designation of landmarks and landmark districts), a cultural resource may be recommended for designation as a landmark or landmark district if it manifests one of the following criteria:

- A. It possesses a significant character, interest or value attributable to the development, heritage or cultural characteristics of the city, the southern California region, the state or the nation; or
- B. It is the site of a historic event with a significant place in history; or
- C. It is associated with the life of a person or persons significant to the community, city, region or nation; or
- D. It portrays the environment in an era of history characterized by a distinctive architectural style; or
- E. It embodies those distinguishing characteristics of an architectural type or engineering specimen; or
- F. It is the work of a person or persons whose work has significantly influenced the development of the city or the southern California region; or
- G. It contains elements of design, detail, materials, or craftsmanship which represent a significant innovation or
- H. It is a part of or related to a distinctive area and should be developed or preserved according to a specific historical, cultural or architectural motif; or

- I. It represents an established and familiar visual feature of a neighborhood or community due to its unique location or specific distinguishing characteristic; or
- J. It is, or has been, a valuable information source important to the prehistory or history of the city, the southern California region or the state; or
- K. It is one of the few remaining examples in the city, region, state or nation possessing distinguishing characteristics of an architectural or historical type; or
- L. In the case of the designation of a tree(s) based on historic significance, that the tree(s) is (are) associated with individuals, places and/or events that are deemed significant based on their importance to national, state and community history; or
- M. In the case of the designation of a tree(s) based on cultural contribution, that the tree(s) is (are) associated with a particular event or adds (add) significant aesthetic or cultural contribution to the community. (ORD-09-003, Sec. 1, 2 009; ORD-05-0026 § 1, 2005; Ord. C-6961 § 1 (part), 1992).

## **2. Impact Thresholds and Mitigation**

According to the Public Resources Code, “a project that may cause a substantial change in the significance of an historical resource is a project that may have a significant effect on the environment.” The Public Resources Code broadly defines a threshold for determining if the impacts of a project on an historic property will be significant and adverse. By definition, a substantial adverse change means, “demolition, destruction, relocation, or alterations,” such that the significance of an historical resource would be impaired. For purposes of NRHP eligibility, reductions in a property’s integrity (the ability of the property to convey its significance) should be regarded as potentially adverse impacts. (PRC §21084.1, §5020.1(6))

Further, according to the CEQA Guidelines, “an historical resource is materially impaired when a project... [d]emolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register of Historical Resources [or] that account for its inclusion in a local register of historical resources pursuant to section 5020.1(k) of the Public Resources Code or its identification in an historical resources survey meeting the requirements of section 5024.1(g) of the Public Resources Code, unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant.” (§15064.5(b)(2))

Per CEQA Guidelines 15064.5(b)(4), the lead agency is responsible for the identification of “potentially feasible measures to mitigate significant adverse changes in the significance of an historical resource.” The specified methodology for determining if impacts are mitigated to less than significant levels are the *Secretary of the Interior’s Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings* and the *Secretary of the Interior’s Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings* (1995), publications of the National Park Service. (PRC §15064.5(b)(3-4))

## **3. Historical Setting**

### *General Historical Context*

The present city of Long Beach is located on a portion of the 300,000 acres of land granted to Manuel Nieto by the Spanish colonial government in 1784. This tract would subsequently be divided into five smaller land grants, including Rancho Los Alamitos and Rancho Cerritos, on which Long Beach would later be established.

The former was purchased in 1840 by real estate speculator and cattleman Abel Stearns, who was in the process of amassing one of the largest land-holdings in Southern California, known collectively as Stearn's Ranchos. Rancho Los Alamitos was purchased in 1843 by Los Angeles merchant John Temple. Both Stearns and Temple became victims of the prolonged droughts of the early 1860s, eventually selling the two ranchos to Jotham Bixby.

The first effort to develop the ranchos was attempted by William E. Wilmor, in 1880, on a portion of the Bixby landholdings. He called his townsite the "American Colony" or "Willmore City." Willmore was a few years too early to benefit from the enormous railroad-inspired Southern California land boom of the late 1880s, and was undercapitalized. His efforts failed, but Willmore's 1882 subdivision formed the precursor to modern Long Beach. The townsite was purchased in 1884 by the Long Beach Land and Water Company, which began making significant improvements, including the construction of a wharf and hotel, and connecting the town to the Southern Pacific Railroad's Wilmington branch. The elements for growth now in place, the expansion was explosive, especially after the opening of a Pacific Electric line to the city in 1902. Long Beach, which had become one of the region's premier seaside resorts, was incorporated as a city in 1908.

The city began to take on a more commercial and industrial character with the construction of harbor facilities, beginning with the relocation of the Craig Shipbuilding Company to Long Beach in 1907. The Port of Long Beach continued to expand as oceanfront lands were reclaimed, particularly after the discovery of major oil fields at nearby Signal Hill in 1921. The 1920s would be a defining decade for Long Beach, as it expanded rapidly on the twin pillars of tourism and commerce, emerging as a city rivaling Los Angeles for regional stature and importance.

The devastating 1933 Long Beach earthquake was a major setback for Long Beach, particularly coming as it did at the nadir of the Great Depression. The city's fortunes would return fairly quickly, however, with the continued development of local oil resources during the 1930s, and the establishment of the Long Beach Navy Base and Shipyard in 1940. Growth continued to be driven in the postwar period by the waterfront and Cold War defense industries.

#### *Site-Specific Context*

The present Bluff Heights neighborhood was originally developed in 1886 by John W. Bixby as the community of Alamitos Beach. Located approximately two miles east of Long Beach, it was only sparsely developed by the turn of the century. The area grew rapidly with a series of re-subdivisions after 1902, the year when inter-urban streetcar service was extended to Long Beach. The Bluff Heights area was absorbed by the city in 1905 and participated fully in the vast building boom that ensued, particularly after 1910. The rapid growth of the area is reflected by the construction of the Horace Mann Elementary School in 1914.

The project site is located in a portion of the neighborhood subdivided in 1904 as the Densmore Tract, covering the blocks bounded by Obispo Avenue on the west, Loma Avenue on the east, Fourth Street on the north, and Eliot Street (now, E. 3rd Street) on the south. Roughly the western half of this tract, including the project site, is located within the Bluff Heights Historic District. Although predominantly developed before 1920, the neighborhood continued to fill in during the 1920s and afterwards. Consequently, a wide variety of domestic and institutional architectural styles are represented.

The single family character of the neighborhood began to change in the postwar period, as the demand for housing led to the construction of apartment buildings, often replacing single family homes. An effort to preserve the historic character of the neighborhood was advanced first by downzoning, and then in 2004, with

the establishment of the Bluff Heights Historic District. The district is comprised of over 600 contributing properties, mainly single family residences constructed between 1910 and 1920.

#### **4. Potential Historic Resources**

##### *Previously Identified Historic Resources*

This project area is located within the Bluff Heights Historic District, designated by ordinance in 2004. This designation was likely supported by a comprehensive survey of properties within the boundaries of the district, but the available documentation for this survey is incomplete. The district map [Figure 2] indicates that six parcel classifications resulted from the survey: Altered Craftsman, Craftsman, Non-contributing, Prairie/Mediterranean, Victorian/Other, and Vacant. Although it is not explicitly stated in any available material, it can be surmised that all properties except those defined as “Non-contributing” and “Vacant” were found to contribute to the district. The district ordinance (Ordinance No. C-7937) also provides for standards of review for new construction and alterations within the district. Letter reports prepared for the two properties in February 2012 found both to be contributors to the Bluff Heights Historic District. (Galvin Preservation Associates, 2012)

**3215 E. 3rd Street.** The Immanuel Baptist Church building is two stories in height, not including the partially above-ground basement, and occupies four parcels at the northeastern corner of 3rd Street and Obispo Avenue. The western Obispo Avenue elevation features the main entry, located off the corner and organized in three, arched bays flanked by square towers. The bays are two stories in height and defined by large engaged Corinthian columns. Three pairs of double entry doors with transoms above are set within the bays above a platform stepped back from the sidewalk. Arched multi-paned windows are located above the doors and within the bays. A rosette vent is centered on the gable end above. The gabled roof is medium-pitched with shallow, coved eaves. The towers are characterized by tall, inset, arched niches and a tripartite blind arcade above, defined by small Corinthian columns. The tower roofs feature bracketing under the shallow eaves.

The building’s nearly symmetrical southern elevation is organized as a central mass covered by a shed roof, flanked by two slightly projecting gable-roofed wings. The wings feature four two-story inset arched bays separated by engaged Corinthian columns. The bays feature pairs of multi-paned wood casement windows at the ground and second-story levels, with multi-paned transoms above the windows on the ground floor. Abstract relief panels are located in the bays between the windows. The parapeted gable ends feature arched relief under the very shallow cornice line. Rosette vents are centered within the gable ends. The central mass features bands of windows matching the treatment within the flanking bays. Centered on this elevation is a second-story projecting bay with a gable roof and three deeply inset arched windows. A minor entry door is located off-center to the east.

Windows on the western and southern elevations are mainly multi-pane wood frame fixed or casements with white and orange slag glass lights. Stained glass windows face non-street elevations. The roof covering is Spanish tile. The building’s cornerstone appears to have been covered or removed. [Photos 1-5]

The organization of the Immanuel Baptist Church congregation began with the meeting of a prayer group in an East Long Beach home in 1912, leading to the chartering of the church the following year with 64 members. It became the second Baptist congregation in Long Beach, following the First Baptist Church, which was organized in 1893. Construction of a church for the congregation started later that year with the assistance of the First Baptist Church, and was completed in 1913. This one-story building occupied the northern half of the site covered by the church building as it exists today. This building was either replaced or fully incorpo-

Historic Resources Report  
304 Obispo Avenue and 3215 E. 3rd Street, Long Beach



Figure 2. Bluff Heights Historic District, with Project Location Indicated [Source: City of Long Beach]

rated into a larger church, with sanctuary seating for 1,000 congregants. Completed in 1923, the new church was designed by Long Beach architect W. Horace Austin.

As constructed, the two-story church featured a decorative brick and marble-clad exterior. The building was damaged in the 1933 Long Beach Earthquake and repaired. Little is currently known about the extent of the damage other than it required the congregation to find temporary quarters during the repairs for perhaps a year or more. The specific alterations to the building that may have occurred with these repairs, if any, are unknown. A substantial interior alteration occurred in 1953, with the installation of a massive, ten-ton Aeolian-Skinner pipe organ in the sanctuary. The current exterior stucco coating appears to have been applied during a major building renovation in 1969. A building permit issued in that year refers to sandblasting and stucco, and the replacement of windows. The aluminum frame windows seen on a portion of the southern elevation may have replaced wood casement windows at this time. The main entry doors on the western elevation are also non-original.

In term of architectural style, this building's original brick and marble-clad exterior probably suggested the Italian Renaissance Revival style, as characterized by the repeated motif of deeply-set window bays defined by engaged classical columns and the use of Romanesque arches. References to the Mission Revival style can be seen in the towers flanking the main entry, although it reads more definitely of this style now than it likely did before 1969, the year when the building was apparently clad in stucco. Today this building appears more nearly Spanish Revival or Mission Revival in style than when it was constructed. This property is assigned to the "Victorian/Other" classification on the Bluff Heights Historic District map.

*W. Horace Austin, AIA*

William Horace Austin was born in Kansas in 1881, moving to Long Beach with his family in 1895. He began his association with architecture working in the building trades, and later was educated in architecture at the University of Pennsylvania, although he apparently returned to California without obtaining a full degree. During the course of his career, Austin became one of the city's most prolific commercial and institutional architects. His many design credits in Long Beach include the Farmers and Merchants Bank (1921), City National Bank (1921), the Long Beach Press-Telegram Building (1924), Long Beach Junior College (1929), Adelaide Techenor Hospital School clinic (1937), and numerous reconstructions and remodeling projects after the 1933 earthquake.

Outside of Long Beach, he designed the Seal Beach City Hall (1929), the Compton Middle School (1929), Compton Grammar School (1930), the Santa Ana Masonic Hall (1930), the Bowers Memorial Museum in Santa Ana (1930, with Frank Landsdown), and the San Pedro Post Office/Federal Building (1934-36, with Gordon Kaufmann). Collaborating with Los Angeles architect John C. Austin (apparently unrelated) he designed the Citrus Union High School (1921), Woodrow Wilson School in Long Beach (1925 with Austin and Frederick Ashley), and the Riverside Junior High School (1925 with Austin and Frederick Ashley). He died in Long Beach in 1942.

**304 Obispo Avenue.** This single family residence is one story in height and roughly rectangular in plan. It features a front-facing gable roof with exposed rafter tails projecting from under moderately deep eaves. A full-front raised porch is located under an inset gable roof supported by truncated columns set atop square piers. The essentially symmetrical western street elevation consists of a centered entry door flanked by wide windows. Both are surrounded by wide, wood casings featuring angled, exposed lintels. The paneled entry door is contemporary and the windows on this elevation are aluminum frame, apparently within original window openings. The street elevation is clad with medium-width lap siding. All of the secondary elevations ap-

pear to be clad in stucco and windows on these elevations are mainly aluminum frame. The columns and piers are also stucco-clad. [Photos 6, 7]

This residence was constructed circa 1920 as a parsonage for the adjacent Immanuel Baptist Church, and was used for this purpose into the mid-1920s. The first known resident was Rev. William H. Galbraith, the first pastor of the Immanuel Baptist Church, and his wife Christina. By the mid-1920s it was occupied by the church caretaker but by the late 1920s was rented. The first of the known renters was Stephen O. Larson and his wife Naomi. He owned a meat market in Long Beach called Larson's Quality Market. By 1930 the residence was occupied by Burton J. Shirey, along with his wife Lillian and their three children. They were also renters, presumably from the church. Shirey ran the service department for an automobile dealer during the 1930s but by the time of his death in 1960 was working as an aircraft mechanic.

Shirey and family were replaced as the renters of the property around 1934 by Charles P. Boudreaux, his wife Ruth, their two children, and Ruth's mother, Annie Smith. He apparently worked as a fireman and engineer on a tugboat, most likely at Long Beach Harbor. During the 1940s he worked for the U.S. Navy, probably as a civilian. The family built a home elsewhere in Long Beach in late 1947. The property owner listed on a building permit dated 1935 is Security First National Bank, suggesting that by this time the church had sold the property and it had been foreclosed by the bank. Other known occupants of the property during the 1940s and 1950s were Floyd C. Williams, a printer; Stanley Dunn (occupation unknown); and Kenneth Woods, a machinist for Douglas Aircraft.

The architectural style of this residence is California Bungalow as it was commonly constructed in its later stages after World War I, when the style became abstracted and reduced to gable roof forms with open eaves and full-front porches, but had otherwise been stripped of much of the deliberately expressed structural detailing that had characterized the earlier phases of the style. This property is assigned to the "Altered Craftsman" category on the Bluff Heights Historic District map.

## **5. Eligibility of Historic Resources**

### *National and California Registers: Significance and Eligibility*

**3215 E. 3rd Street.** This property does not appear to be eligible for listing under NRHP Criterion A or CRHR Criterion 1 (associations with historic events). While it is associated with the historical theme of the development of the Bluff Heights district of Long Beach, it appears to be only generally associated with this theme, and represents no known, notable role in this theme. The property does not appear to be eligible for listing under NRHP Criterion B or CRHR Criterion 2 (associations with historically significant individuals). This property does not appear to be eligible for listing under NRHP Criterion C or CRHR Criterion 3 (an example of a type, period, or method of construction or association with a master designer). Although it was designed by W. Horace Austin, one of the more important architects in Long Beach during this time period, the building's architectural style and appearance have been altered substantially, to the extent that it is no longer representative of his work.

**304 Obispo Avenue.** This property does not appear to be eligible for listing under NRHP Criterion A or CRHR Criterion 1 (associations with historic events). While it is associated with the historical theme of the development of the Bluff Heights district of Long Beach, it appears to be only generally associated with this theme, and represents no known, notable role in these theme. The property does not appear to be eligible for listing under NRHP Criterion B or CRHR Criterion 2 (associations with historically significant individuals). Of the known owners or occupants of the property for whom any substantive biographical information was found,

none appear to have made a significant contribution towards the historical development of the state, nation or community. This property does not appear to be eligible for listing under NRHP Criterion C or CRHR Criterion 3 (an example of a type, period, or method of construction or association with a master designer). It is a typical example of a common architectural style, of which numerous and more fully-realized and more intact examples can be found in Long Beach.

NRHP Criterion D and CRHR Criterion 4 pertain to archeological resources and consequently have not been evaluated in this report.

#### *Local Significance and Eligibility*

The implication of the available data from the Bluff Heights Historic District listing is that both properties should be regarded as contributors to the district. In terms of individual eligibility for City Landmark designation, the criteria for designation in general are functionally similar to the NRHP and CRHR criteria, with some notable exceptions. In particular, Criterion I permits the designation of a property that “represents an established and familiar visual feature of a neighborhood or community due to its unique location or specific distinguishing characteristic.” The City Landmark ordinance does not contain explicit integrity criteria. It appears that 3215 E. 3rd Street, due to its mass and substantial presence in the neighborhood, may qualify for individual listing under this criterion. The property at 304 Obispo Avenue does not appear to be eligible for designation under any City of Long Beach criteria.

#### *Conclusions*

The property at 3215 E. 3rd Street is a contributor to a designated historic district and may be individually eligible for City Landmark designation. Therefore, it should be regarded as a historic resource for purposes of CEQA. The property at 304 Obispo Avenue is a contributor to a designated historic district. Therefore, it should be regarded as a historic resource for purposes of CEQA.

## **6. Project Impacts**

- A. The project will result in the demolition of the single family residence located at 304 Obispo Avenue, and the construction of a surface parking lot on the property. This property is located within a designated historic district, and appears to be a contributor to the historic district. Due to the size of the district, the loss of one contributing property would not result in the district becoming ineligible. However, the loss of this property as a contributor would constitute a slight reduction to the design integrity of the landmark district. This impact is significant and adverse, but mitigable to a less than significant level through mitigation.
- B. The project will result in alterations to the property at 3215 E. 3rd Street to accommodate its adaptive reuse as senior housing. The project plans call the infilling of some window and door openings, the creation of new door and window openings, the replacement of doors in existing openings, the replacement of the stained glass and slag glass windows with new windows units with clear glazing, and the installation of rooftop heating and ventilating equipment. The result of this activity may be a loss of design integrity sufficient to cause the property to become a non-contributor to the landmark district or ineligible for individual landmark designation. This impact is significant and adverse, but mitigable to a less than significant level through mitigation.

## **7. Mitigation Measures and Residual Impacts**

### *Background*

A principle of environmental impact mitigation is that some measure or combination of measures may, if incorporated into a project, serve to avoid or reduce significant and adverse impacts to a historic resource. In reference to mitigating impacts on historic resources, the CEQA Guidelines state:

Where maintenance, repair, stabilization, rehabilitation, restoration, preservation, conservation or reconstruction of the historical resource will be conducted in a manner consistent with the *Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings* (1995), Weeks and Grimmer, the project's impact on the historical resource shall generally be considered mitigated below a level of significance and thus is not significant. (PRC §15126.4 (b)(1))

These standards, developed by the National Park Service, represent design guidelines for carrying out historic preservation, restoration and rehabilitation projects. The Secretary's Standards and the supporting literature describe historic preservation principles and techniques, and offers recommended means for carrying them out. Adhering to the Standards is the only method described within CEQA for presumptively reducing project impacts on historic resources to less than significant and adverse levels.

The demolition of an historic property cannot be seen as conforming with the *Secretary of the Interior's Standards*. Therefore, the absolute loss of an historic property should generally be regarded as an adverse environmental impact which cannot be mitigated to a less than significant and adverse level. Further, the usefulness of documentation of an historic resource, through photographs and measured drawings, as mitigation for its demolition, is limited by the CEQA Guidelines, which state:

In some circumstances, documentation of an historical resource, by way of historic narrative, photographs or architectural drawings, as mitigation for the effects of demolition of the resource will not mitigate the effects to a point where clearly no significant effect on the environment would occur. (CEQA Guidelines §15126.4 (b)(2))

Implied by this language is the existence of circumstances whereby documentation may mitigate the impact of demolition to a less than significant level. However, the conditions under which this might be said to have occurred are not described in the Guidelines. It is also noteworthy that the existing CEQA case law does not appear to support the concept that the loss of an historic resource can be mitigated to less than adverse impact levels by means of documentation or commemoration. (*League for Protection of Oakland's Architectural and Historic Resources v. City of Oakland* [1997] 52 Cal. App. 4th 896; *Architectural Heritage Association v. County of Monterey* [2004] 19 Cal. Rptr. 3d 469)

Taken in their totality, the CEQA Guidelines require a project which will have potentially adverse impacts on historic resources to conform to the *Secretary of the Interior's Standards*, in order for the impacts to be mitigated to below significant and adverse levels. However, CEQA also mandates the adoption of feasible mitigation measures which will reduce adverse impacts, even if the residual impacts after mitigation remain significant. Means other than the application of the Standards would necessarily be required to achieve this level of mitigation. In determining what type of additional mitigation measures would reduce impacts to the greatest extent feasible, best professional practice dictates considering the level of eligibility of the property, as well as by what means it derives its significance.

Mitigation programs for impacts on historic resources tend to fall into three broad categories: documentation, design and interpretation. Documentation techniques involve the recordation of the site according to accepted professional standards, such that the data will be available to future researchers, or for future restoration efforts. Design measures could potentially include direct or indirect architectural references to a lost historic property, e.g., the incorporation of historic artifacts, into the new development, or the relocation of the historic property to another suitable site. Interpretative measures could include commemorating a significant historic event or the property's connection to historically significant themes.

*Project Mitigation*

The relocation of buildings subject to demolition is not typically regarded as feasible mitigation, unless a relocation site has been identified prior to impact analysis, and the relocation is made a part of the project description. With the implementation of the following measures, the residual impacts of this project will be less than significant:

- A. In consultation with the Planning Bureau of the Long Beach Development Services Department, a historic preservation professional qualified in accordance with the *Secretary of the Interior's Standards* shall be selected to complete a Documentation Report on the property at 304 Obispo Avenue. The property shall be documented with archival quality photographs of a type and format approved by the City of Long Beach. This documentation, along with historical background for this property, shall be submitted to an appropriate repository approved by the City of Long Beach. The documentation reports shall be completed and approved by the City of Long Beach prior to the issuance of demolition permits.
- B. The proposed alterations to the Emmanuel Baptist Church at 3215 E. 3rd Street shall be subject to the issuance of a Certificate of Appropriateness by the City of Long Beach Cultural Heritage Commission, which shall find that the proposed alterations conform to the *Secretary of the Interior's Standards* prior to the issuance of the Certificate of Appropriateness. All provisions of Ordinance C-7937, "An Ordinance of the City Council of the City of Long Beach Designating the Bluff Heights Historic Landmark District," particularly with respect to retaining and preserving all original architectural materials and design features, shall apply to this review.

**8. Selected Sources**

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Photo 1. 3215 E. 3rd Street, western and southern elevations. [9-26-2012]



Photo 2. 3215 E. 3rd Street, western elevation. [9-26-2012]



Photo 3. 3215 E. 3rd Street, southern elevation. [9-26-2012]



Photo 4. 3215 E. 3rd Street, northern elevation. [9-26-2012]



Photo 5. 3215 E. 3rd Street, eastern elevation. [9-26-2012]

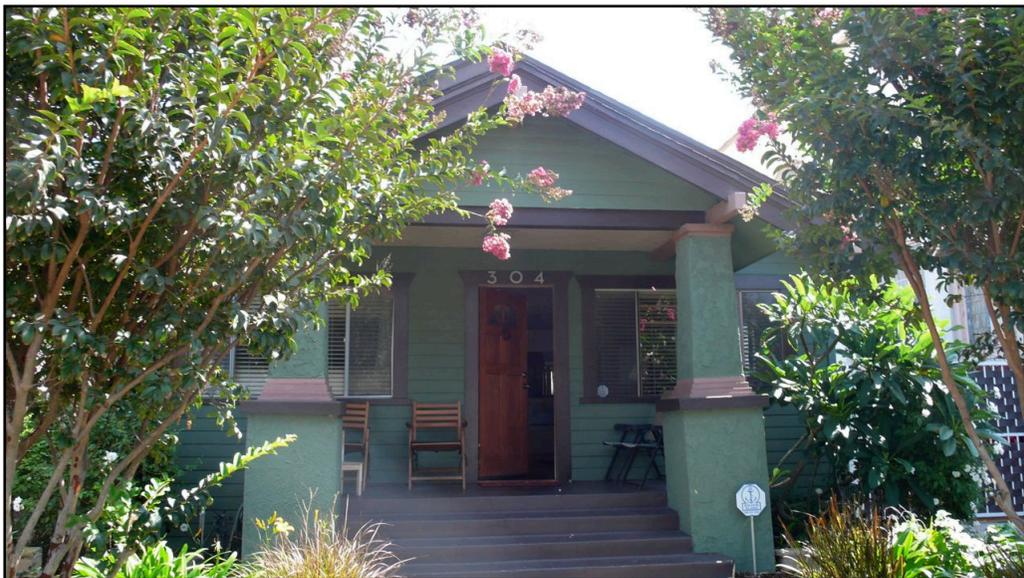


Photo 6. 302 Obispo Avenue, western elevation. [9-26-2012]



Photo 7. 302 Obispo Avenue, northern elevation. [9-26-2012]



Photo 8. 300 block of Obispo Avenue, eastern side, looking south. [9-26-2012]



Photo 9. 3245 E. 3rd Street (property immediately east of 3215 E. 3rd Street). [9-26-2012]



Photo 10. 312 Obispo Avenue (property immediately north of 304 Obispo Avenue). [9-26-2012]

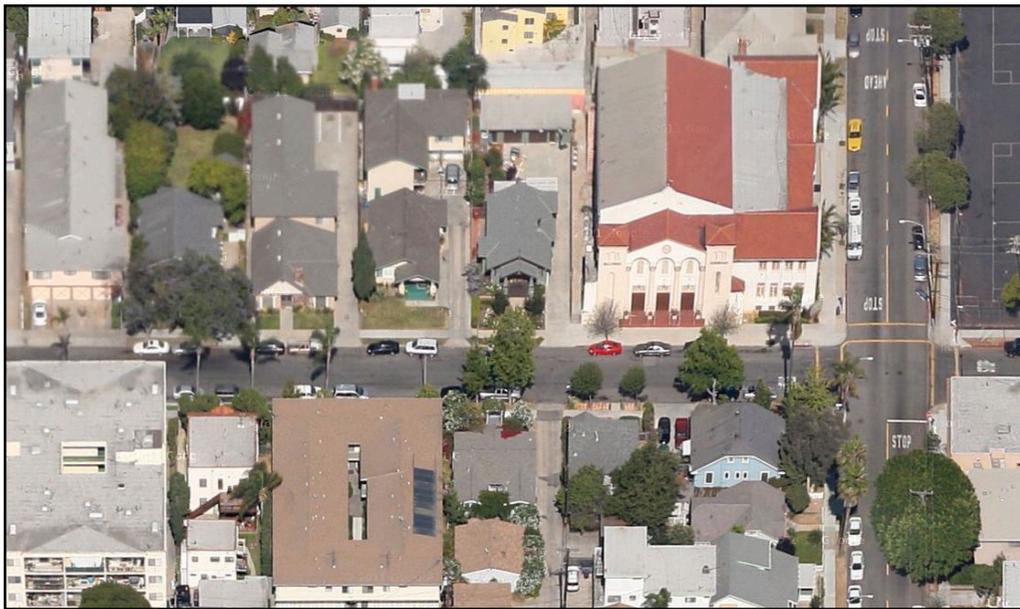


Photo 11. Project site, oblique aerial view, from west. (Source: Google Maps)



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# **Appendix C to the Final EIR**

Mitigation Monitoring and Reporting Program

## **MITIGATION MONITORING AND REPORTING PROGRAM**

CEQA requires adoption of a monitoring and reporting program for the mitigation measures necessary to mitigate or avoid significant effects on the environment. The mitigation monitoring and reporting program is designed to ensure compliance with adopted mitigation measures during project implementation. For each mitigation measure recommended in the Initial Study or EIR that applies to the proposed project, specifications are made herein that identify the action required and the monitoring that must occur. In addition, the party for verifying compliance with individual mitigation measures is identified.

| Mitigation Measure/Condition of Approval   | Action Required  | When Monitoring to Occur  | Monitoring Frequency   | Responsible Agency or Party | Compliance Verification |      |          |
|--|--|---|--|-----------------------------|-------------------------|------|----------|
|  |  |   |  |                             | Initial                 | Date | Comments |
| <b>CULTURAL RESOURCES</b>  |  |   |  |                             |                         |      |          |
| <b>Mitigation Measure CR-1(a): 304 Obispo Avenue Documentation Report.</b> In consultation with the Planning Bureau of the Long Beach Development Services Department, a historic preservation professional qualified in accordance with the Secretary of the Interior's Standards shall be selected to complete a Documentation Report on the property at 304 Obispo Avenue. The property shall be documented with archival quality photographs of a type and format approved by the City of Long Beach. This documentation, along with historical background for this property, shall be submitted to an appropriate repository approved by the City of Long Beach. The documentation reports shall be completed and approved by the City of Long Beach prior to the issuance of demolition permits.               | Review and approval of Documentation Report for property at 304 Obispo Avenue.   | Prior to issuance of demolition permits.  | Once prior to issuance of demolition permits.  | LBDS                        |                         |      |          |
| <b>Mitigation Measure CR-1(b): Immanuel Community Church Certificate of Appropriateness.</b> The proposed alterations to the former Immanuel Community Church building at 3215 E. 3 <sup>rd</sup> Street shall be subject to the issuance of a Certificate of Appropriateness by the City of Long Beach Cultural Heritage Commission, which shall find that the proposed alterations conform to the <i>Secretary of the Interior's Standards</i> prior to the issuance of the Certificate of Appropriateness. All provisions of Ordinance C-7937, "An Ordinance of the City Council of the City of Long Beach Designating the Bluff Heights Historic Landmark District," particularly with respect to retaining and preserving all original architectural materials and design features, shall apply to this review. | Review of proposed alterations to the former Immanuel Community Church building and issuance of a Certificate of Appropriateness subject to required findings. | Prior to issuance of building permits for property at 3215 E. 3 <sup>rd</sup> Street. | Once prior to issuance of building permits for property at 3215 E. 3 <sup>rd</sup> Street.         | LBCHC                       |                         |      |          |
| <b>NOISE</b>   |  |   |  |                             |                         |      |          |
| <b>Mitigation Measure N-1: Heavy Truck Restriction/Haul Routes.</b> 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.   | Field verification that construction contractor is enforcing compliance with mitigation measure.   | During any project-related demolition or construction activities at the project site. | Periodically throughout project-related demolition or construction activities at the project site. | LBDS, OCM                   |                         |      |          |

Key: LBCHC – City of Long Beach Cultural Heritage Commission  
 LBDS – City of Long Beach Development Services Department  
 OCM – Onsite Construction Manager