

Garden Grove United Methodist Church Project Initial Study/Mitigated Negative Declaration



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November 2014

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TABLE OF CONTENTS

1.0	INTRODUCTION.....	1
1.1	PURPOSE OF THE INITIAL STUDY	1
2.0	PROJECT DESCRIPTION	5
2.1	PROJECT LOCATION AND ENVIRONMENTAL SETTING.....	5
	Surrounding Land Uses.....	5
	Existing Site	5
2.2	PROJECT DETAILS	6
3.0	ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED	37
3.1	AESTHETICS.....	41
3.2	AGRICULTURE AND FOREST RESOURCES	45
3.3	AIR QUALITY	47
3.4	BIOLOGICAL RESOURCES	57
3.5	CULTURAL RESOURCES	61
3.6	GEOLOGY AND SOILS.....	65
3.7	GREENHOUSE GAS EMISSIONS	71
3.8	HAZARDS AND HAZARDOUS MATERIALS	81
3.9	HYDROLOGY AND WATER QUALITY	89
3.10	LAND USE/PLANNING.....	97
3.11	MINERAL RESOURCES	119
3.12	NOISE.....	121
3.13	POPULATION AND HOUSING	135
3.14	PUBLIC SERVICES.....	139
3.15	RECREATION	143
3.16	TRANSPORTATION/TRAFFIC	145
3.17	UTILITIES/SERVICE SYSTEMS	155
3.18	MANDATORY FINDINGS OF SIGNIFICANCE	165
4.0	MITIGATION MONITORING AND REPORTING PROGRAM.....	169
5.0	REFERENCES.....	179
6.0	PREPARERS	183

APPENDICES

- A: AIR QUALITY AND GREENHOUSE GAS EMISSIONS DATA SHEETS
- B: BIOLOGICAL RESOURCES ASSESSMENT MEMORANDUM
- C: GEOTECHNICAL REPORT
- D: NOISE DATA SHEETS
- E: PARKING ANALYSIS
- F: PHASE I ENVIRONMENTAL SITE ASSESSMENT
- G: WATER QUALITY MANAGEMENT PLAN

FIGURES AND TABLES

FIGURES

Figure A.1: General Plan Land Use Designations	xi
Figure A.2: Zoning Designations.....	xiii
Figure 1.1: Regional Project Location	3
Figure 2.1: Existing Land Uses.....	13
Figure 2.2: Existing Project Site	15
Figure 2.3: Site Plan.....	17
Figure 2.4a: Building A Elevation	19
Figure 2.4b: Building A Elevation.....	21
Figure 2.5a: Building B Elevation	23
Figure 2.5b: Building B Elevation	25
Figure 2.6a: Head Start Building Elevation	27
Figure 2.6b: Head Start Building Elevation.....	29
Figure 2.7a: Landscape Concept Building A	31
Figure 2.7b: Landscape Concept Building B	33
Figure 2.7c: Landscape Concept Head Start Facility.....	35

TABLES

Table 2.A: Project Details.....	6
Table 2.B: Proposed Parking Supply and Parking Required	8
Table 3.3.A: Construction Emissions with Regional Effects.....	50
Table 3.3.B: Construction Localized Emissions.....	52
Table 3.3.C: Operational Emissions with Regional Effects – Proposed Project.....	52
Table 3.3.D: Operational Emissions with Regional Effects – Maximum Allowable Density	53
Table 3.3.E: Operational Localized Emissions (lbs/day) – Proposed Project.....	54
Table 3.3.F: Operational Localized Emissions (lbs/day) – Maximum Allowable Density	54
Table 3.7.A: Short-Term Construction Greenhouse Gas Emissions.....	77
Table 3.7.B: Long-Term Operational Greenhouse Gas Emissions – Proposed Project.....	78
Table 3.7.C: Long-Term Operational Greenhouse Gas Emissions – Maximum Allowable Density Scenario	78
Table 3.10.A: City of Garden Grove General Plan Consistency Analysis	99
Table 3.10.B: Zoning Ordinance Development Standards Consistency Analysis.....	115
Table 3.12.A: Land Use Compatibility for Exterior Community Noise.....	122
Table 3.12.B: City of Garden Grove Ambient Base Noise Levels	122
Table 3.12.C: Existing Weekday Traffic Noise Levels	123
Table 3.12.D: Default Noise Emission Reference Levels and Usage Factors	125
Table 3.12.E: Existing Weekday With Project Traffic Noise Levels	128
Table 3.12.F: Existing Weekday With Maximum Density Scenario Traffic Noise Levels.....	128
Table 3.12.G: Existing Sunday Baseline Traffic Noise Levels	129
Table 3.12.H: Existing Sunday With Project Traffic Noise Levels.....	129
Table 3.12.I: Existing Sunday With Maximum Density Scenario Traffic Noise Levels.....	130

Table 3.14.A: Projected School Enrollments	141
Table 3.16.A: Project Trip Generation	146
Table 3.16.B: LOS and ICU	148
Table 3.16.C: LOS and HCM.....	148
Table 3.16.D: Existing and Existing Plus Project Intersection LOS Summary.....	149
Table 3.16.E: Existing and Existing Plus Project With Allowable Density Intersection LOS Summary.....	151
Table 3.17.A: Existing Wastewater Generation on Project Site.....	156
Table 3.17.B: Wastewater Generation at Project Build Out.....	156
Table 3.17.C: Existing Water Demand on the Project Site	158
Table 3.17.D: Water Demand at Project Build Out.....	159
Table 3.17.E: Existing Solid Waste Generation	162
Table 3.17.F: Solid Waste Generation at Project Build Out	162
Table 4.A: Mitigation and Monitoring Reporting Program	171

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MITIGATED NEGATIVE DECLARATION

Title of Project (including any commonly used names for the project): Garden Grove United Methodist Church Project

Brief Description of Project: The proposed project would develop a 5.2 acre (ac) site comprised of two parcels located 12741 Main Street and 10882 Stanford Avenue with a mixed-use development comprised of 47 affordable housing units, a new 3,485 square foot (sf) Head Start facility, and a 2,795 sf leasing office/commercial space. Existing United Methodist Church facilities and the church preschool would remain on the project site. Implementation of the proposed project would require a General Plan Amendment (GPA) and re-zoning of the vacant parcel located at 10882 Stanford Avenue. This portion of the project site currently has a land use designation of Medium Density Residential (MDR) and a zoning designation of Community Center Specific Plan-Community Center Residential Area 20 (CCSP-CCR20). Following approval of the requested GPA and rezone, the entire project site would have a land use designation of Civic Center Mixed Use (CCMU) and a zoning designation of Civic Center Core (CC-3). A lot line adjustment would be required for the proposed project that would modify the southern interior lot line of the parcel located at 10882 Stanford Avenue.

Project Location (see also attached map): West side of Main, south side of Stanford Avenue, 12741 Main Street and 10882 Stanford Avenue, City of Garden Grove, County of Orange

Name of the Project Proponent: The project applicant is Jamboree Housing Corporation, 17701 Cowan Ave., Suite 200, Irvine, CA 92614

Cortese List: The proposed project does does not have a site located on the Cortese List.

Finding: The Initial Study/Mitigated Negative Declaration (IS/MND) found that the environmental effects associated with the proposed project would be less than significant following implementation of the mitigation measures listed below.

Mitigation Measures: BIO-1, CUL-1, CUL-2, CUL-3, GEO-1, HAZ-1, HAZ-2, NOISE-1, TRAFFIC-1

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MITIGATED NEGATIVE DECLARATION

1. PROJECT TITLE:

Garden Grove United Methodist Church Project
General Plan Amendment No. GPA-001-2014;
Amendment No. A-012-2014;
Site Plan No. SP-014-2014;
Variance No. V-008-2014;
Conditional Use Permit No. CUP-023-2014;
Development Agreement No. DA-001-2014;
Lot Line Adjustment No. LLA-006-2014

2. LEAD AGENCY:

City of Garden Grove
11222 Acacia Parkway P.O. Box 3070
Garden Grove, California 92840

3. CONTACT PERSON AND TELEPHONE NO.:

Maria Parra, Urban Planner
City of Garden Grove Planning Services Division
11222 Acacia Parkway
Garden Grove, California 92840
(714) 741-5312

4. PROJECT LOCATION:

12741 Main Street and 10882 Stanford Avenue, Garden Grove, California 92840
Assessor Parcel Numbers 089-202-54 and 089-202-28
(please see page 3)

5. PROJECT PROPONENT AND ADDRESS:

Jamboree Housing Corporation
17701 Cowan Avenue, Suite 200
Irvine, California 92614

6. ENVIRONMENTAL SETTING

The project site is located within an urbanized area that is improved with United Methodist Church facilities (chapel, sanctuary, administration building, and community hall), a church preschool, and a Head Start facility. The project site is bound on the north by Stanford Avenue, on the east by Main Street, on the south by Acacia Parkway, and on the west by existing residential uses with Westlake Street beyond. Surrounding land uses include multi-family residences to the north, a park and community facility to the east, multi-family apartment units to the south, and single-family homes to the west. The existing uses on the project site will remain in their current condition following project implementation, with the exception of the 35 additional parking spaces and landscaping that would be added to the eastern church parking lot through curb modifications, new landscape areas, and restriping; demolition of the existing basketball courts on the southern portion of the project site; and the demolition of the Head Start facility, which would be reconstructed with an outdoor play area further west on the project site.

7. GENERAL PLAN LAND USE DESIGNATION

As illustrated by Figure A.1, General Plan Land Use Designations, the 4.7-acre parcel is designated as Civic Center Mixed Use (CCMU) on the City's General Plan Land Use Map (2008). The CCMU land use designation allows a Floor Area Ratio (FAR) of 0.50 for non-residential uses and residential densities up to 42 dwelling units per acre (du/ac). Allowable uses within the CCMU designation include a combination of civic, institutional, commercial, high-density residential and open space uses.

The vacant 0.51-acre parcel is designated as Medium Density Residential (MDR) on the City's General Plan Land Use Map (2008). The MDR land use designation allows residential densities between 18.1 and 32 du/ac. Allowable uses within the MDR designation include multi-family apartments, condominiums, townhomes, and single-family small-lot subdivisions.

8. ZONING

As illustrated by Figure A.2, Zoning Designations, the 4.7-acre parcel has a zoning designation on the City's Zoning Map (2012) of Civic Center Core (CC-3). The CC-3 zoning designation allows a FAR of 0.50 for non-residential uses, and residential densities up to 42 du/ac. Allowable uses within the CC-3 zoning designation include, but are not limited to, multi-family residential, commercial/office, professional studio, recreation/entertainment, and retail uses.

The vacant 0.51-acre parcel has a zoning designation of Community Center Specific Plan-Community Center Residential-20 Area 20 (CCSP-CCR20). The CCSP-CCR20 zoning designation allows residential densities up to 23 du/ac in Area 20. Allowable uses within the CCSP-CCR20 zoning designation include condominiums, townhouses, apartments, and churches.

9. DESCRIPTION OF PROJECT

A request to develop 2.5 acres of the United Methodist Church site, which is comprised of two parcels with a total land area of 5.2 acres, with an integrated mixed-use project consisting of 47 affordable apartment units. The request includes a General Plan Amendment to change the land use designation of the 0.51-acre vacant parcel from Medium Density Residential (MDR) to Civic Center Mixed Use (CCMU) and a Zone Change to rezone the parcel from Community Center Specific Plan-Community Center Residential Area 20 (CCSP-CCR20) to Civic Center-Core (CC-3); Lot Line Adjustment to adjust the southern interior property line of the vacant parcel; a Site Plan approval to allow the construction of two, three-story apartment buildings with 47 affordable residential apartment units, a 2,975 square foot leasing office/retail commercial space, a new, one-story, 3,485 square foot building to replace an existing Head Start building; a Conditional Use Permit request to allow the church, the church operated pre-school, and the Head Start program to continue to operate; and a Variance request to allow a reduction to the required parking for the church, pre-schools, and the proposed commercial tenant space. Pursuant to the request, the Head Start program will reduce its license capacity from 68 children to 60 children, and the church pre-school will continue to operate with a capacity of 75 children. Pursuant to the State Law regarding affordable housing projects, in conjunction with the requested approvals, the applicant is also requesting three waivers from the Civic Center-Core (CC-3) development standards: (1) to reconfigure the active recreation area by deviating from the required minimum 20-foot width dimension; (2) to allow 12 of the residential units to have a private patio area of less than 90 square feet; and (3) to allow the project to deviate from the required 0.50 commercial Floor Area Ratio (FAR) by providing a 0.21 FAR for the commercial component.

10. AGENCIES WHOSE APPROVAL IS REQUIRED

City of Garden Grove Planning Commission

City of Garden Grove City Council

State Water Resources Control Board (SWRCB)

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LSA

LEGEND

Project Location

General Plan Land Use (2008)

Low Medium Density Residential

Medium Density Residential

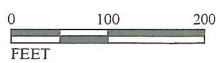
Civic Center Mixed Use

Heavy Commercial

Civic/Institution

Parks/Open Space

FIGURE A.1

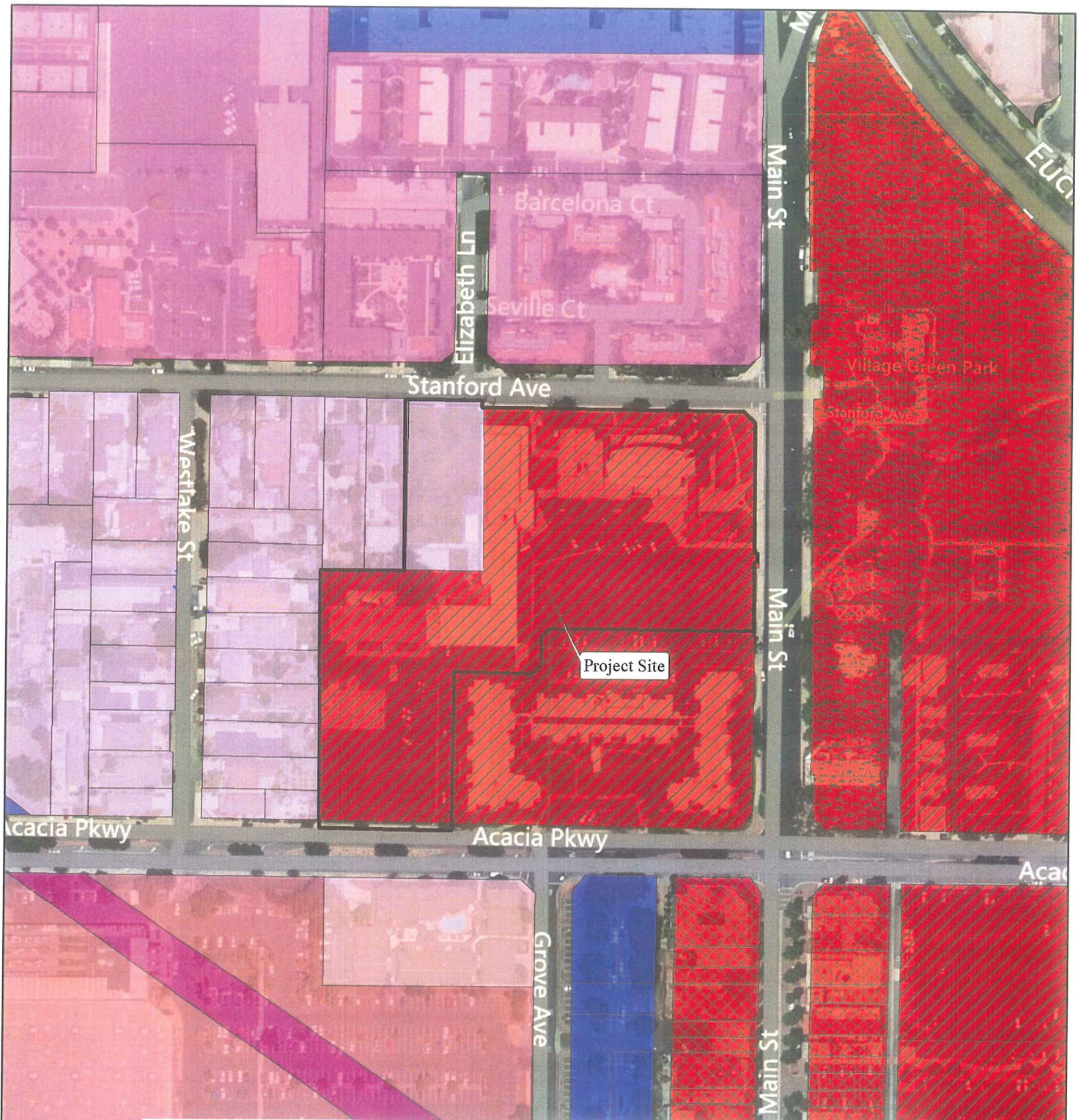


SOURCE: Bing Maps (2013); City of Garden Grove (2008)

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Garden Grove United Methodist Church Project
General Plan Land Uses

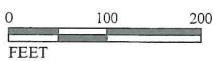
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LEGEND		
	Project Location	
Zoning		
	Civic Center-Core (CC-3)	
	Civic Center-Main Street (CC-2)	
	Civic Center-Open Space (CC-OS)	
	Community Center Specific Plan (CCSP)	
	Community Center Specific Plan Community Center Transit Area 63	
	Community Center Specific Plan Core Residential Area 20	
	Community Center Specific Plan Core Residential Area 31	
	Community Center Specific Plan District Commercial Area 30	
	Community Center Specific Plan Peripheral Residential Area 12 (CCSP-PR12)	
	Community Center Specific Plan Peripheral Residential Area 13	
	Planned Unit Development (PUD)	

FIGURE A.2

LSA



SOURCE: Bing Maps (2013); City of Garden Grove (2008)
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Garden Grove United Methodist Church Project
 Zoning

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1.0 INTRODUCTION

1.1 PURPOSE OF THE INITIAL STUDY

This purpose of this Initial Study/Mitigated Negative Declaration (IS/MND) is to evaluate the potential environmental impacts that would occur as a result of construction and the subsequent operation of the Garden Grove United Methodist Church project (proposed project) on a 5.2-acre project site. The project site consists of two parcels located at 12741 Main Street and 10882 Stanford Avenue in the City of Garden Grove (City), as shown on Figure 1.1, Regional Project Location. The proposed project would develop a 2.5-acre portion of the project site with a mixed-use project comprised of 47 affordable apartment units, a 2,975 sf leasing office/commercial space, and a new 3,485 square foot (sf) Head Start facility to replace the existing 6,107 sf Head Start facility currently located on the central portion of the site. Vehicular access to the project site would be provided by a new driveway on Stanford Avenue and an existing driveway on Acacia Parkway. In addition, residents and visitors could access the site via the existing United Methodist Church driveways along Main Street.

The proposed project is considered a project per the State California Environmental Quality Act (CEQA) Guidelines. The City of Garden Grove is the Lead Agency for the proposed project, and as such, is responsible for the proposed project's environmental review. Further, Section 21067 of the Public Resources Code defines a Lead Agency as the public agency responsible for carrying out or approving a project that may have potentially significant environmental impacts on the environment. The project Applicant is Jamboree Housing Corporation.

As part of the environmental review process for the proposed project, the City has authorized the preparation of an IS/MND to assess the project's environmental impacts. The primary purpose of this IS/MND is to disclose the environmental implications of the proposed project to the City's decision-makers and to the public.

Although this IS/MND has been prepared with the assistance of a consultant, the analysis, conclusions, and findings herein are representative of the City's position, in its capacity as the Lead Agency for the proposed project. Based on the initial study, the City has determined that with the incorporation of mitigation, the project will not have a significant effect on the environment.

This IS/MND and an associated Notice of Intent (NOI) will be forwarded to all applicable responsible agencies, trustee agencies, and the public for review and comment for a period of 30 days to allow these entities and other parties to comment on the proposed project and the findings in the IS/MND.

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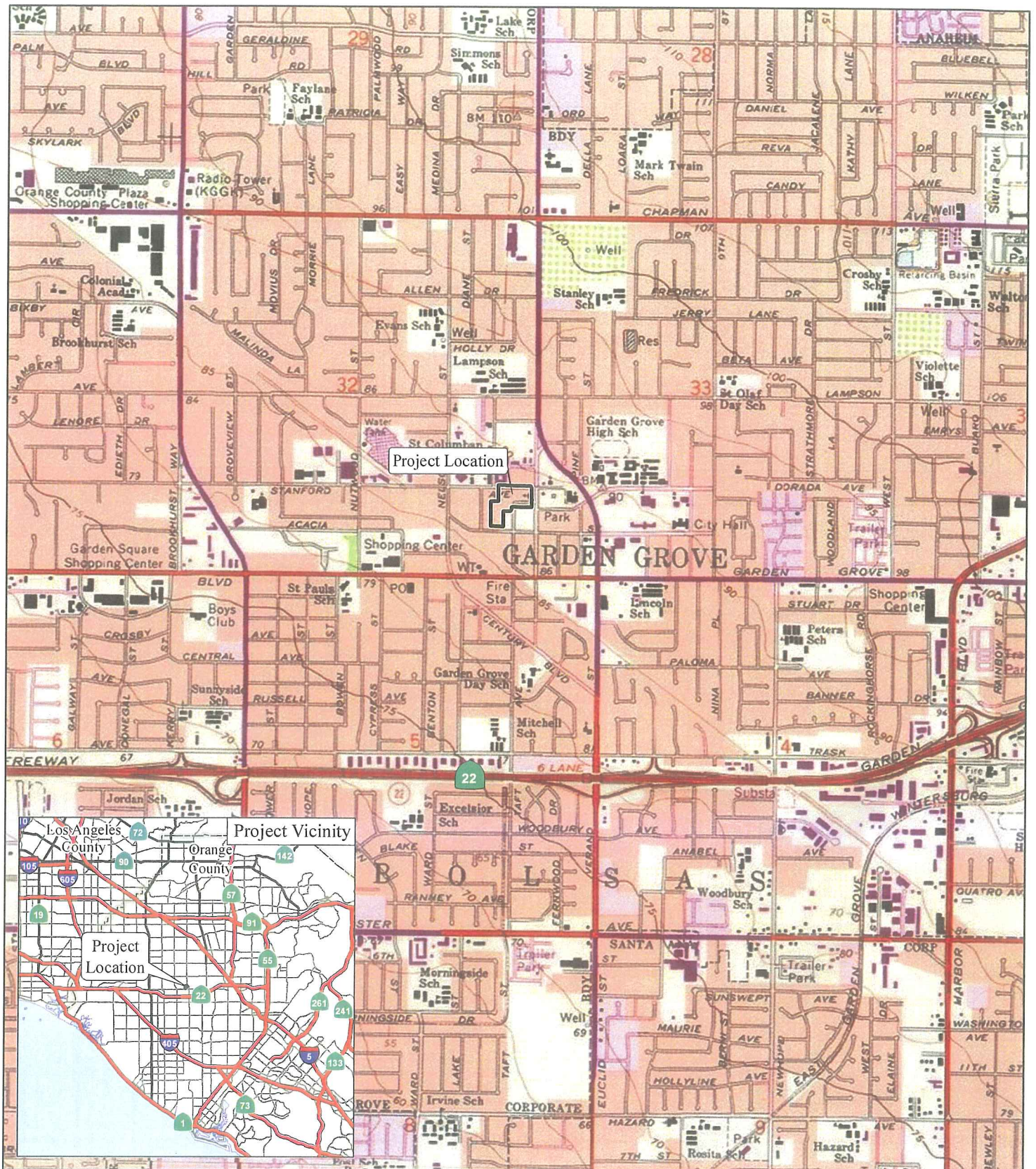
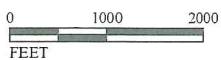


FIGURE 1.1

LSA

LEGEND

 Project Location



SOURCE: USGS 7.5' Quad - Anaheim (1981), CA
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Garden Grove United Methodist Church Project
 Regional Project Location

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2.0 PROJECT DESCRIPTION

2.1 PROJECT LOCATION AND ENVIRONMENTAL SETTING

Surrounding Land Uses

The project site is centrally located in the City on the west side of Main Street in the civic center downtown area. As shown in Figure 2.1, Existing Land Uses, the project site is located in an urbanized area, surrounded by multi-family residences to the north, a park and community facility to the east, multi-family apartment units to the south, and single-family homes to the west.

Existing Site

As illustrated by Figure 2.2, Existing Project Site, the 5.2-acre (ac) project site consists of two parcels; a 4.7 ac parcel located at 12741 Main Street that contains the existing United Methodist Church and facilities and a 0.51 ac parcel located at 10882 Stanford Avenue that is currently vacant. The vacant parcel is an unimproved grassy open space area.

The existing United Methodist Church facilities include a 740-seat 8,745 square feet (sf) sanctuary, an 80-seat 1,714 sf chapel, 10,048 sf of administrative offices, a 9,707 sf community room, a pastor's residence, a 6,107 sf Head Start facility, and a 7,713 sf church preschool. The Head Start facility provides mental, social, and emotional development for children from birth to age five. In addition to education, Head Start programs provide children and their families with health, nutrition, social, and other services. The majority of the church structures are one- and two-stories in height; however, the main sanctuary is approximately three stories in height with a pointed spire that extends an additional two stories.

The church has an on-site surface parking lot comprised of 192 surface spaces, which accommodates the church congregation, the preschool and Head Start facility, and staff. Access to the project site and parking lot is provided by two driveways on Main Street and two driveways on Acacia Parkway. The United Methodist Church worship services serve 130 to 170 members and are held on Sundays at 9:30 a.m. and 11:45 a.m. Key weekday church functions include the Head Start program (136 children and 15 staff members), which operates between 8:00 a.m. and 4:00 p.m., church pre-school (65 children and 12 staff members), which operates between 6:30 a.m. and 6:30 p.m., church office operations (5 staff members) occurring between 9:00 a.m. and 3:00 p.m., and various classes (5 to 25 participants), bible study sessions (5 to 10 members), choir rehearsals (25 to 30 members), and meetings/activities (10 to 20 members), which occur at various times throughout day and evening hours. Trips generated by each of these functions are expected to mainly occur before and after the time period when the functions occur. Saturday activities also include classes and choir rehearsals (15 to 25 members).

2.2 PROJECT DETAILS

As shown in Table 2.A, the Garden Grove United Methodist Church Project (proposed project) would develop a 2.5-acre portion of the project site with a mixed-use project comprised of 47 affordable apartment units, a 2,975 sf leasing office/commercial space, and a new 3,485 sf Head Start Facility (17 ft in height) with a 4,500 sf, outdoor play area to replace the existing one-story, 6,107 sf Head Start facility currently located on the central portion of the site (see Figure 2.3, Site Plan). In addition, a 5,100 sf outdoor play area would be added to the existing church preschool as part of the proposed project. The demolition of the existing Head Start building and basketball courts and addition of an outdoor play area are the only structural changes that would occur to the existing Church facilities. Landscaping and 35 additional parking spaces would be added to the eastern church parking lot through curb modifications and restriping. Painting and aesthetic improvements are planned for the facade of the existing preschool, which will be consistent with the existing visual character of the area.

Table 2.A: Project Details

Existing Buildings		
Building	Proposed Action	Size (Square Footage)
Church Facilities		
• Church Offices	No Construction or Improvements	10,048
• Community Hall ¹	No Construction or Improvements	9,707
• Chapel	No Construction or Improvements	1,714
• Sanctuary	No Construction or Improvements	8,745
• Preschool (2 Buildings)	No Construction/Minor Improvements to Facade of Buildings	7,713
<i>Total area to remain</i>		37,927
Head Start	Demolition	6,107
<i>Total area to be demolished</i>		6,107
Proposed Buildings		
Residential		
• Building A (31 units)	New Construction	31,019
• Building B (16 units)	New Construction	13,284
Head Start	New Construction to Replace Existing Head Start Facility	3,485
Leasing Office	New Construction	2,975
<i>Total New Construction</i>		50,763

Source: Acacia Parkway Affordable Housing Site Plan (2014). Jamboree Housing.

¹ Includes 800 sf lounge/kitchen area.

sf = square feet

The proposed project requires a General Plan Amendment (GPA No. GPA-001-2014) to change the land use designation of the 0.51 ac parcel from MDR to CCMU, and a zone change (Zone Change A-012-2014) to rezone the 0.51ac parcel from a designation of CCSP-CCR20 to CC-3. A lot line adjustment (LLA) would also be required for the interior southern property line of the vacant parcel located at 10882 Stanford Avenue.

The 47-unit apartment community would consist of two primary structures (Buildings A and B), which would include a total of 20 one-bedroom, 12 two-bedroom, and 15 three-bedroom units. Building A would replace the existing basketball court and parking lot on the southern portion of the project site and would contain the following uses in a three-story structure: 31,019 sf of apartment uses (31 apartments), a 2,975 sf leasing office (with the potential to serve as a commercial space in the future), a 647 sf clubhouse, a 647 sf exercise room, private balconies, and a 4,765 sf podium level terrace.

Building B would be located on the northern portion of the project site, adjacent to the United Methodist Church accessory buildings (i.e., the community room, kitchen, lounge, classrooms, and church preschool). This structure would also be three stories in height and would contain approximately 13,284 sf of apartment uses (16 apartments), private balconies, a 647 sf clubhouse, a 647 sf fitness room, and a 1,623 sf podium level terrace on the rooftop. The 16 apartments contained in Building B are intended to be senior housing units.

The proposed project would develop the remaining portions of the site with 16,720 sf of open space and 21,127 sf of recreational areas, as well as both surface and enclosed parking lots to serve on-site residents and the new Head Start Facility.

Parking and Access. Vehicular access to the project site would be provided by a new driveway on Stanford Avenue and an existing driveway on Acacia Parkway. In addition, residents and visitors to the apartments, Head Start facility, and leasing office/commercial space could access the site via the existing United Methodist Church driveways along Main Street. These driveways would be connected in order to serve the entire site. Shared pedestrian access to the mixed uses on the project site would be facilitated by existing sidewalks and proposed walkways.

The proposed project would provide a total of 77 new parking spaces, 74 of which will be reserved for residential uses, consistent with Section 65915 of Senate Bill 1818 for affordable housing developments (i.e., one on-site space per one-bedroom unit and two on-site spaces per two- and three-bedroom units), as well as two (2) spaces for the Head Start drop-off area and one (1) space reserved for United States Postal Service (USPS) that could be used for residential or visitor purposes after-hours. Building A would provide 28 garage spaces for residents and Building B would provide 10 garage spaces for residents. In addition, carports would provide an additional 9 parking spaces and there would be 30 open parking stalls. Therefore, the residential component of the proposed project is parked per State Code.

Approval of a variance would be required for the commercial component of the proposed project to provide fewer parking spaces for the United Methodist Church facilities, church preschool, Head Start facility, and leasing office/commercial space than required by the City's parking requirements. A Parking Analysis included in Appendix E of this Initial Study/Mitigated Negative Declaration (IS/MND) was prepared for the proposed project to substantiate the reduction in church, preschool, Head Start, and leasing office/commercial space parking that would be required by the City's Zoning Code for the proposed project. The proposed project would reconfigure the eastern church parking lot to provide an additional 35 parking spaces through curb modifications and restriping. Implementation of the proposed project would reduce the existing church parking supply of 192 spaces by 39 spaces, leaving a total of 153 spaces available to the United Methodist Church.

The total proposed parking spaces for the United Methodist Church and its supporting uses and facilities would therefore total 230 spaces. As shown in Table 2.B, based on the City’s parking requirement, the total required parking supply of 424 spaces would be required for the United Methodist Church and its supporting uses and facilities, and therefore does not conform to parking requirements outlined in the City’s Municipal Code. However, based on the parking analysis completed for the proposed project, 230 spaces provided by the proposed project would be sufficient to accommodate the peak-parking demand generated by the proposed mixed use project and the existing United Methodist Church. However, a parking variance would be required for the proposed project. For additional discussion of parking requirements, refer to Section 3.10, Land Use/Planning.

Table 2.B: Proposed Parking Supply and Parking Required

Use	Parking Required	Parking Provided
Church		
Sanctuary (740 fixed seats)	247	
Chapel (80 fixed seats)	27	
Church Offices (10,048 sf)	41	
Community Room (9,707 sf)	39	
Lounge/Kitchen (800 sf)	3	
Pastor’s Residence	2	
Day Care Facilities (Preschool Buildings and Head Start)	50	
Leasing Office/Commercial Space	15	
Subtotal	424	
Deficit¹	271 (64%)	
Residential (Complies with Code)		
Building A (31 Units)	54	
Building B (16 Units)	20	
Additional Parking ²	3	
Subtotal	77	
Total	498	230

Source: LSA Associates, Inc. (2014).

¹ Parking deficit represents deficiency for the church, preschool, Head Start, and leasing office/commercial space, not the residential units.

² Three parking spaces will be reserved for Head Start and USPS during normal business hours, and residents and guests can use these parking spaces during non-business hours and on weekends.

sf = square feet

Building Design. The proposed project has been designed to be consistent with the character of the adjacent and surrounding residential development, and to match the visual character of the adjacent Main Street area. The project’s design includes elements such as brick veneer, balconies, and painted metal awnings. Buildings A and B, as well as the new Head Start Building, would include stucco color finish, asphalt shingle tiles, and painted aluminum windows.

Figures 2.4 (a and b) through 2.6 (a and b) provide exterior elevations for Building A, Building B, and the new Head Start Building. Building A would be three stories and would be constructed to a height of 42 feet (ft). Building B would also be three stories and would be constructed to a height of 41 ft. The new Head Start Building would be one-story and would be 17 ft in height. As shown in

Table 2.A, Building A would provide 31 units designated for families, while Building B would provide 16 units designated for seniors.

Landscaping. Figure 2.7 (a through c) depicts the conceptual landscape plans for the project. A total of 14,692 sf of landscaping would be installed. A number of trees would be planted including decorative and shade trees along the proposed project's frontage, courtyard, and paseo walkway. Additional landscaping features such as potted trees and raised planters would be included in the courtyard area of Building A. All landscaping for the proposed project would be required to comply with Section 9.18.120 of the City's Municipal Code's Landscaping design standards.

Lighting. According to the City's Municipal Code Section 9.18.100, Development and Design Standards Applicable to All Mixed Use Zones, all on-site lighting shall be stationary and directed away from adjoining properties and public right-of-ways.

Sustainability Features. The proposed project would incorporate a number of design features that would reduce impacts to greenhouse gas (GHG) emissions, water use, waste generation, and energy demands. These features are listed below:

Project Design Feature GCC-1: To ensure that the proposed project complies with and would not conflict with or impede the implementation of reduction goals identified in the City of Garden Grove (City) General Plan, Assembly Bill (AB) 32, Senate Bill (SB) 375, the Governor's Executive Order (EO) S-3-05, and other strategies to help reduce greenhouse gases (GHGs) to the level proposed by the Governor, the project shall implement a variety of measures that would further reduce its GHG emissions. To the extent feasible, and to the satisfaction of the City, the following measures shall be incorporated into the design and construction of the project:

- **Construction and Building Materials.**
 - Divert at least 50 percent of the demolished and/or grubbed construction materials from landfills for reuse or recycling (including, but not limited to, soil, vegetation, concrete, lumber, metal, and cardboard).
 - Use of low-VOC interior paint and paperless drywall in bathrooms
 - CRI Green Label low-VOC carpeting, underlayment, and low-VOC adhesives
 - Indoor air quality management plan and verification testing during construction
- **Energy Efficiency Measures.** Design all project buildings to meet or exceed the latest (2013) California Building

Code's (CBC) Title 24 energy standard, such as installing energy-efficient (ENERGY STAR) heating and cooling systems, appliances and equipment, tankless water heaters, and control systems.

- **Water Conservation and Efficiency Measures.**
 - Create water-efficient landscapes within the development.
 - Flow reducers in kitchen and bathroom faucets
 - Water efficient low-flow toilets
 - Install water-efficient irrigation systems and devices, such as soil moisture-based irrigation controls.
 - Restrict watering methods (e.g., prohibit systems that apply water to nonvegetated surfaces) and control runoff.

Water Quality. To meet the requirements of the City of Garden Grove's Urban Water Management Plan (UWMP) and the Garden Grove Municipal Code (GGMC), the proposed project would include installation of two infiltration trenches located under the paved drive aisles. Runoff would be pretreated by infiltration Best Management Practices (BMPs) ([CULTEC] recharger chambers) to offset any increase in stormwater runoff that would result from the increased impervious surface area. These BMPs and all other BMPs are described in complete detail within the Water Quality Management Plan (WQMP) for the project, which was prepared for the proposed project by Joseph C. Truxaw and Associates, Inc. on August 14, 2014.

Because the proposed project would disturb greater than 1 ac of soil, the project is subject to the requirements of the State Water Resources Control Board National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order No. 2009-0009-DWQ, NPDES No. CAS000002) (Construction General Permit), or subsequent permit. Prior to construction, the project would obtain coverage under the Construction General Permit. The Waste Discharge Identification Number (WDID) would be provided to the City to demonstrate proof of coverage under the Construction General Permit.

Implementation/Phasing. The proposed project is planned for development in a single phase, with construction expected to be completed no later than September 2015. The project would begin with removal of the existing asphalt parking lot and basketball court located on the southern portion of the project site, and demolition of the existing Head Start Facility. Thereafter, project construction would continue with grading, site preparation, construction, and landscaping. All construction equipment, including construction worker vehicles, would be staged on site.

Discretionary Actions. Development of the proposed project would require discretionary approvals by the City as the Lead Agency, and Responsible Agencies. The City's discretionary actions include the following:

- **General Plan Amendment Approval.** A General Plan Amendment would be required to change the land use designation for the 0.51 ac parcel from MDR to CCMU.
- **Rezone Approval.** A rezoning of the 0.51 ac parcel from its current designation of CCSP-CCR20 to CC-3 would be required as part of the proposed project.
- **Site Plan Review and Approval.** Site Plan Review allows multiple departments in the City to analyze the utilities, building, safety, streets, parking, landscape, fire access, land use compatibility, and overall site design to allow the construction of 47 affordable housing units, a 3,485 sf Head Start facility, and 2,975 sf of leasing office/commercial space, and make recommendations based on staff review.
- **Parking Variance Approval.** Approval of a variance to allow the project to provide fewer parking spaces for the United Methodist Church facilities, church preschool, Head Start facility, and leasing office/commercial space than required by the City's parking requirements.
- **Concession/Waiver Approval.** The City Planning Commission would consider approval of three concessions for the proposed project's inconsistency with development standards provided by the City's Zoning Code. The State Affordable Housing project allows for up to three concessions (waivers). Concessions required by the proposed project include the following:
 - Reconfiguration of the minimum 20 ft dimension for active recreation area into smaller areas throughout the project site per the City's Zoning Code Section 9.18.110.030.F.2.
 - Allowance of private balconies less than 90 sf in size for private recreation areas.
 - Allowance of the project to provide 0.21 FAR for the commercial component of the proposed project, and not 0.5 FAR as required by the City's Zoning Code.
- **Conditional Use Permit Approval.** A Conditional Use Permit (CUP) to allow the continued operation of the shared parking on the project site for the new Head Start facility, pre-school, and church operations.
- **Lot Line Adjustment Approval.** A lot line adjustment would be required for the interior southern property line vacant parcel located at 10882 Stanford Avenue.
- **Adoption of the Mitigated Negative Declaration.** The City Planning Commission will consider the MND and make a recommendation to the City Council on adoption of the MND in conjunction with approval of the project.

Other Ministerial City Actions. Ministerial permits/approvals (e.g., demolition and grading permits, building permits) would be issued by the City to allow demolition of the existing on-site Head Start building, site preparation, curb cuts, and connections to the utility infrastructure.

Probable Future Actions by Responsible Agencies. Because the project also involves approvals, permits, or authorization from other agencies, these agencies are "Responsible Agencies" under California Environmental Quality Act (CEQA). Section 15381 of the CEQA Guidelines defines Responsible Agencies as public agencies other than the Lead Agency that would have discretionary approval power over the project or some component of the project, including mitigation. This agency is identified below:

- **State Water Resources Control Board.** Applicant/Developer must submit Permit Registration Documents, including a Notice of Intent (NOI), to comply with the National Pollution Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities.

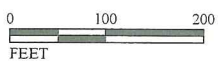


LSA

LEGEND

- Project Location
- Existing Land Use (SCAG 2008)
- Single Family Residential
- Multi-Family Residential
- Facilities
- Education - K-12
- Retail Stores and Commercial Services
- General Office Use
- Education - College
- Local Parks and Recreation
- Vacant Lot

FIGURE 2.1

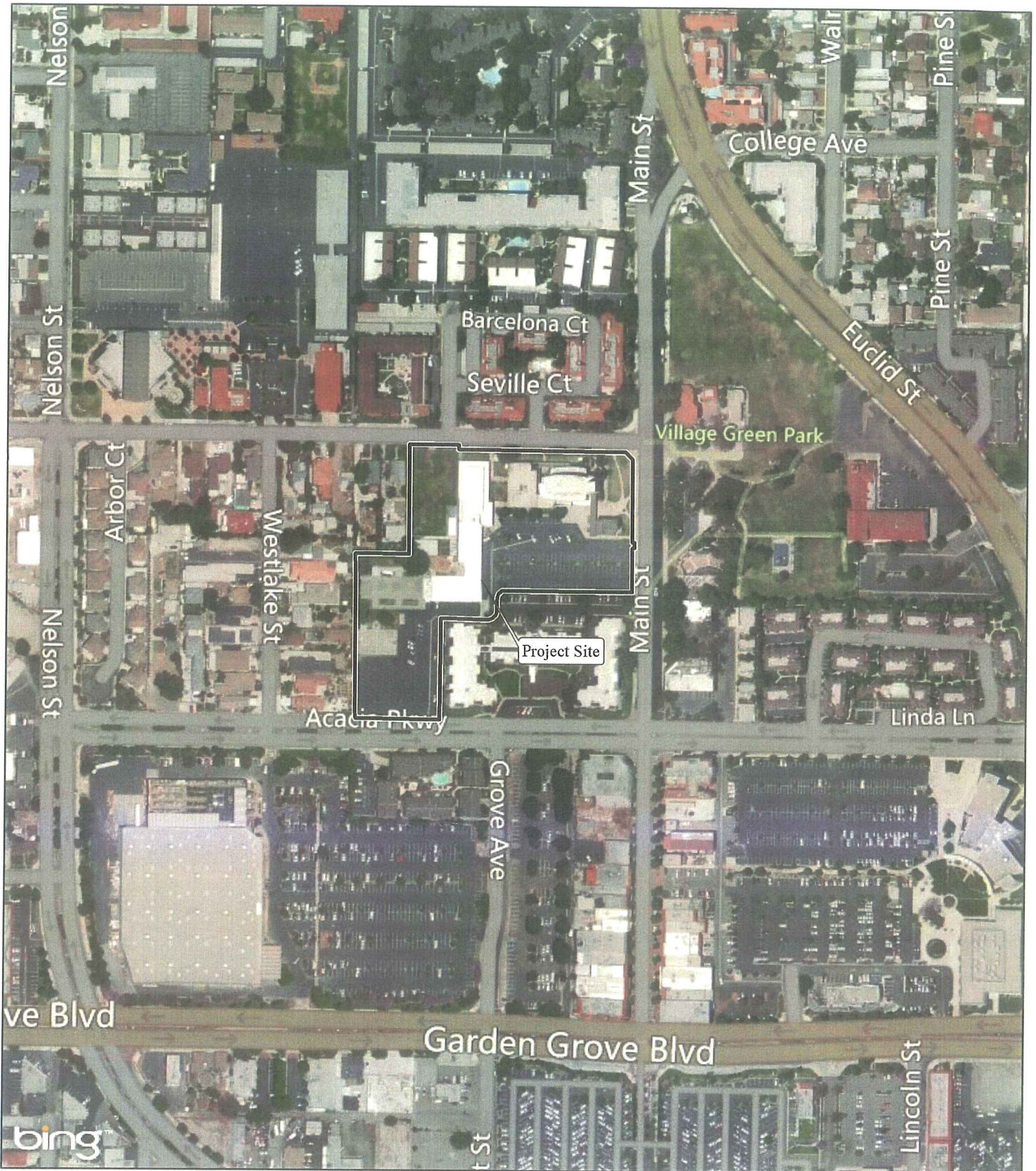


SOURCE: Bing Maps (2013)

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Garden Grove United Methodist Church Project
Existing Land Uses

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LSA

LEGEND

 Project Location

FIGURE 2.2



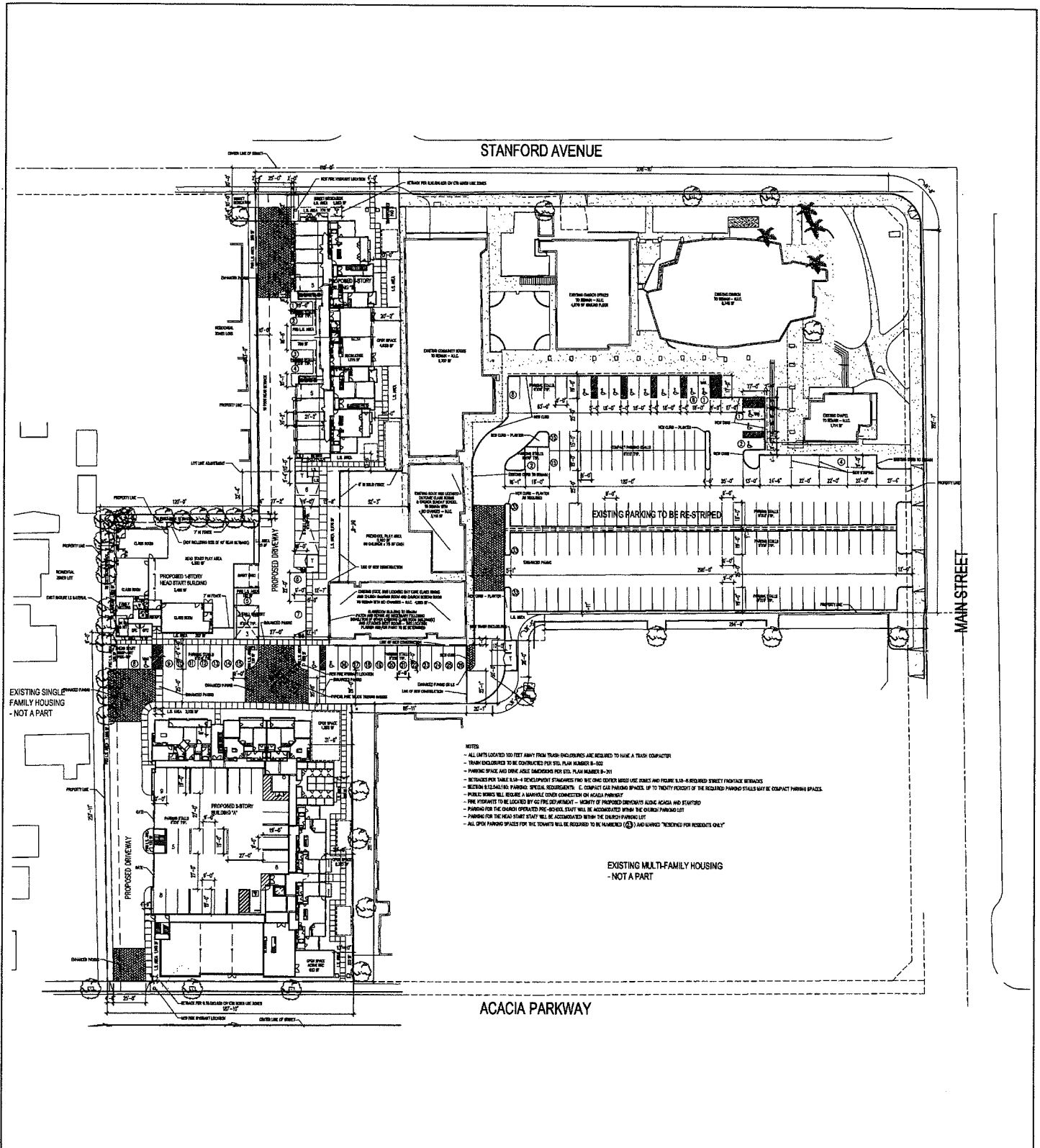
0 150 300
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SOURCE: Bing Maps (2013)

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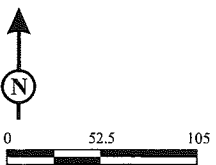
Garden Grove United Methodist Church Project
Existing Project Site

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LSA

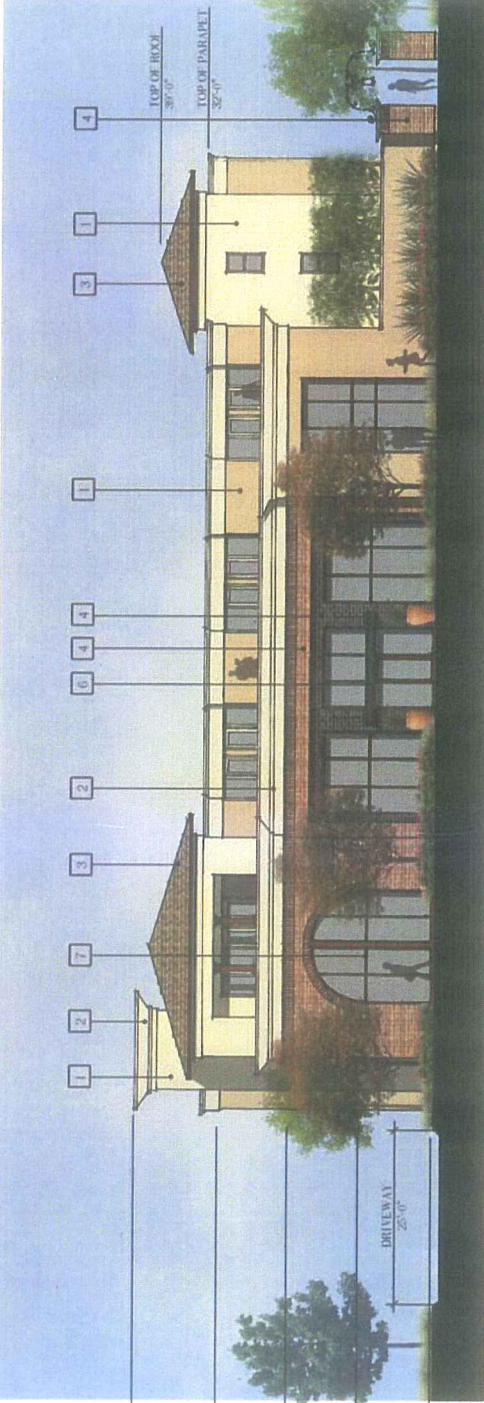
FIGURE 2.3



SOURCE: Newman Garrison Partners

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SOUTH ELEVATION (ACACIA STREET VIEW)

TOP OF ROOF	42'-6"
TOP OF LEVEL 1	35'-0"
LEVEL 3	20'-6"
LEVEL 2	10'-6"
LEVEL 1	0'-0"



WEST ELEVATION

TOP OF PARAPET	35'-0"
TOP OF PLATE	30'-6"
LEVEL 3	20'-6"
LEVEL 2	10'-6"
LEVEL 1	0'-0"

Material Legend

- 1 Stone Color Finish
 - 2 Iron Accent Color
 - 3 Stone Finish over Form
 - 4 Roof Material Concrete flat tiles
 - 5 Brick Veneer Material Thin brick
 - 6 Balcony Railing Material Painted metal
 - 7 Avenging Material Painted metal
- 8 Stonedent仕上げに、色を塗る
9 3000mm x 1500mm x 150mmのタイルを敷く
10 塗装された鋼製手すり

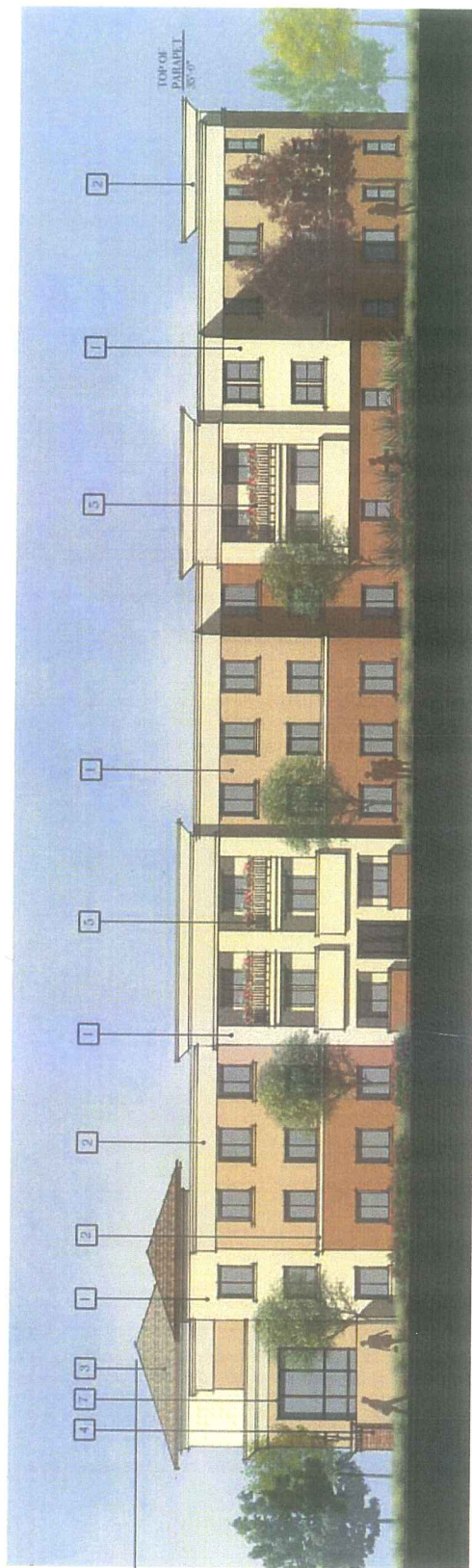
LSA

FIGURE 2.4a

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NORTH ELEVATION



EAST ELEVATION

LSA

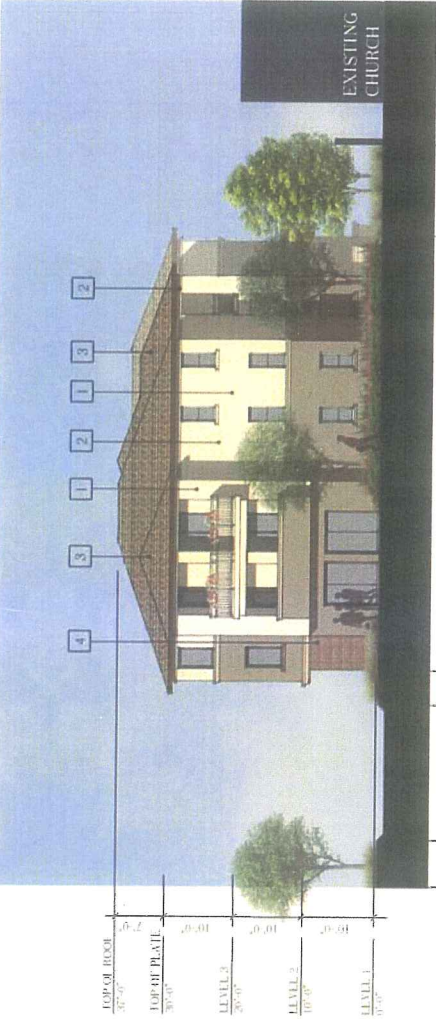
FIGURE 2.4b

Garden Grove United Methodist Church Project
Building A Elevations

Material Legend

- 1 Stucco Coat Finish
- 2 Form Accents, 4th Material, Stucco Finish over form
- 3 Red Material, Concrete flat top
- 4 Brick Veneer Material, Thin brick
- 5 Red-on-Robbie Material, Painted metal
- 6 Acrylic Material, Painted metal
- 7 Stucco finish over 1/2\"/>

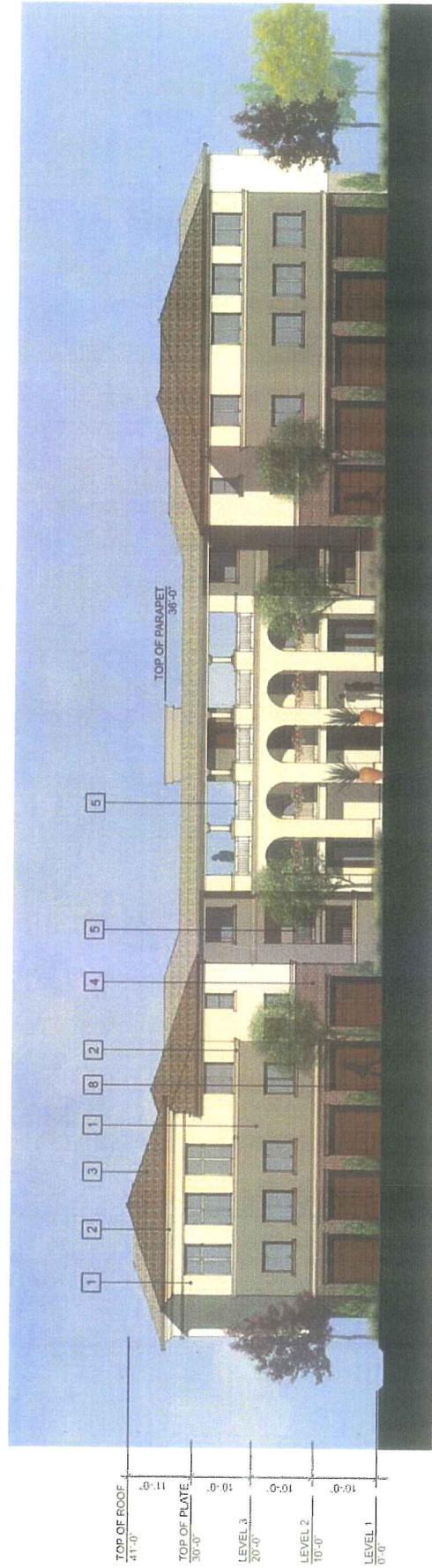
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SOUTH ELEVATION

Material Legend

- 1 Stucco Colored Finish
- 2 Faux Accent Color Material - Stucco Finish over Foam
- 3 Roof Material - Asphalt shingles
- 4 Brick Veneer Material - Thin brick
- 5 Balcony Railing Material - Painted metal
- 6 Acrylic Material - Painted metal
- 7 Streetlamp - modern to be coordinated with other streetlights to be coordinated
- 8 Painted Steel Ornamental Garage Door



WEST ELEVATION

LSA

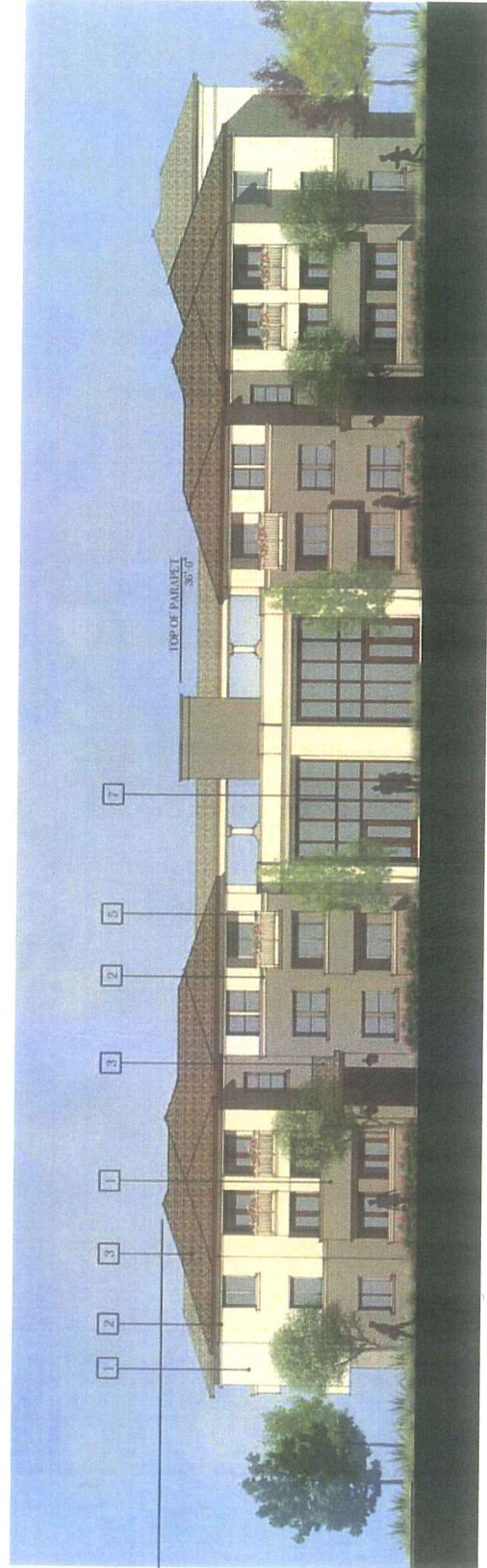
FIGURE 2.5a

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NORTH ELEVATION

TOP OF ROOF	35'-0"
TOP OF PARAPET	30'-0"
LEVEL 3	20'-0"
LEVEL 2	10'-0"
LEVEL 1	0'-0"



EAST ELEVATION

TOP OF ROOF	35'-0"
TOP OF PARAPET	30'-0"
LEVEL 3	20'-0"
LEVEL 2	10'-0"
LEVEL 1	0'-0"

Material Legend

- 1 Stucco Color Finish
- 2 Trim Detail Color Material - Stucco finish over foam
- 3 Roof Material - Asphalt Shingles
- 4 Brick Veneer Material - Dura brick
- 5 Relative Finish Material - Painted metal
- 6 Existing Material - Painted metal
- 7 Structural supports to be colored aluminum - Anodized to be color match
- 8 Painted Structural Garage Door

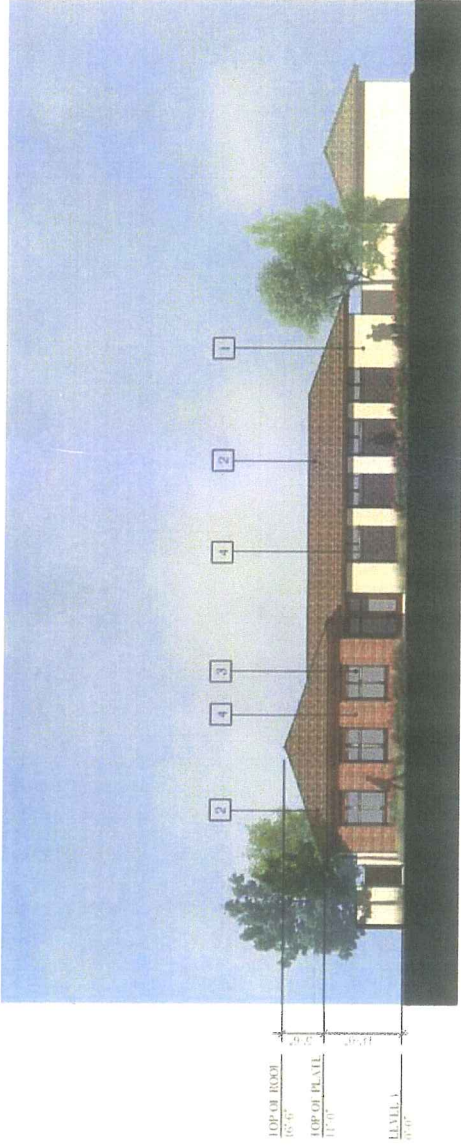
LSA

FIGURE 2.5b

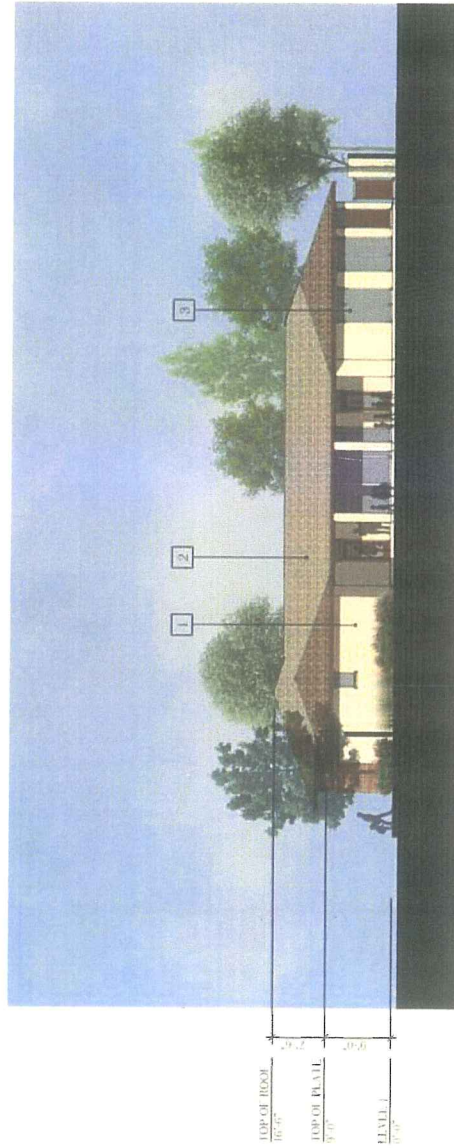
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Material Legend

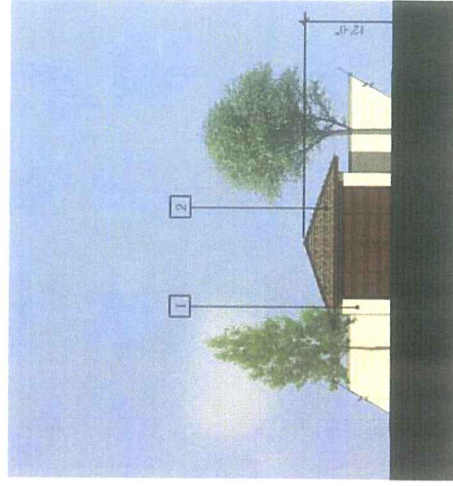
- 1 Stucco/Clay Brick
- 2 Metal Asphalt shingles
- 3 Colored aluminum windows
- 4 Brick veneer material - Thin brick



SOUTH ELEVATION



EAST ELEVATION



MAINTENANCE SHED
EAST ELEVATION

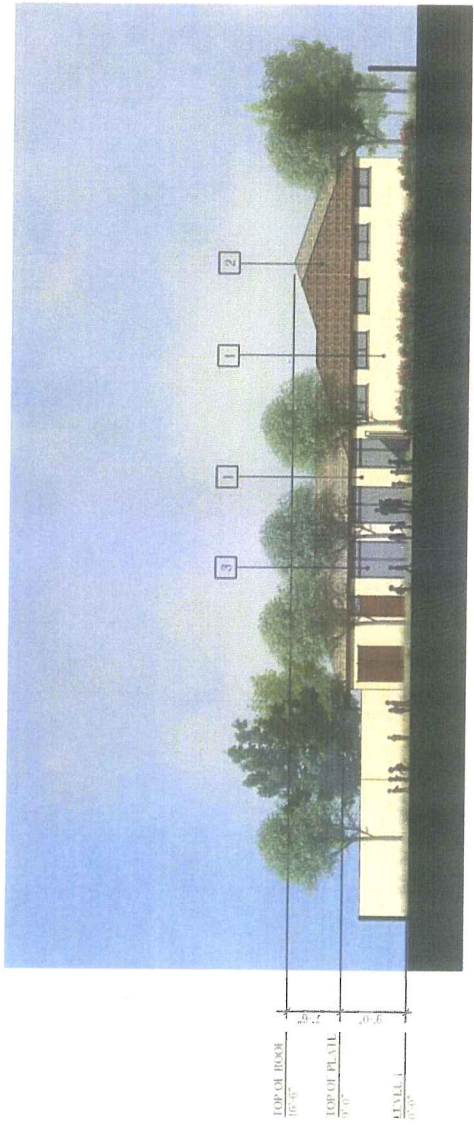
LSA

FIGURE 2.6a

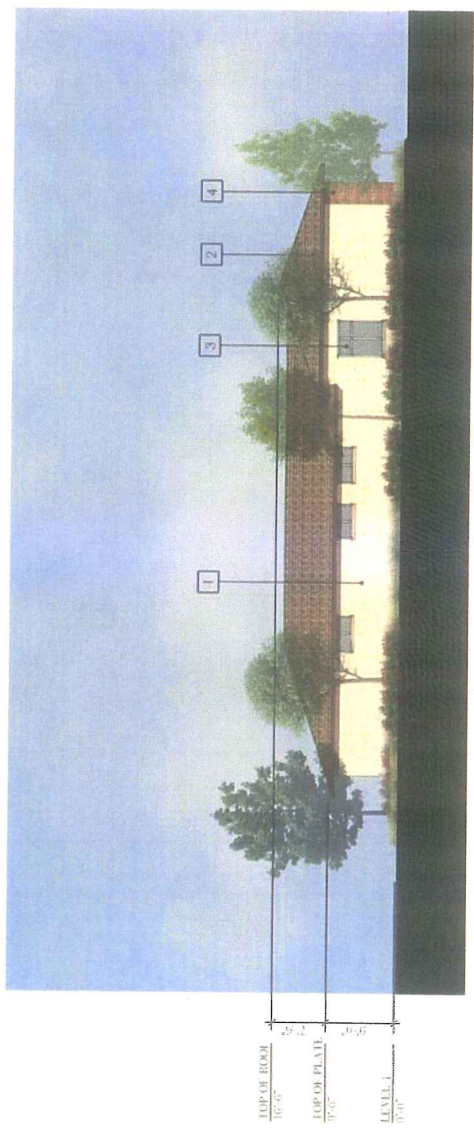
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Material Legend

- 1 Stucco Color Finish
- 2 Roof Asphalt Shingle
- 3 Colored aluminum windows
- 4 Brick veneer material Thin brick



NORTH ELEVATION



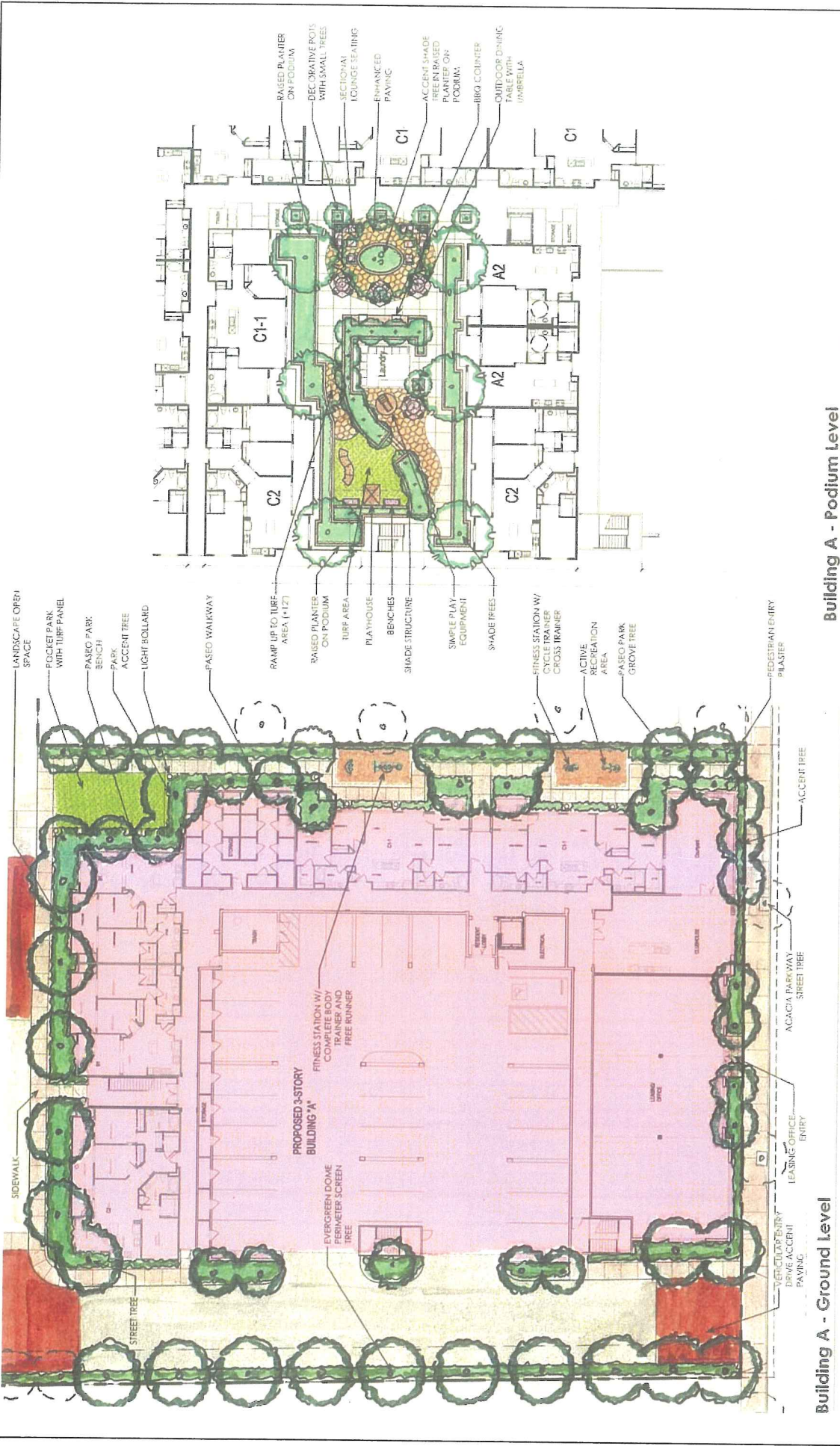
WEST ELEVATION

LSA

FIGURE 2.6b

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FIGURE 2.7a



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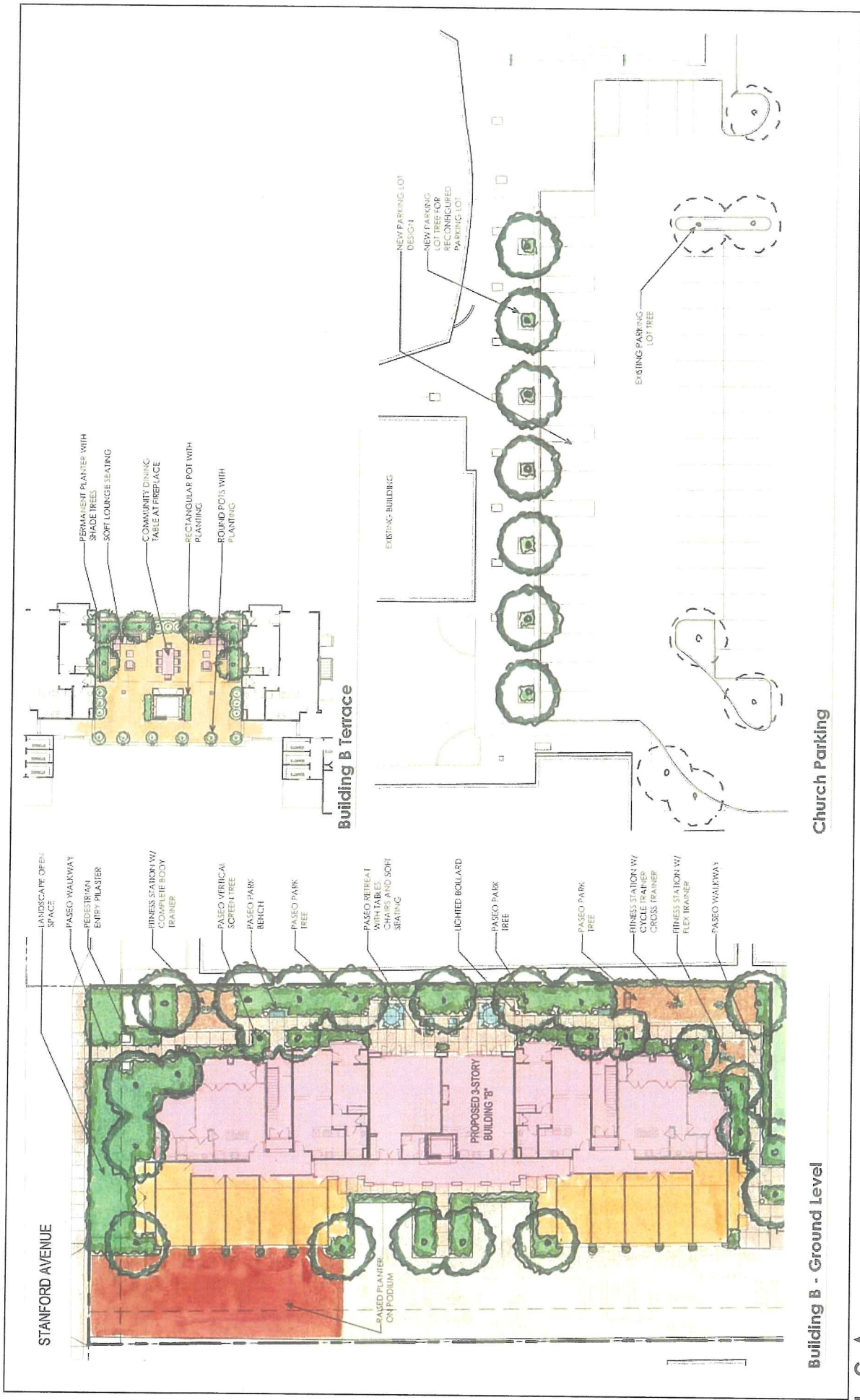


FIGURE 2.7b

Church Parking

Building B - Ground Level

LSA



0 85 FEET

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Head Start Building

FIGURE 2.7c

LSA



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3.0 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

- | | | |
|---|---|---|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Agriculture & Forest Resources | <input type="checkbox"/> Air Quality |
| <input type="checkbox"/> Biological Resources | <input 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 type="checkbox"/> Land Use/Planning | <input type="checkbox"/> Mineral Resources | <input 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:

1. I find that the project **could not** have a significant effect on the environment, and a **NEGATIVE DECLARATION** would be prepared.
2. 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.
3. I find the proposed project **may have a significant effect** on the environment, and an **ENVIRONMENTAL IMPACT REPORT** is required.
4. 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.
5. I find that although the proposed project could have a significant effect on the environment, because all potentially 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.

Maureen Crane
Project Planner

11/3/14
Date

Planning Manager

Date

EVALUATION OF ENVIRONMENTAL IMPACTS

1. A brief explanation is required for all answers except “No Impact” answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A “No Impact” answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A “No Impact” answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project would not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
3. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. “Potentially Significant Impact” is appropriate if there is substantial evidence that an effect may be significant. If there are one or more “Potentially Significant Impact” entries when the determination is made, an EIR is required.
4. “Negative Declaration: Less Than Significant With Mitigation Incorporated” applies where the incorporation of mitigation measures has reduced an effect from “Potentially Significant Impact” to a “Less Than Significant Impact.” The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from earlier analyses may be cross-referenced, as discussed below).
5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063 (c) (3) (D). In this case, a brief discussion should identify the following:
 - a. Earlier Analysis Used. Identify and state where they are available for review.
 - b. Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
 - c. Mitigation Measures. For effects that are “Less Than Significant with Mitigation Measures Incorporated,” describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
7. Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
8. This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project’s environmental effects in whatever format is selected.

9. The explanation of each issue should identify:
 - a. The significance criteria or threshold, if any, used to evaluate each question; and
 - b. The mitigation measure identified, if any, to reduce the impact to less than significant.

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3.1 AESTHETICS

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(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 type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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"/>

Impact Analysis:

The proposed project is requesting a GPA and rezone, which would allow for a potential maximum density of 5 additional units (for a total of 21 units) on the 0.51-acre parcel. However, the following analysis does not include a separate maximum-density scenario since aesthetic impacts related to 5 additional units would remain less than significant.

- (a) **No Impact.** The project site is located within an urbanized area of the City of Garden Grove (City). The project site is developed with United Methodist Church facilities, a church preschool, a Head Start facility, associated structures, and parking lots. There are no aesthetic or visual resources located on the project site or in the surrounding vicinity that have been designated by the City's General Plan. Further, the project site is not within or adjacent to any designated scenic vista, as there are no officially designated scenic vistas in the City. Therefore, the proposed project would not impact scenic vistas.

Mitigation Measures: No mitigation would be required.

- (b) **No Impact.** The California Department of Transportation's (Caltrans) Landscape Architecture Program administers the Scenic Highway Program, contained in Streets and Highways Code Sections 260–263. State Highways are classified as either Officially Listed or Eligible. State Route 22 (SR-22), located approximately 0.75 miles (mi) south of the project site, is not identified as an eligible or State-designated Scenic Highway.¹ Therefore, the project does not have the potential to damage resources within a State-designated scenic highway.

In addition, there are no existing aesthetic or visual resources located on the project site or in the surrounding vicinity that have been designated in the City's General Plan. There are no existing scenic rock outcroppings located within the project limits, and the proposed project would preserve a majority of the existing trees on site. No impacts related to scenic resources would occur.

Mitigation Measures: No mitigation would be required.

¹ California Department of Transportation (Caltrans). California Scenic Highway Mapping System (Orange County). Website: http://www.dot.ca.gov/hq/LandArch/scenic_highways/index.htm (accessed August 2014).

(c) Less Than Significant Impact.

Visual Character and Quality of the Site. The project site is located in a fully developed urban environment. The area is characterized by a variety of residential, community facility (i.e., parks, Civic Center, churches), and commercial land uses. The project site is developed with United Methodist Church facilities, a church preschool, a Head Start facility, associated structures, and parking lots. The project site can be accessed via four full-access driveways; two off Main Street and two off Acacia Parkway.

The existing church structures are characterized by small stone pillars, concrete walls, and glass windows. The majority of the church structures are one- and two-stories in height; however, the main sanctuary is approximately three stories in height with a pointed spire that extends an additional two stories in height. The existing church preschool and Head Start facility are characterized by concrete walls and glass windows and are one story in height.

Ornamental landscaping on the project site is minimal and is generally limited to the following: ornamental trees and shrubs fronting Main Street and Stanford Avenue, accent trees scattered throughout the existing church parking lot, and a grass area on the northeastern portion of the site. The vacant parcel on the northeastern portion of the project site is characterized by undeveloped grass areas fronting Stanford Avenue. Landscaping proposed as part of the proposed project would be similar to existing landscaping in scale and appearance. The proposed project would install landscaping along street frontages and the proposed paseo walkway, surrounding the proposed buildings, and within the proposed surface parking lots and podium level courtyard area. Proposed landscaping includes shade, paseo park, accent, and street trees; raised planter boxes; potted plants; enhanced paving; and turf.

As previously stated, the proposed project is a mixed-use development which includes a 47-unit affordable housing apartment community, a new 3,485 sf Head Start Facility, and 2,975 sf of leasing office/commercial space on a property currently developed with existing United Methodist Church facilities, a church preschool, and Head Start facility. The proposed residential and commercial components of the project would be comprised of two primary structures: Buildings A and B. Building A would include 31 apartment units, a leasing office/commercial space, a clubhouse, and an exercise room. Building B would include 16 apartment units for seniors, a roof terrace, a club house, and an exercise room. The proposed project would also construct a new Head Start building and an associated playground on the central portion of the project site. The proposed project would develop the remaining portions of the site with open spaces and parking lots. The project also includes the demolition of the existing Head Start facility on the central portion of the site and a new play area for the existing church preschool.

The proposed project would develop the aforementioned structures in an architectural style that would characterize the new development on the project site as a unique and separate entity from the existing church facilities. Although different from the existing buildings on the project site, the architecture for the proposed project would be consistent with architectural theme of the existing multifamily residential buildings across Stanford Avenue and with the visual character of the adjacent Main Street area. Specifically, building materials would include the following design elements: painted stucco, brick veneer, painted metal awnings and balcony railings, painted roof shingles, painted garage doors, and colored vinyl windows. Building entrances would be oriented

toward pedestrian walkways and public sidewalks and the upper stories of buildings would be set back from the ground floor in an effort to promote walkability.

Although the majority of the existing buildings on site are two stories in height (with the exception of the main sanctuary), the increased height and massing associated with the proposed project would not be visually inconsistent with the existing urban environment in this area. Existing buildings in the project vicinity, including the residential development across Stanford Avenue, have similar heights as proposed for the project. The proposed project will not create shade/shadow effects on the neighboring residences to the west because the majority of this side of the project will be developed with the minimum 25 ft wide project driveway. The only new structure adjacent to the western project boundary is the Head Start facility, which is one-story and is set back from the property line by 10 ft. In addition, the mature trees along this portion of the property line will remain.

The proposed project would include low-density multifamily affordable housing units. Multifamily housing and other residential uses already exist in the vicinity of the project site, so the proposed project would not fundamentally alter the surrounding land use character. Therefore, the proposed project would not degrade the character or quality of the Civic Center area, nor would the proposed project contribute to an overall degradation of the visual character or quality of the surrounding area. Therefore, impacts related to the degradation of the visual character or quality of the site would be less than significant, and no mitigation would be required.

Mitigation Measures: No mitigation would be required.

- (d) **Less than Significant Impact.** Spill light occurs when light fixtures such as streetlights, parking lot lighting, exterior building lighting, and landscape lighting are not properly aimed or shielded to direct light to the desired location and light escapes and partially illuminates a surrounding location. Glare is the result of improperly aimed or blocked lighting sources that are visible against a dark background such as the night sky. Glare generally does not result in illumination of off-site locations, but results in a visible source of light viewable from a distance.

The project site contains lighting on the existing church facilities, as well as in and around the parking lot. Sensitive receptors in the vicinity of the project site include residential uses to the north, west, and south of the site. The proposed project would include on-site lighting typical of a mixed-use development and would be consistent with the City's Municipal Code Section 9.18.100, Development and Design Standards Applicable to All Mixed Use Zones. All on-site lighting shall be stationary and directed away from adjoining properties and public right-of-ways and exterior lighting would be directed, positioned, or shielded in such a manner as to not "unreasonably illuminate the window area of nearby residences." As such, building exterior lights would be surface-mounted and directed away from or screened from adjacent residential uses. The project site would be illuminated from sunset to sunrise (generally 6:00 p.m. to 6:00 a.m., depending on the time of year).

The proposed project would be located within a developed area of the City, which currently emits lighting that is typical for an urban area (residential, commercial, and institutional uses). Impacts related to glare from on-site lighting would not occur because light sources would be directed and shielded to prevent impacts to adjoining properties. In addition, on-site lighting levels would not be of a magnitude that has the potential to produce substantial amounts of glare in relation to glare produced by surrounding urban uses. Finally, as part of the site plan review process, lighting plans are subject to City review and approval. Therefore, lighting impacts would be less than significant, and no mitigation would be required.

Mitigation Measures: No mitigation would be required.

3.2 AGRICULTURE AND FOREST RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(a) Convert Prime Farmland, Unique Farmland, or 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"/>
(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"/>

Impact Analysis:

The proposed project is requesting a GPA and rezone, which would allow for a potential maximum density of 5 additional units (for a total of 21 units) on the 0.51-acre parcel. However, the following analysis does not include a separate maximum density scenario because there are no impacts related to agriculture and forest resources, and similar to the proposed project, the maximum density scenario would have no impacts.

- (a) **No Impact.** The project site is not used for agricultural production and is not designated Prime Farmland, Unique Farmland, or Farmland of Statewide Importance on maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency. The surrounding area is characterized by commercial, Civic Center, parks, and residential uses. The proposed project would not convert Prime Farmland, Unique Farmland, Farmland of Statewide Importance, or any other type of farmland to a nonagricultural use. Likewise, the proposed project site would not conflict with existing zoning for agricultural use or a Williamson Act contract or contribute to environmental changes that could result in conversion of farmland to nonagricultural use. No impacts would occur, and no mitigation would be required.¹

Mitigation Measures: No mitigation would be required.

- (b) **No Impact.** The proposed project site is not used for agricultural production, not zoned for agricultural use, and is not protected by, or eligible for, a Williamson Act contract. No impacts would occur, and no mitigation would be required.

Mitigation Measures: No mitigation would be required.

¹ California Department of Conservation. *Orange County Important Farmland Map 2010*. Website: <ftp://ftp.consrv.ca.gov/pub/dlrp/FMMP/pdf/2010/ora10.pdf> (accessed August, 2014).

- (c) **No Impact.** The project site is located within a developed area of the City. The project site is not used for timberland production, not zoned as forest land or timberland, and does not contain forest land or timberland. No impacts would occur, and no mitigation would be required.

Mitigation Measures: No mitigation would be required.

- (d) **No Impact.** The project site is located within a developed area of the City and would not convert forest land to a nonforest use. Likewise, the proposed project site would not contribute to environmental changes that could result in conversion of forest land to non-forest use. No impacts would occur, and no mitigation would be required.

Mitigation Measures: No mitigation would be required.

- (e) **No Impact.** The proposed project would not convert farmland to a nonagricultural use. Likewise, the proposed project site is not adjacent to or in proximity of farmlands and therefore would not contribute to environmental changes that could result in conversion of farmland to nonagricultural use. No impacts would occur, and no mitigation would be required.

Mitigation Measures: No mitigation would be required.

3.3 AIR QUALITY

Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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"/>
(c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment 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 checked="" type="checkbox"/>	<input type="checkbox"/>

Introduction:

The proposed project includes a mixed-use development on a 2.5-acre portion of the project site and requires a General Plan Amendment (GPA) to change the land use designation of a vacant 0.51-acre parcel within the project site from Medium Density Residential (MDR) to Civic Center Mixed-Use (CCMU), and a zone change to rezone the 0.51-acre parcel from a designation of Community Center Specific Plan-Community Center Residential-20 Area 20 (CCSP-CCR20) to Civic Center Core (CC-3). Because the project Applicant is requesting a GPA and a rezone, the following technical analysis includes a maximum-density scenario which accounts for the maximum development that could occur under the requested GPA and rezone. It should be noted that this maximum-density scenario is not the proposed mixed-use project and is for comparison purposes only to represent a worst-case analysis.

Impact Analysis:

- (a) **Less than Significant Impact.** An Air Quality Management Plan (AQMP) describes air pollution control strategies to be taken by a city, county, or region classified as a nonattainment area. The main purpose of an AQMP is to bring the area into compliance with federal and State air quality standards. California Environmental Quality Act (CEQA) requires that certain projects be analyzed for consistency with the AQMP. A project is consistent with an AQMP if it will not result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, and is consistent with the growth assumptions in the AQMP.

The South Coast Air Quality Management District (SCAQMD) *CEQA Air Quality Handbook* indicates that consistency with AQMP growth assumptions must be analyzed for new or amended General Plan Elements, Specific Plans, and significant projects. Significant projects include airports, electrical generating facilities, petroleum and gas refineries, designation of oil drilling districts, water ports, solid waste disposal sites, and off-shore drilling facilities.

AQMP Consistency Analysis. Because of California's nonattainment status for ozone (O₃), particulate matter less than 2.5 microns in size (PM_{2.5}), and particulate matter less than 10 microns in size (PM₁₀), if project-generated emissions of either of the O₃ precursor pollutants (i.e., reactive organic gases [ROG] and nitrogen oxides [NO_x]), PM_{2.5}, or PM₁₀ would exceed the

Tables 3.3.E and 3.3.F show the calculated emissions for the proposed operational activities (fully described above) compared to the LSTs for the Central Orange County SRA at a distance of 25 m, under the Proposed Project and the Maximum Allowable Density, respectively. The localized significance analysis only includes on-site sources; therefore, the emissions shown include all stationary and 5 percent of the proposed project’s mobile sources.

Table 3.3.E: Operational Localized Emissions (lbs/day) – Proposed Project

Emissions Sources	NO _x	CO	PM ₁₀	PM _{2.5}
Existing On-Site Emissions	0.34	1.4	0.2	0.055
Proposed Project On-Site Emissions	0.27	4.8	0.22	0.12
Total On-Site Emissions	0.61	6.2	0.42	0.18
LST Threshold	183	1,253	3.0	2.0
Significant Emissions?	No	No	No	No

Source: LSA Associates, Inc. (September 2014).

Note: Source Receptor Area = Central Orange County, 2 acres, 25-meter distance for residents, on-site traffic 5 percent of total.

CO = carbon monoxide

NO_x = nitrogen oxides

lbs/day = pounds per day

PM_{2.5} = particulate matter less than 2.5 microns in size

LST = localized significance threshold

PM₁₀ = particulate matter less than 10 microns in size

Table 3.3.F: Operational Localized Emissions (lbs/day) – Maximum Allowable Density

Emissions Sources	NO _x	CO	PM ₁₀	PM _{2.5}
Existing On-Site Emissions	0.34	1.4	0.2	0.055
On-Site Emissions	0.35	6.6	0.28	0.14
Total On-Site Emissions	0.69	8.0	0.48	0.20
LST Threshold	183	1,253	3.0	2.0
Significant Emissions?	No	No	No	No

Source: LSA Associates, Inc. (September 2014).

Note: Source Receptor Area = Central Orange County, 2 acres, 25-meter distance for residents, on-site traffic 5 percent of total.

CO = carbon monoxide

NO_x = nitrogen oxides

lbs/day = pounds per day

PM_{2.5} = particulate matter less than 2.5 microns in size

LST = localized significance threshold

PM₁₀ = particulate matter less than 10 microns in size

Tables 3.3.E and 3.3.F show that the calculated emissions rates for either the proposed operation activities or the maximum allowable density would be below the localized significance thresholds for CO, NO_x, PM₁₀, and PM_{2.5}. Therefore, the proposed project would not cause any operational localized air quality impacts, and no mitigation would be required.

CO Hot-Spot Analysis. There is a direct relationship between traffic/circulation congestion and CO impacts since exhaust fumes from vehicular traffic are the primary source of CO, a localized gas that dissipates very quickly under normal meteorological conditions. Therefore, CO concentrations decrease substantially as the distance from the source (intersection) increases. The highest CO concentrations are typically found in areas directly adjacent to congested roadway

intersections. These areas of vehicle congestion have historically had the potential to create pockets of elevated levels of CO that are called “hot spots.” However, with the turnover of older vehicles, introduction of cleaner fuels, and implementation of control technology on industrial facilities, CO concentrations in the project vicinity have steadily declined.¹

Micro-scale air quality impacts have traditionally been analyzed in environmental documents for which the region was a nonattainment area for CO. However, the SCAQMD has demonstrated in the CO attainment re-designation request to the Environmental Protection Agency (EPA) that there are no “hot spots” anywhere in Southern California, even at intersections with much higher volumes, much worse congestion, and much higher background CO levels than anywhere in the project area. If the worst-case intersections in the air Basin have no “hot spot” potential, any local impacts near the project site would be well below thresholds with an even larger margin of safety. Therefore, no project-specific CO hot-spot analysis was conducted.

Mitigation Measure: No mitigation would be required.

- (c) **Less Than Significant Impact.** As discussed in Response 3.3(b), no exceedance of SCAQMD criteria pollutant emission thresholds would be anticipated for the proposed project. The projected emissions of criteria pollutants as a result of the proposed mixed-use project, when considered independently and in combination with the existing United Methodist Church facilities and the church preschool on the project site, would be expected to be below the emissions thresholds established for the region. Cumulative emissions are part of the emission inventory included in the AQMP for the project area. Therefore, there would be no cumulatively considerable net increase of the criteria pollutants that are in nonattainment status within the Basin.

Mitigation Measure: No mitigation would be required.

- (d) **Less Than Significant Impact.** As described in Response 3.3(b), the proposed mixed-use project, when considered both individually and in combination with the existing United Methodist Church facilities and the church preschool on the project site, would not significantly increase long-term emissions within the project area. Construction of the proposed project may expose surrounding sensitive receptors to airborne particulates, as well as a small quantity of construction equipment pollutants (i.e., usually diesel-fueled vehicles and equipment). However, construction contractors would be required to implement measures to reduce or eliminate emissions by following SCAQMD standard construction practices. Therefore, because construction activities would emit less than significant air quality emissions, sensitive receptors are not expected to be exposed to substantial pollutant concentrations during construction, and potential short-term impacts are considered less than significant.

Mitigation Measures: No mitigation would be required.

- (e) **Less Than Significant Impact.** Some objectionable odors may emanate from operation of diesel-powered construction equipment during construction of the proposed project. These odors, however, would be limited to the site only during the construction period and, therefore, would

¹ State of California Air Resources Board (ARB). The California Almanac of Emissions and Air Quality. Website: <http://www.arb.ca.gov/aqd/almanac/almanac.htm>.

not be considered a significant impact. Project operation would not result in objectionable odors as residential and community facility uses are not known to emit odors. No mitigation would be required.

Mitigation Measures: No mitigation would be required.

3.4 BIOLOGICAL RESOURCES

Would the project:		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(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 Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(b)	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(c)	Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input 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"/>

Impact Analysis:

The proposed project is requesting a GPA and rezone, which would allow for a potential maximum density of 5 additional units (for a total of 21 units) on the 0.51-acre parcel. However, the following analysis does not include a separate maximum-density scenario since biological resources impacts related to 5 additional units would be the same as for the proposed project and would remain less than significant with mitigation.

A biological site survey was conducted on August 25, 2014 by a qualified LSA Biologist. The analysis in this section is based on the *Biological Resources Assessment* (LSA Associates, Inc. [LSA], September 2, 2014) prepared for the proposed project (Appendix B).

- (a) **Less than Significant Impact.** The 4.7-acre portion of the project site is presently developed with urban uses including the Grove United Methodist Church and its associated structures, a church preschool, a Head Start facility, and parking lots, and does not contain native habitat. Vegetation on this portion of the project site consists of small areas of ornamental landscaping and mature ornamental trees located along boundaries of the project site and scattered throughout the parking lots. The 0.51-acre portion of the project site is currently vacant and undeveloped open space which does not contain any native habitat or known candidate, sensitive, or special-status plant species. As such, the entire 5.2 acre project site does not contain any habitat that would support a candidate, sensitive, or special-status plant species. Additionally, there are no known candidate, sensitive, or special-status animal species inhabiting the site. One bat species on the literature list, hoary bat (*Lasiurus cinereus*), has a very low potential of roosting in the

leaves of the ornamental trees on the site during the fall, winter, and spring months of the year. However, there is a very low potential of encountering hoary bat on site due to the absence of these species on site and lack of suitable habitat specific to these species. Two special-status bird species, Allen's hummingbird and Cooper's hawk, have a moderate probability of occurring on the project site; however, no suitable habitat specific to these species is present, and these species do not currently inhabit the site. Construction and operation of the proposed mixed-use development would not result in the removal of vegetation or disruption to any existing habitat containing a sensitive or special-status species. Therefore, no significant impacts to sensitive or special-status species would result from project implementation, and no mitigation would be required.

Mitigation Measures: No mitigation would be required.

- (b) **No Impact.** The project site is located in an urban area, is presently developed, and does not contain native habitat. In addition, the project site does not contain any riparian habitat or sensitive natural communities identified in local or regional plans, policies, or regulations or by the California Department of Fish and Wildlife or the United States Fish and Wildlife Service. No impacts related to riparian habitat or other sensitive natural communities identified in local or regional plans would result from project implementation, and no mitigation would be required.

Mitigation Measures: No mitigation would be required.

- (c) **No Impact.** The project site is located in an urban area, is presently developed, and does not contain native habitat. In addition, no natural hydrologic features or federally protected wetlands as defined by Section 404 of the Clean Water Act occur on site. Therefore, no direct removal, filling, or hydrological interruption of a wetland area would occur with development of the project site. No impacts would occur, and no mitigation would be required.

Mitigation Measures: No mitigation would be required.

- (d) **Less than Significant Impact with Mitigation Incorporated.** The project site is located in an urban area, is presently developed with urban uses, and does not contain native habitat. No portion of the project site or immediately surrounding areas contains an open body of water that serves as natural habitat in which fish could exist. Likewise, there is no established native resident or migratory wildlife corridor existing within or adjacent to the project site.

Existing ornamental landscaping and trees on both the vacant 0.51-acre portion of the project site and the 4.7-acre developed portion of the project site may provide suitable habitat for nesting birds. Disturbing or destroying active nests is a violation of the Migratory Bird Treaty Act (MBTA). In addition, nests and eggs are protected under Fish and Game Code Section 3503. Project implementation must be accomplished in a manner that avoids impacts to active nests during the breeding season. As such, avoiding impacts can be accomplished through a variety of means, including restricting brush and tree removal to periods outside the avian nesting season (August 16 through February 14) or through performance of nesting bird surveys prior to clearing when clearing occurs during the nesting season. With implementation of Mitigation Measure BIO-1, potentially significant impacts to nesting birds would be reduced to a less than significant level.

Mitigation Measure:

BIO-1 Compliance with Migratory Bird Treaty Act. In the event that project construction or grading activities should occur within the active breeding season for birds (i.e., February 15 through August 15), a nesting bird survey shall be conducted by a qualified biologist prior to commencement of grading or construction activities. If active nesting of birds is observed within 100 ft of the designated construction area prior to construction, the construction crew shall establish an appropriate buffer around the active nest. The designated project biologist shall determine the buffer distance based on the specific nesting bird species and circumstances involved. Once the project biologist verifies that the birds have fledged from the nest, the buffer may be removed.

Prior to commencement of grading activities and issuance of any building permits, the City of Garden Grove Director of Community Development, or designee, shall verify that all project grading and construction plans include specific documentation regarding the Migratory Bird Treaty Act (MBTA) requirements for a nesting bird survey should construction or grading occur from February 15 through August 15, that preconstruction surveys have been completed and the results reviewed by staff, and that the appropriate buffers (if needed) are noted on the plans and established in the field with orange snow fencing.

- (e) **Less than Significant Impact.** Title 11 of the City of Garden Grove Municipal Code codifies the protection, maintenance, removal, and planting of trees in the public streets, parks, and other public places within the City limits. This ordinance applies to any vegetation with a woody trunk. According to the Municipal Code, written permission from the City Manager, or authorized agent, is required before removing, cutting, pruning, breaking, injuring, defacing, or in any other way interfering with any tree or shrub, or any part thereof, either above or below the ground, growing on any public thoroughfare, park, or public place (as defined in Sections 11.32.020). Although the City has not established a standard tree relocation requirement or tree replacement ratio, conditions of approval typically require compliance with project-specific provisions to replace or relocate trees.

The only vegetation on the project site consists of small ornamental landscaping areas and mature ornamental trees adjacent to buildings and along the street frontage. Because the subject project site is almost entirely developed and it is not a public thoroughfare, park, or public place, the proposed project would not conflict with the provisions of the adopted Municipal Code pertaining to tree removal. Further, the project would replace any existing on-site trees to be removed as part of the project with additional on-site landscaping. Therefore, the proposed project would not result in a significant impact related to local policies or ordinances protecting biological resources, and no mitigation would be required.

Mitigation Measures: No mitigation would be required.

- (f) **No Impact.** The project site is not located within the boundaries of the Orange County Central Coastal Natural Communities Conservation Plan (NCCP)/Habitat Conservation Plan (HCP). As

such, the proposed project would not conflict with local ordinances or the adopted Orange County NCCP/HCP, or other approved local, regional, or State HCPs. Therefore, the proposed project would not result in impacts related to local ordinances and the adopted NCCP/HCP, and no mitigation would be required.

Mitigation Measures: No mitigation would be required.

3.5 CULTURAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Impact Analysis:

The proposed project is requesting a GPA and rezone, which would allow for a potential maximum density of 5 additional units (for a total of 21 units) on the 0.51-acre parcel. However, the following analysis does not include a separate maximum-density scenario since cultural resources impacts related to 5 additional units would be the same as for the proposed project and would remain less than significant with mitigation.

- (a) **No Impact.** Historic structures and sites are typically defined using local, State, and federal criteria. The California Environmental Quality Act (CEQA) defines a “historical resource” as a resource that meets one or more of the following criteria: (1) listed in, or determined eligible for listing in, the California Register of Historical Resources (California Register); (2) listed in a local register of historical resources as defined in Public Resources Code (PRC) Section 5020.1(k); (3) identified as significant in a historical resource survey meeting the requirements of PRC Section 5024.1(g); or (4) determined to be a historical resource by a project’s lead agency (PRC Section 21084.1 and *State CEQA Guidelines* Section 15064.5(a)). The United States Department of the Interior has established specific guidelines and criteria that indicate the manner in which a site, structure, or district is to be identified as having historic significance through a determination of eligibility for listing on the National Register of Historic Places. Significance may be determined if the property is associated with events, activities, or developments that were important in the past, with the lives of people who were important in the past, or represents significant architectural, landscape, or engineering elements. Additionally, a site or structure may be historically significant if it is locally protected through a local general plan or historic preservation ordinance. A site or structure may have local historical significance even if it is not formally identified pursuant to the aforementioned criteria.

Existing church facilities on the project site were developed in the 1950s. The southern portion of the project site was developed with the existing Head Start facility structure as early as 1959. Although the existing Head Start facility would be demolished and relocated in a new structure, the existing structure does not appear to meet any of the aforementioned significance criteria for consideration as a historic resource. No other existing structures on site would be demolished or affected as part of the proposed project. Further, the site is not identified as being historically significant in the City’s General Plan. Therefore, no significant adverse impacts related to a historical resource are anticipated due to project implementation.

Mitigation Measures: No mitigation would be required.

- (b) **Less than Significant Impact with Mitigation.** The existing United Methodist Church, associated facilities, and church preschool, would not be structurally altered as part of the proposed project. The proposed project would demolish the existing Head Start facility and basketball courts, and remove the church parking lot located on the southern portion of the project site. Project construction includes development of 47 residential units, a 2,975 sf leasing office/commercial space, a new 3,485 sf Head Start facility, and associated parking lots on 2.5-acres of the project site. It is considered unlikely that archaeological resources would be encountered on the project site due to significant prior disturbance from past grading and development activities. However, to ensure that no significant impacts occur in the event that unknown resources are discovered, Mitigation Measure CUL-1 will be implemented to reduce potential impacts to a less than significant level. Mitigation Measure CUL-1 requires that a qualified archaeologist be on site during grading and other significant ground-disturbing activities.

At the completion of project construction, the proposed project would not result in further disturbance of native soils on the project site and, therefore, operation of the proposed project would not result in a substantial adverse change in the significance of an archeological resource as defined in Section 15064.5 of the *State CEQA Guidelines*. Therefore, operation of the proposed project would not cause a substantial adverse change in the significance of any known archaeological resource.

The following measure would ensure that potential impacts to unknown archaeological resources are reduced to a less than significant level.

Mitigation Measure:

CUL-1: Unknown Archeological Resources. Prior to the issuance of grading permits, the Applicant shall retain, with the approval of the City of Garden Grove (City) Community Development Director, or designee, a qualified archaeological monitor from the Orange County List of Qualified Archaeologists. Prior to issuance of grading permits, the Applicant, with City approval, shall also retain a Native American monitor to be selected by the City after consultation with interested tribal and Native American representatives. Both monitors shall be present on the project site during ground-disturbing activities to monitor rough and finish grading, excavation, and other ground-disturbing activities in the native soils. Because no cultural resources are likely to be encountered on the project site, monitors are not required to be present on a full-time basis, but shall spot check at the discretion of the project archaeologist ground-disturbing activities to ensure that no cultural resources are impacted during ground-disturbing activities.

- (c) **Less than Significant with Mitigation Incorporated.** According to the *Preliminary Geotechnical Investigation for Site Development and Design and Construction of Affordable Housing Project at Garden Grove United Methodist Church (Preliminary Geotechnical Investigation)* prepared for the proposed project and included in Appendix C of this Initial Study (IS)/Mitigated Negative Declaration (MND), the City is underlain by Pleistocene (40,000 years to

1.8 million years old) shallow marine, lagoonal, floodplain, and terrace deposits. The oldest exposed rock in the City is from the San Pedro Formation, which has previously yielded marine invertebrates, as well as marine and terrestrial vertebrates. No rock from the San Pedro Formation is exposed on the project site. According to the *Preliminary Geotechnical Investigation*, the proposed project is underlain by younger alluvial fan deposits. Generally, younger alluvial fan deposits are considered to have Low Paleontological sensitivity because not enough time has passed for plant and animal species to become fossilized. The potential for paleontological resources on the project site is therefore considered low due to the character of subsurface soils (Young Alluvium) and because of the amount of disturbance associated with the previous development that has occurred onsite. Although it is unlikely that paleontological resources would be encountered during ground-disturbing project construction activities, implementation of Mitigation Measure CUL-2 would be required to reduce impacts to potential unknown paleontological resources to a less than significant level. Mitigation Measure CUL-2 requires that construction activities be halted and a qualified paleontologist be contacted in the event that paleontological resources are encountered during ground disturbing activities.

At the completion of project construction, the proposed project would not result in further disturbance of native soils on the project site and, therefore, operation of the proposed project would not result in a substantial adverse change in the significance of a paleontological resource as defined in Section 15064.5 of the *State CEQA Guidelines*.

The following measure would ensure that potential impacts to unknown paleontological resources are reduced to a less than significant level.

Mitigation Measure:

CUL-2: Paleontological Resources. In the event that paleontological resources are encountered during project construction, work in the immediate area of the find shall be redirected. Subsequently, the Applicant shall retain, with the approval of the City's Community Development Director, or designee, a qualified paleontologist from the Orange County List of Qualified Paleontologists to assess the findings for scientific significance. If any fossil remains are discovered in sediments with a Low paleontological sensitivity rating (Young Alluvial Deposits), the paleontologist shall make recommendations as to whether monitoring shall be required in these sediments on a full-time basis.

- (d) **Less than Significant with Mitigation Incorporated.** No known human remains are present on the project site, and there are no facts or evidence to support the idea that Native Americans or people of European descent are buried on the project site. In the unlikely event that human remains are encountered during project grading, the Orange County (County) Coroner would be notified, and standard procedures for the respectful handling of human remains during the earthmoving activities would be adhered to as described in Mitigation Measure CUL-3. Implementation of Mitigation Measure CUL-3 would reduce potential project impacts related to the discovery of human remains on the proposed project site to a less than significant level.

Because the proposed project would require a General Plan Amendment (GPA) to change the land use designation for the 0.51-acre parcel of the project site from Community Center Specific Plan-Community Center Residential Area 20 (CCSP-CCR20) to Civic Center Mixed Use (CCMU), City staff conducted Native American consultation for the proposed project consistent with Senate Bill 18 (SB 18) requirements. As part of this process, the City staff submitted a request to perform a Sacred Lands File (SLF) search to the Native American Heritage Commission (NAHC) and a Local Tribal Consultation List Request to the NAHC. On February 24, 2014, seven Native American tribes were notified of the City's GPA for the proposed project site. No responses were received on behalf of the seven Native American tribes consulted. As part of Mitigation Measure CUL-1, the Applicant will coordinate with the representative tribes in order to provide a Native American monitor during excavation activities.

Mitigation Measure:

- CUL-3: Human Remains.** In the event that human remains are discovered during ground-disturbing or construction activities, the following steps shall be taken:
- a. There shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until the Orange County Coroner is contacted to determine whether the remains are prehistoric and that no investigation of the cause of death is required. If the Coroner determines the remains to be Native American, then the Coroner shall contact the Native American Heritage Commission (NAHC) within 24 hours, and the NAHC shall identify the person or persons it believes to be the most likely descendant from the deceased Native American. The most likely descendant may make recommendations to the landowner or the person responsible for the excavation work for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in Public Resources Code Section 5097.98; or
 - b. Where the following conditions occur, the landowner or his/her authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity either in accordance with the recommendations of the most likely descendant or on the property in a location not subject to further subsurface disturbance:
 1. The NAHC is unable to identify a most likely descendant, or the most likely descendant failed to make a recommendation within 48 hours after being notified by the NAHC;
 2. The identified descendant fails to make a recommendation; or
 3. The landowner or his/her authorized representative rejects the recommendation of the descendant, and mediation by the NAHC fails to provide measures acceptable to the landowner.

3.6 GEOLOGY AND SOILS

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(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? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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 type="checkbox"/>	<input checked="" 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, or that would become 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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"/>

Impact Analysis:

The proposed project is requesting a GPA and rezone, which would allow for a potential maximum density of 5 additional units (for a total of 21 units) on the 0.51-acre parcel. However, the following analysis does not include a separate maximum-density scenario since geology and soil impacts related to 5 additional units would be the same as for the proposed project and would remain less than significant with mitigation.

- (a) i) **No Impact.** As with all of Southern California, the entire 5.2 acre project site is subject to strong ground motion resulting from earthquakes on nearby faults. However, according to the *Preliminary Geotechnical Investigation for Site Development and Design and Construction of Affordable Housing Project at Garden Grove United Methodist Church (Preliminary Geotechnical Investigation)* (Harrington Geotechnical Engineering, Inc.) (July 8, 2014) prepared for the proposed project and contained in Appendix C of this IS/MND, the project site is not located within the boundaries of an “Earthquake Fault Zone” as defined by the State of California and as established by the Alquist-Priolo Fault Zoning Act. Therefore, the proposed project would not result in impacts related to rupture of a known earthquake fault as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map, and no mitigation would be required.

Mitigation Measures: No mitigation would be required.

- (a) ii) **Less than Significant Impact with Mitigation Incorporated.** The 5.2-acre project site, and all of Southern California, is located in a seismically active region. The project site lies in relatively close proximity to several active faults that have historically generated moderate to occasionally high levels of ground motion. As such, the existing United Methodist Church, church preschool, associated facilities, and parking lots as well as the proposed mixed-use project may experience similar moderate to occasionally high ground shaking from nearby fault zones, and some background shaking from other seismically active areas in the region. According to the *Preliminary Geotechnical Investigation*, the fault that would have the largest influence on the site seismicity is the San Joaquin Hills blind thrust fault, located approximately 25 miles (mi) south of the project site.

Ground shaking generated by fault movement is considered a potentially significant impact that may potentially affect the proposed project. Mitigation Measure GEO-1 requires the project Applicant to comply with the recommendations of the *Preliminary Geotechnical Investigation*, the most current California Building Code (CBC), and the Structural Engineer Association of California Guidelines, which stipulates appropriate seismic design provisions that shall be implemented with project design and construction. With implementation of Mitigation Measure GEO-1, potential impacts related to seismic ground shaking would be reduced to a less than significant level.

Mitigation Measure:

GEO-1: Incorporation of and Compliance with the Recommendations in the Geotechnical Report. During project construction activities, the City of Garden Grove (City)'s Community Development Director, Director of Public Works, or designee shall ensure that all grading operations and construction are conducted in conformance with the recommendations included in the geotechnical report prepared for the proposed project that has been prepared by Harrington Geotechnical Engineering, Inc., titled *Preliminary Geotechnical Investigation for Site Development and Design and Construction of Affordable Housing Project at Garden Grove United Methodist Church (Preliminary Geotechnical Investigation)* (July 8, 2014) (Appendix C). Specific requirements in the *Preliminary Geotechnical Investigation* address:

1. General: The Geotechnical Engineer and/or Engineering Geologist, or their authorized representative(s), shall perform observations, testing services and geotechnical consultation throughout the duration of the project.
2. Clearing/Grading: The soil throughout the site should be excavated to a minimum depth of 2 feet below the bottom of proposed footings or to the depth necessary to remove material disturbed by demolition work. The top one foot of the exposed soil should be moisture-conditioned and compacted in accordance with ASTM Test Method D1557; excavated soil that is free of deleterious matter should be placed in thin, loose lifts, moisture-conditioned, and compacted to a minimum relative compaction of 90 percent; imported soil should be sampled at the source and tested for expansion, sulfate, chloride, pH, and minimum resistivity.

3. Grading observations, testing, and monitoring: Grading and compaction operations should be observed and tested by a representative of the geotechnical engineer so that anticipated conditions can be verified and any supplemental recommendations necessary for proper development of the site provided. Results of the observations and tests should be provided in the final report for the project along with a statement by the geotechnical engineer regarding the adequacy of the work.
4. Conventional spread footing and floor slab design: footing sizes, design bearing pressures, passive soil pressures, structural reinforcements, and thickness of floor slabs shall be consistent with the Geotechnical Engineer's recommendations.
5. Seismic design: Seismic design shall conform to the 2013 California Building Code and the Structural Engineer Association of California guidelines.
6. Settlement: Maximum settlement of foundations is expected to be less than one inch and differential settlement is expected to be on the order of one-quarter inch or less, with foundations designed as recommended.
7. Water vapor retarder: A water vapor retarder installed in accordance with the manufacturer's specifications is recommended for all slabs. A qualified moisture/vapor consultant to be engaged to evaluate the general and specific moisture vapor transmission paths and any impact on the proposed construction.
8. Concrete quality: special sulfate-resistant concrete will not be required on this project. The exposure class (ACI 318-08), Table 4.2.1, is S0. Concrete may use Type II cement and should comply with the requirements set forth in ACI 318-08, Table 4.3.1.
9. Pavement: The recommendations of the Geotechnical Report shall be adhered to regarding a suitable pavement structural section for any new pavement associated with the project, minimum thicknesses of pavement, subgrade compaction and aggregate base materials.
10. Backfill placement and compaction: Backfills for structural excavations and utility lines should consist of site or similar materials acceptable to the geotechnical engineer. Compaction methods shall comply with ASTM Test Method D1557 and backfills should be observed by the geotechnical technician during placement and tested at maximum vertical intervals of two feet.
11. Infiltration rate: The geotechnical Engineer may require additional infiltration rate testing upon completion of grading.
12. Pre-construction conference: A pre-construction conference attended by the owner, design team, general contractor, and city inspector should be scheduled to review the findings and recommendations of this report and project plans and specifications prior to starting work on the project.

13. Plans and specifications review: Recommendation that project plans and specifications be submitted to the Geotechnical Engineer for review/comment by to confirm that the recommendations of the report have been properly interpreted and implemented.
14. Construction observations and testing: Recommendation that the project Geotechnical Engineer be retained to provide grading and construction observations and testing services, including observations periodically during: demolition/clearing work; during grading (after completion of the sub-excavation, prior to processing the bottom, and during fill placement/compaction); after completion of foundation excavations, prior to placement of forms and/or reinforcing steel; during backfilling of structural excavations and utility trenches; and during placement of any aggregate base and asphalt concrete pavement used on the project.

Additional site testing and final design evaluation shall be conducted by the project geotechnical consultant to refine and enhance these requirements. The Applicant shall require the project geotechnical consultant to assess whether the requirements in the *Preliminary Geotechnical Investigation* need to be modified or refined to address any changes in the project that occur prior to the start of grading. If the project geotechnical consultant identifies modifications or refinements to the requirements, the project Applicant shall require appropriate changes to the final project design and specifications and shall submit any revised geotechnical reports to the Land Development Section of the Engineering Division, or designee, for approval prior to issuance of any grading or construction permits.

The Land Development Section of the Engineering Division, or designee, shall review grading plans prior to the start of grading to verify that the requirements developed during the geotechnical design evaluation have been appropriately incorporated into the project plans. Design, grading, and construction shall be performed in accordance with the requirements of the City's Building Code and the California Building Code (CBC) applicable at the time of grading, as well as the recommendations of the project geotechnical consultant as summarized in a final report subject to review by the City's Building Official, or designee, prior to the start of grading activities. On-site inspection during grading shall be conducted by the project geotechnical consultant and the Land Development Section of the Engineering Division to ensure compliance with geotechnical specifications as incorporated into project plans.

- (a) iii) **Less than Significant Impact.** Liquefaction commonly occurs when three conditions are present simultaneously: (1) high groundwater; (2) relatively loose, cohesionless (sandy) soil; and (3) earthquake-generated seismic waves. The presence of these conditions may cause a loss of shear strength and, in many cases, the settlement of subsurface soils. The project site

is located within a mapped California Geological Survey Liquefaction Hazard Zone.¹ According to the City's General Plan Safety Element (2030), seismic threats of particular concern in the City include liquefaction and settlement of subsurface soils.

The liquefaction susceptibility of the on-site subsurface soils and the potential for seismically-induced settlement were evaluated as part of the *Preliminary Geotechnical Investigation* prepared for the proposed project. According to the *Preliminary Geotechnical Investigation*, the project site is located in an area underlain with soil that is considered susceptible to liquefaction and seismically-induced settlement. Therefore, standard penetration tests (SPTs), which are used to determine the properties of subsurface soils and test the relative density of subsurface soils, were conducted at the project site. Results of these SPTs concluded that soils underlying the project site have a maximum settlement of 0.58 inch and a differential (unequal) settlement of 0.50 inch, which are considered minimal. Therefore, based on the site-specific tests performed as part of the *Preliminary Geotechnical Investigation*, the potential for liquefaction of the on-site subsurface soils as a result of seismic-related ground failure would be less than significant, and no mitigation would be required.

Mitigation Measures: No mitigation would be required.

- (a) iv) **No Impact.** Seismically induced landslides and other slope failures are common occurrences during or soon after earthquakes in areas with significant ground slopes. According to the *Water Quality Management Plan (WQMP)* prepared for the proposed project (Appendix G), the entire 5.2-acre project site has an approximate 1 percent slope towards Acacia Parkway and Stanford Avenue. According to the California Department of Conservation, Division of Mines and Geology, the project site is not located within an earthquake-induced landslide zone. Further, the entire project site and surrounding area is generally flat, and no existing historic landslides or geologic material susceptible to earthquake-induced slope failure is present in the surrounding area or on the project site. Therefore, seismically induced landslides would not occur at the project site or occur as a result of the proposed project, and no mitigation would be required.

Mitigation Measures: No mitigation would be required.

- (b) **Less than Significant Impact.** During construction activities, soil would be exposed, and there would be an increased potential for soil erosion compared to existing conditions. Additionally, during a storm event, soil erosion could occur at an accelerated rate. The potential for increased erosion is discussed in Section 3.9, Hydrology and Water Quality. With adherence to Standard Condition WQ-1 and incorporation of infiltration BMPs as part of the project, as outlined in Section 3.9, Hydrology and Water Quality, impacts related to soil erosion during operation of the proposed project would be less than significant, and no mitigation would be required.

Mitigation Measures: No mitigation would be required.

¹ California Department of Conservation, Division of Mines and Geology. Seismic Hazard Zones Map. Website: http://gmw.consrv.ca.gov/shmp/download/quad/ANAHEIM/maps/ozn_anah.pdf (accessed August 26 2014).

- (c) **Less than Significant Impact with Mitigation Incorporated.** As previously stated, the project site is not in an area susceptible to landslides.

The project site is located within a mapped California Geological Survey Liquefaction Hazard Zone. However, according to the results of the SPTs conducted as part of the *Preliminary Geotechnical Investigation*, the potential for liquefaction and lateral spreading of the on-site subsurface soils as a result of seismic shaking would be less than significant.

According to the *Preliminary Geotechnical Investigation*, the project site is underlain with younger alluvial fan deposits consisting of medium-dense, coarse-grained deposits of silt-sand and sand, as well as stiff-to-very-stiff fine-grained deposits of clayey silt and silty clay. Soil subsidence (caving) in the sandy zones on the project site may occur during construction. Mitigation Measure GEO-1 requires the project Applicant to comply with the recommendations of the *Preliminary Geotechnical Investigation* that stipulate the appropriate seismic design provisions be implemented with project design and construction. Therefore, with implementation of Mitigation Measure GEO-1, potential impacts related to lateral spreading or subsidence would be reduced to a less than significant level, and no additional mitigation would be required.

Mitigation Measures: Refer to Mitigation Measure GEO-1, above.

- (d) **No Impact.** Expansive soils contain types of clay minerals that occupy considerably more volume when they are wet or hydrated than when they are dry or dehydrated. Volume changes associated with changes in the moisture content of near-surface expansive soils can cause uplift or heave of the ground when they become wet or, less commonly, cause settlement when they dry out.

A common procedure for evaluating and rating soil expansion potential is the expansion index (EI) test. Expansive soils are defined as soils with an EI greater than twenty (20).¹ According to the *Preliminary Geotechnical Investigation*, the surface and near-surface soils on the entire project site have an EI less than 20 (Calculated Expansion Index of 0), and are therefore, considered non-expansive and would not require special consideration in foundation design related to the presence of expansive soils. Therefore, the potential for expansive soils in areas proposed for construction is negligible, and no mitigation would be required.

Mitigation Measure: No mitigation would be required.

- (e) **No Impact.** The proposed project would not include construction of, or connections to, septic tanks or alternative wastewater disposal systems. Therefore, the proposed project would not result in impacts related to the soils capability to adequately support the use of septic tanks or alternative wastewater disposal systems, and no mitigation would be required.

Mitigation Measures: No mitigation would be required.

¹ State of California 2013 California Building Code, Section 1803.5.3 Expansive Soils. Website: http://www.ecodes.biz/ecodes_support/free_resources/2013California/13Building/PDFs/Chapter%2018%20-%20Soils%20and%20Foundations.pdf (accessed August 2014).

3.7 GREENHOUSE GAS EMISSIONS

Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(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"/>
(b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Technical Background:

Global climate change (GCC) is the observed increase in the average temperature of the Earth's atmosphere and oceans along with other significant changes in climate (such as precipitation or wind) that last for an extended period of time. The term "global climate change" is often used interchangeably with the term "global warming," but "global climate change" is preferred to "global warming" because it helps convey that there are other changes in addition to rising temperatures.

The prevailing scientific opinion on climate change is that "most of the warming observed over the last 50 years is attributable to human activities."¹ Increased amounts of carbon dioxide (CO₂) and other greenhouse gases (GHGs) are the primary causes of the human-induced component of warming. The observed warming effect associated with the presence of GHGs in the atmosphere (from either natural or human sources) is often referred to as the greenhouse effect.²

GHGs are present in the atmosphere naturally, are released by natural sources, or are formed from secondary reactions taking place in the atmosphere. The gases that are widely seen as the principal contributors to human-induced GCC include the following:³

- a) CO₂
- b) Methane (CH₄)
- c) Nitrous oxide (N₂O)
- d) Hydrofluorocarbons (HFCs)
- e) Perfluorocarbons (PFCs)
- f) Sulfur hexafluoride (SF₆)

¹ Intergovernmental Panel on Climate Change (IPCC), *Climate Change 2007: Working Group I: The Physical Science Basis*. http://www.ipcc.ch/publications_and_data/ar4/wg1/en/contents.html (accessed July 26, 2011).

² The temperature on Earth is regulated by a system commonly known as the "greenhouse effect." Just as the glass in a greenhouse allows heat from sunlight in and reduces the amount of heat that escapes, greenhouse gases like carbon dioxide, methane, and nitrous oxide in the atmosphere keep the Earth at a relatively even temperature. Without the greenhouse effect, the Earth would be a frozen globe; thus, although an excess of greenhouse gas results in global warming, the *naturally occurring* greenhouse effect is necessary to keep our planet at a comfortable temperature.

³ The greenhouse gases listed are consistent with the definition in Assembly Bill (AB) 32 (Government Code 38505), as discussed later in this section.

In June 2005, Governor Schwarzenegger established California's GHG emissions reduction targets in Executive Order (EO) S-3-05. The EO established the following goals for the State of California: GHG emissions were to be reduced to 2000 levels by 2010; GHG emissions should be reduced to 1990 levels by 2020; and GHG emissions should be reduced to 80 percent below 1990 levels by 2050.

California's major initiative for reducing GHG emissions is outlined in Assembly Bill (AB) 32, the "Global Warming Solutions Act," passed by the California State legislature on August 31, 2006. AB 32 requires the California Air Resources Board (ARB) to:

- Establish a statewide GHG emissions cap for 2020, based on 1990 emissions, by January 1, 2008;
- Adopt mandatory reporting rules for significant sources of GHG emissions by January 1, 2008;
- Adopt an emissions reduction plan by January 1, 2009, indicating how emissions reductions would be achieved via regulations, market mechanisms, and other actions; and
- Adopt regulations to achieve the maximum technologically feasible and cost-effective reduction of GHGs by January 1, 2011.

To assist public agencies in the mitigation of GHG emissions or analyzing the effects of GHGs under the California Environmental Quality Act (CEQA), including the effects associated with transportation and energy consumption, Senate Bill (SB) 97 (Chapter 185, 2007) required the Governor's Office of Planning and Research (OPR) to develop CEQA guidelines on how to minimize and mitigate a project's GHG emissions. The OPR was required to prepare, develop, and transmit these guidelines on or before July 1, 2009, and the Resources Agency was required to certify and adopt them by January 1, 2010. On January 8, 2009, the OPR released preliminary draft CEQA guideline amendments. The Natural Resources Agency adopted the CEQA Guidelines Amendments and transmitted them to the Office of Administrative Law (OAL) on December 31, 2009. On February 16, 2010, the OAL approved the Amendments and filed them with the Secretary of State for inclusion in the California Code of Regulations (CCR). The Amendments became effective on March 18, 2010. The Amendments encourage Lead Agencies to consider many factors in conducting a CEQA analysis, but preserve the discretion granted by CEQA to Lead Agencies in making their determinations.

State CEQA Guidelines Section 15064.4 states:

- (a) The determination of the significance of greenhouse gas emissions calls for a careful judgment by the lead agency consistent with the provisions in Section 15064. A lead agency should make a good-faith effort, based on available information, to describe, calculate, or estimate the amount of greenhouse gas emissions resulting from a project. A lead agency shall have discretion to determine, in the context of a particular project, whether to:
 - (1) Use a model or methodology to quantify greenhouse gas emissions resulting from a project, and which model or methodology to use. The lead agency has discretion to select the model it considers most appropriate provided it supports its decision with substantial evidence. The lead agency should explain the limitations of the particular model or methodology selected for use; or

- (2) Rely on a qualitative analysis or performance based standards.
- (b) A lead agency may consider the following when assessing the significance of impacts from greenhouse gas emissions on the environment:
 - (1) The extent to which the project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting.
 - (2) Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.
 - (3) The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions. Such regulations or requirements must be adopted by the relevant public agency through a public review process and must include specific requirements that reduce or mitigate the project's incremental contribution of greenhouse gas emissions. If there is substantial evidence that the possible effects of a particular project are still cumulatively considerable notwithstanding compliance with the adopted regulations or requirements, an EIR must be prepared for the project.

State CEQA Guidelines Section 15064(b) provides that the “determination of whether a project may have a significant effect on the environment calls for careful judgment on the part of the public agency involved, based to the extent possible on scientific and factual data,” and further states that an “ironclad definition of significant effect is not always possible because the significance of an activity may vary with the setting.”

As such, currently neither the CEQA statutes, OPR guidelines, nor the *State CEQA Guidelines* prescribe specific quantitative thresholds of significance or a particular methodology for performing an impact analysis. As with most environmental topics, significance criteria are left to the judgment and discretion of the lead agency.

The recommended approach for GHG analysis included in the Governor's OPR June 2008 Technical Advisory (TA) is to: (1) identify and quantify GHG emissions, (2) assess the significance of the impact on climate change, and (3) if significant, identify alternatives and/or mitigation measures to reduce the impact below significance.¹ The June 2008 OPR guidance provides some additional direction regarding planning documents as follows: “CEQA can be a more effective tool for GHG emissions analysis and mitigation if it is supported and supplemented by sound development policies and practices that would reduce GHG emissions on a broad planning scale and that can provide the basis for a programmatic approach to project-specific CEQA analysis and mitigation. For local government lead agencies, adoption of general plan policies and certification of general plan EIRs that analyze broad jurisdiction-wide impacts of GHG emissions can be part of an effective strategy for addressing cumulative impacts and for streamlining later project-specific CEQA reviews.”

¹ State of California, 2008. Governor's Office of Planning and Research. *CEQA and Climate Change: Addressing Climate Change Through California Environmental Quality Act Review*. June 19.

SB 375, signed into law on October 1, 2008, is intended to enhance the ARB's ability to reach AB 32 goals by directing the ARB to develop regional GHG emissions reduction targets to be achieved within the automobile and light truck sectors for 2020 and 2035. On December 5, 2008, the South Coast Air Quality Management District (SCAQMD) adopted an interim quantitative GHG Significance Threshold for industrial projects where the SCAQMD is the lead agency of 10,000 MT of CO₂ equivalent/year (CO₂ eq/yr). The SCAQMD has not adopted any other GHG Significance Thresholds.

For the purpose of this technical analysis, the concept of CO₂e is used to describe how much global warming a given type and amount of GHG may cause, using the functionally equivalent amount or concentration of CO₂ as the reference. Individual GHGs have varying global warming potentials and atmospheric lifetimes. The CO₂e is a consistent methodology for comparing GHG emissions since it normalizes various GHG to the same metric. The reference gas is CO₂, which has a global warming potential equal to 1.

The equation below provides the basic calculation required to determine CO₂e from the total mass of a given GHG using the global warming potentials published by the Intergovernmental Panel on Climate Change (IPCC).

$$\text{Tonnes (Metric Tons) of CO}_2\text{e} = \text{Tonnes (Metric Tons) of GHG} \times \text{GWP}$$

Where: CO₂e = carbon dioxide equivalent
GHG = greenhouse gas
GWP = global warming potential

This method would be used to evaluate GHG emissions during construction and operation of the proposed project. For this analysis only, CO₂, CH₄, and N₂O are considered. This is due to the relatively large contribution of these gases in comparison to other GHGs expected to be produced during the project construction and operation phases.

The GHG emission estimates were calculated using CalEEMod (Version 2013.2.2). CalEEMod stands for "California Emissions Estimator Model," and is an air quality modeling program that estimates air pollution emissions in pounds per day (lbs/day) or tons per year (tpy) for various land uses, area sources, construction projects, and project operations. Mitigation measures can also be specified to analyze the effects of mitigation on project emissions. CalEEMod estimates a project's CO₂, N₂O, and CH₄ emissions from area and mobile sources, energy and water consumption, and waste generation.

An individual project cannot generate enough GHG emissions to significantly influence climate change, but individual projects can incrementally contribute toward the potential for the cumulative emissions driving GCC. This analysis analyzes whether the project's contribution to the impact is "cumulatively considerable."

Impact Analysis:

The following response applies to Questions 3.7(a) and 3.7(b) above.

(a) and (b)

Less Than Significant Impact. Construction GHG emissions associated with the proposed project would include those emissions generated during development of the 2.5-acre portion of the project site with the proposed residential, leasing office/commercial, and Head Start uses. Operation emissions include those project-related GHG emissions associated with the operation of the proposed mixed-use development on the 2.5-acre portion of the project site, as well as emissions generated by the existing facilities including the United Methodist Church facilities and church preschool on the project site. The generation of new GHG emissions associated with new development on the project site would occur from energy consumption (and associated generation of GHG emissions) occurring during the project's operation (as opposed to its construction). Typically, more than 80 percent of the total energy consumption takes place during the use of buildings, and less than 20 percent is consumed during construction.¹

Overall, the following activities associated with the proposed project could directly or indirectly contribute to the generation of GHG emissions:

1. **Removal of Vegetation:** The removal of vegetation on the 2.5-acre portion of the project site for construction results in a loss of the CO₂ sequestration in plants. However, planting of additional vegetation would result in additional CO₂ sequestration and would reduce the GHG emissions of the project.
2. **Construction Activities:** During construction of the project, GHGs would be emitted through the operation of construction equipment and from worker and builder supply vendor vehicles, each of which typically uses fossil-based fuels to operate. The combustion of fossil-based fuels creates GHGs such as CO₂, CH₄, and N₂O.
3. **Gas, Electricity, and Water Use:** Natural gas use results in the emissions of two GHGs: CH₄ (the major component of natural gas) and CO₂ (from the combustion of natural gas). Electricity use can result in GHG production if the electricity is generated by combusting fossil fuel. California's water conveyance system is energy-intensive. Approximately one-fifth of the electricity and one-third of the nonpowerplant natural gas consumed in California are associated with water delivery, treatment, and use.²
4. **Solid Waste Disposal:** Solid waste generated by the proposed project could contribute to GHG emissions in a variety of ways. Landfilling and other methods of disposal use energy for transporting and managing the waste, and they produce additional GHGs to varying degrees. Landfilling, the most common waste management practice, results in the release of CH₄ from the anaerobic decomposition of organic materials. CH₄ is 25 times more potent a GHG than CO₂. However, landfill CH₄ can also be a source of energy. In addition, many

¹ United Nations Environment Programme (UNEP), 2007. *Buildings and Climate Change: Status, Challenges and Opportunities*, Paris, France.

² ARB, 2010. *Economic Sectors Portal*. Website: www.arb.ca.gov/cc/ghgsectors/ghgsectors.htm (accessed January 5, 2010).

materials in landfills do not decompose fully, and the carbon that remains is sequestered in the landfill and not released into the atmosphere.

5. **Motor Vehicle Use:** Transportation associated with the proposed project would result in GHG emissions from fuel combustion in daily automobile and truck trips. CO₂ is the most significant GHG emitted by vehicles, but lesser amounts of CH₄ and N₂O are also emitted in vehicle exhaust.

Construction GHG Emissions. GHG emissions associated with the proposed project would occur over the short term from construction activities occurring on the 2.5-acre portion of the site, consisting primarily of emissions from equipment exhaust. As discussed below, there would also be long-term regional emissions associated with project-related vehicular trips and stationary source emissions such as natural gas used for heating. The calculation presented below includes construction emissions in terms of CO₂ and annual CO₂e GHG emissions from increased energy consumption, water usage, and solid waste disposal, as well as estimated GHG emissions from vehicular traffic that would result from implementation of the project.

GHG emissions generated from construction of the proposed project would predominantly consist of CO₂. In comparison to criteria air pollutants such as ozone (O₃) and particulate matter less than 10 microns in size (PM₁₀), CO₂ emissions persist in the atmosphere for a substantially longer period of time. While emissions of other GHGs such as CH₄ are important with respect to GCC, emission levels of other GHGs are less dependent on the land use and circulation patterns associated with the proposed land use development project than are levels of CO₂.

Construction activities produce combustion emissions from various sources such as site grading, utility engines, on-site heavy-duty construction vehicles, equipment hauling materials to and from the site, asphalt paving, and motor vehicles transporting the construction crew. Exhaust emissions from on-site construction activities would vary daily as construction activity levels change.

Project construction is expected to commence in early 2015 and is expected to be complete in time for a project opening in 2016. Table 3.7.A lists the peak annual emissions for each construction phase. As indicated, the peak annual construction GHG emissions would be highest during the building construction phase, at approximately 350 metric tons per year (MT/yr). In other words, the building construction phase would emit 350 MT of CO₂e during the peak year and something less for the other period of building construction. The total GHG emissions for all phases combined over the construction period would be approximately 450 MT. Details of the emission factors and other assumptions are included in Appendix I.

Based on SCAQMD guidance, rather than consider construction emissions alone, the overall operational project emissions summary should include construction emissions amortized over a 30-year span. The amortized level of construction emissions from 450 MT of CO₂e is 15 MT/yr.

Table 3.7.A: Short-Term Construction Greenhouse Gas Emissions

Construction Phase	Total Regional Pollutant Emissions (MT/yr)			
	CO ₂	CH ₄	N ₂ O	CO ₂ e
Demolition	55	0.01	0	55
Site Preparation and Grading	21.8	0.0062	0	21.9
Building Construction	350	0.073	0	350
Architectural Coating	3.1	0.00031	0	3.1
Paving	17	0.0047	0	17

Source: LSA Associates, Inc. (September 2014).

CH₄ = methane
CO₂ = carbon dioxide
CO₂e = carbon dioxide equivalent

MT = metric tons
MT/yr = metric tons per year
N₂O = nitrous oxide

Operational GHG Emissions. Long-term operation of the proposed project would generate GHG emissions from the proposed mixed-use development, the existing United Methodist Church facilities and church preschool, area and mobile sources, and indirect emissions from stationary sources associated with energy consumption. The existing emissions are added to the proposed project emissions as the combination represents the total project emissions when the project is complete. Mobile-source emissions of GHGs would include project-generated vehicle trips associated with mixed-use on-site facilities and customers/employees/deliveries to the project site. Area-source emissions would be associated with activities such as landscaping and maintenance of proposed land uses, natural gas for heating, and other sources from the existing uses on site. Increases in stationary source emissions would also occur at off-site utility providers as a result of demand for electricity, natural gas, and water by the proposed uses.

The GHG emission estimates presented in Tables 3.7.B and 3.7.C show the emissions associated with the level of development at build out for the proposed project and under a maximum allowable density scenario, respectively. The maximum allowable density scenario represents the potential development that could occur under the requested General Plan Amendment to Civic Center Mixed-Use (CCMU) and the rezone to Civic Center Core (CC-3). Appendix E includes the annual CalEEMod calculations for GHG emissions. Table 3.7.B shows that project operations would result in average annual emissions of 1,370 MT of CO₂e/yr under the proposed project scenario. Table 3.7.C shows that project operations would result in average annual emissions of 1,570 MT of CO₂e/yr under the maximum allowable density scenario.

As shown in Tables 3.7.B and 3.7.C, the proposed project would generate 1,370 and 1,570 MT/yr of CO₂e emissions, respectively, under the proposed project and maximum allowable density scenarios. As the project would be designed to comply with the City of Garden Grove's (City's) General Plan goals and policies, as well as have emissions below the 10,000 tpy threshold adopted by the City, the project would be consistent with the regional and local plans. The proposed project would, therefore, not hinder the City's or the State's goals of reducing GHG emissions to 1990 levels by 2020, and would not have a significant impact on the environment due to GHG emissions.

Table 3.7.B: Long-Term Operational Greenhouse Gas Emissions – Proposed Project

Source	Pollutant Emissions (MT/yr)					
	Bio-CO ₂	NBio-CO ₂	Total CO ₂	CH ₄	N ₂ O	CO ₂ e
Construction Emissions Amortized over 30 years	0	15	15	0.0032	0	15
Proposed Mixed-Use Development Operational Emissions						
Area	0	12	12	0.001	0.00021	12
Energy	0	92	92	0.0035	0.0011	93
Mobile	0	580	580	0.024	0	580
Waste	5.0	0	5.0	0.3	0	11
Water	1.0	19	20	0.11	0.0027	23
Total Proposed Mixed-Use Development Emissions	6.0	720	720	0.44	0.0040	730
Total Existing Emissions	20	600	620	1.2	0.0032	640
Total Combined Emissions	26	1,320	1,340	1.64	0.0072	1,370

Source: LSA Associates, Inc. (September 2014).

Note: Numbers in table may not appear to add up correctly due to rounding of all numbers to two significant digits.

Bio-CO₂ = biologically generated CO₂

MT = metric tons

CH₄ = methane

MT/yr = metric tons per year

CO₂ = carbon dioxide

N₂O = nitrous oxide

CO₂e = carbon dioxide equivalent

NBio-CO₂ = Non-biologically generated CO₂

Table 3.7.C: Long-Term Operational Greenhouse Gas Emissions – Maximum Allowable Density Scenario

Source	Pollutant Emissions (MT/yr)					
	Bio-CO ₂	NBio-CO ₂	Total CO ₂	CH ₄	N ₂ O	CO ₂ e
Construction Emissions Amortized over 30 years	0	15	15	0.0032	0	15
Increased Density Development Operational Emissions						
Area	0	12	12	0.0013	0.00021	12
Energy	0	120	120	0.0045	0.0015	120
Mobile	0	750	750	0.031	0	750
Waste	5.0	0	5.0	0.3	0	11
Water	1.0	19	20	0.11	0.0027	23
Total Increased Density Mixed-Use Development Emissions	6.0	920	920	0.45	0.0044	930
Total Existing Emissions	20	600	620	1.2	0.0032	640
Total Combined Emissions	26	1,520	1,540	1.65	0.0076	1,570

Source: LSA Associates, Inc. (September 2014).

Note: Numbers in table may not appear to add up correctly due to rounding of all numbers to two significant digits.

Bio-CO₂ = biologically generated CO₂

MT = metric tons

CH₄ = methane

MT/yr = metric tons per year

CO₂ = carbon dioxide

N₂O = nitrous oxide

CO₂e = carbon dioxide equivalent

NBio-CO₂ = Non-biologically generated CO₂

In addition, the project would be subject to all applicable regulatory requirements, such as the 2013 Title 24 Building Efficiency Standards that includes improvements such as solar-ready roofs to allow homeowners to add solar photovoltaic panels at a future date, more efficient windows to allow increased sunlight, while decreasing heat gain, insulated hot water pipes, to save water and energy and reduce the time it takes to deliver hot water, whole house fans to cool homes and attics with evening air reducing the need for air conditioning load, and air conditioner installation verification to insure efficient operation, which would further reduce the GHG emissions of the proposed project. The project would not conflict with or impede implementation of reduction goals identified in the City's plans, AB 32, the Governor's EO S-3-05, and other strategies to help reduce GHGs to the level proposed by the Governor. Therefore, the proposed project's cumulative contribution to GHG emissions when considered with the existing United Methodist Church facilities and church preschool on the project site would be less than significant.

Mitigation Measures: No mitigation would be required.

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3.8 HAZARDS AND HAZARDOUS MATERIALS

Would the project:		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(b)	Create a significant hazard to the public or the environment through reasonable foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(c)	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(d)	Be located on a site which is included on a list of hazardous materials 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 type="checkbox"/>	<input checked="" 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(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"/>

Impact Analysis:

The proposed project is requesting a GPA and rezone, which would allow for a potential maximum density of 5 additional units (for a total of 21 units) on the 0.51-acre parcel. However, the following analysis does not include a separate maximum-density scenario since hazards and hazardous materials impacts related to 5 additional units would be the same as for the proposed project and would remain less than significant with mitigation.

- (a) **Less Than Significant Impact with Mitigation Incorporated.** Hazardous materials are chemicals that could potentially cause harm during an accidental release or mishap, and are defined as being toxic, corrosive, flammable, reactive, an irritant, or strong sensitizer. Hazardous substances include all chemicals regulated under the United States Department of Transportation “hazardous materials” regulations and the United States Environmental Protection Agency (EPA) “hazardous waste” regulations. Hazardous wastes require special handling and disposal because of their potential to damage public health and the environment. The probable frequency and severity of consequences from the use, transport, or disposal of hazardous materials is affected by the type of substance, quantity used or managed, and the nature of the activities and operations.

Construction. Project construction includes development of the proposed project on a 2.5-acre portion of the project site. The remaining 2.7-acre portion of the property is currently developed with the United Methodist Church, church preschool, associated facilities, and parking lots, which would not be structurally altered during project construction and would therefore not contribute to any construction-related impacts. During demolition and construction activities for the proposed mixed-use project, there is a possibility of generating small quantities of hazardous materials. Construction activities would also use a limited amount of hazardous and flammable substances/oils during heavy equipment operations for site grading and construction. The amount of hazardous chemicals present during construction is limited and would be in compliance with existing government regulations to ensure the amounts of these materials present during construction would be limited and would not pose a significant adverse impact to workers or the environment. Furthermore, the construction contractor would be required to implement standard best management practices regarding hazardous materials storage, handling, and disposal during construction in compliance with the State Construction General Permit to protect water quality (refer to Section 3.9, Hydrology and Water Quality). Any associated risk would be adequately reduced to a level that is less than significant through compliance with these standards and regulations; thus, the limited use and storage of hazardous materials during construction of the proposed project would not pose a significant hazard to the public or the environment. Accordingly, the potential for the release of hazardous materials during project construction would be low and, even if a release would occur, it would not result in a significant hazard to the public, surrounding land uses, or environment due to the small quantities of these materials associated with construction, and no mitigation would be required.

The purpose of a *Phase I Environmental Site Assessment (ESA)* is to assess the presence of recognized environmental conditions (RECs) and other suspect environmental conditions with a property and to determine whether further investigation is required. Based on site reconnaissance conducted as part of the *Phase I ESA* included in Appendix F of this Initial Study (IS)/Mitigated Negative Declaration (MND), the presence of hazardous building materials such as asbestos-containing materials (ACMs), lead-based paints (LBPs), and polychlorinated biphenyl (PCB)-containing fixtures cannot be completely ruled out due to the approximate age of the on-site buildings (Environmental Data Resources. *Phase I ESA*, August 2014). ACMs and LBPs are associated with building materials, and PCBs are potentially used in electrical transformers. Because the proposed project includes the demolition of the existing Head Start facility, the presence of these chemicals cannot be ruled out, and mitigation would be required. Required pre-demolition surveys, identified in Mitigation Measure HAZ-1, would ensure testing for the presence of any hazardous building materials prior to disturbance and/or demolition of existing on-site structures, and would ensure that the appropriate precautions would be taken to properly remove and dispose of such materials. With implementation of Mitigation Measure HAZ-1, impacts related to hazardous building materials would be reduced to a less than a significant level.

The *Phase I ESA* did not identify any properties adjacent to the project site that were anticipated to have adversely impacted conditions at the project site. However, in the unlikely event that unknown hazardous materials are discovered during construction activities, the project contractor would be required to comply with a Contingency Plan developed and approved prior to the commencement of grading activities. As stated in Mitigation Measure HAZ-2, in the event that construction workers encounter underground tanks, gases, odors, uncontained spills, or other

unidentified substances, the Contingency Plan requires the contractor to stop work, cordon off the affected area, and notify the Garden Grove Fire Department (GGFD). The GGFD responder shall determine the next steps regarding possible site evacuation, sampling, and disposal of the substance consistent with local, State, and federal regulations. In addition, the California Department of Transportation, the California Highway Patrol, and local police and fire departments are trained in emergency response procedures for safely responding to accidental spills of hazardous substances on public roads, further reducing potential impacts to a less than significant level. With implementation of Mitigation Measure HAZ-2, potential risks associated with encountering unknown hazardous wastes during construction would be reduced to a less than significant level.

With implementation of Mitigation Measures HAZ-1 and HAZ-2, construction of the proposed project would not create a significant hazard to the public or to the environment through the routine transport, use, or disposal of hazardous materials.

Operation. As a mixed-use development, long-term operational activities typical of the proposed residential, church, preschool, and commercial uses, such as landscape and building maintenance, would occur on the project site. Maintenance activities related to landscaping include the use of fertilizers and light equipment (such as lawn mowers and edgers). These types of activities do not involve the use of a large or substantial amount of hazardous materials. Operation of residential, commercial, church, preschool, and commercial uses, such as those proposed, typically involves the use and storage of small quantities of potentially hazardous materials in the form of cleaning solvents and pesticides. However, such materials would be contained, stored, and used in accordance with manufacturers' instructions and handled in compliance with applicable standards and regulations. Any associated risk would be adequately reduced to a less than significant level through compliance with these standards and regulations. Further, operation of the proposed project would not store, transport, generate, or dispose of large quantities of hazardous substances. Thus, potential impacts from the routine transport, use, or disposal of hazardous materials resulting from operation of the proposed project would be less than significant, and no mitigation would be required.

Mitigation Measures:

HAZ 1: **Predemolition Surveys.** Prior to commencement of demolition activities, the City of Garden Grove (City) Building Official, or designee, shall verify that predemolition surveys for asbestos-containing materials (ACMs) and lead-based paints (LBPs) (including sampling and analysis of all suspected building materials) and inspections for polychlorinated biphenyl (PCB)-containing electrical fixtures and other suspect hazardous building materials have been performed. All inspections, surveys, and analyses shall be performed by appropriately licensed and qualified individuals in accordance with applicable regulations (i.e., American Society for Testing and Materials [ASTM] E 1527-05, and 40 Code of Federal Regulations [CFR], Subchapter R, Toxic Substances Control Act [TSCA], Part 716). If the predemolition surveys do not find ACMs, LBPs, PCB-containing electrical fixtures, or other hazardous building materials, the inspectors shall provide

documentation of the inspection and its results to the City Building Department to confirm that no further abatement actions are required.

If the predemolition surveys find evidence of ACMs, LBPs, or PCB-containing electrical fixtures, or other hazardous building materials, all such materials shall be removed, handled, and properly disposed of by appropriately licensed contractors according to all applicable regulations during demolition of structures (40 CFR, Subchapter R, TSCA, Parts 745, 761, and 763). Air monitoring during these predemolition surveys shall be completed, as applicable, by appropriately licensed and qualified individuals in accordance with applicable regulations both to ensure adherence to applicable regulations (e.g., South Coast Air Quality Management District [SCAQMD]) and to provide safety to workers and the adjacent community.

The City shall provide documentation (e.g., all required waste manifests, sampling, and air monitoring analytical results) to the County of Orange (County) Environmental Health Division showing that abatement of any ACMs, LBPs, PCB-containing electrical fixtures, or other hazardous building materials identified in these structures has been completed in full compliance with all applicable regulations and approved by the appropriate regulatory agency(ies) (40 CFR, Subchapter R, TSCA, Parts 716, 745, 761, 763, and 795 and California Code of Regulations [CCR] Title 8, Article 2.6). An Operating & Maintenance (O&M) Plan shall be prepared for any ACM, LBP, PCB-containing fixtures, or other hazardous building materials to remain in place and will be reviewed and approved by the County Environmental Health Division.

HAZ-2: Contingency Plan. Prior to commencement of grading activities, the Director of the County Environmental Health Division, or designee, shall review and approve a contingency plan that addresses the procedures to be followed should on-site unknown hazards or hazardous substances be encountered during demolition and construction activities. The plan shall indicate that if construction workers encounter underground tanks, gases, odors, uncontained spills, or other unidentified substances, the contractor shall stop work, cordon off the affected area, and notify the Garden Grove Fire Department (GGFD). The GGFD responder shall determine the next steps regarding possible site evacuation, sampling, and disposal of the substance consistent with local, State, and federal regulations.

(b) Less than Significant Impact with Mitigation Incorporated.

Construction. Construction activities would involve the routine use of hazardous materials such as vehicle fuels, oils, and transmission fluids. With the implementation of standard best management practices (BMPs) for water quality such as Erosion Control and Sediment Control BMPs designed to minimize erosion and retain sediment on site and Good Housekeeping BMPs to prevent spills, leaks, and discharge of construction debris and waste into receiving waters, and Mitigation Measure HAZ-1, which requires predemolition surveys, any risks associated with the

storage, handling, or disposal of hazardous materials would be reduced to a level that is less than significant during construction. In addition, there are no reported releases on site or off site that would pose a potential concern during construction activities. Mitigation Measure HAZ-2, outlining the requirements for a contingency plan, would reduce impacts related to the possible discovery of unknown wastes or suspect materials during construction activities. Therefore, with implementation of Mitigation Measures HAZ-1 and HAZ-2 impacts would be reduced to a less than significant level.

Operation. Operation of the proposed project would involve the use of chemical agents, solvents, paints, and other hazardous materials typical of residential, commercial, and community facility uses, that when used properly, would not produce hazardous emissions or require users to handle acutely hazardous materials, substances, or waste. The use of these chemicals would be in compliance with existing government regulations to ensure that operation of the proposed project would result in a less than significant hazard to the public or to the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment during project operation, and no mitigation would be required.

Mitigation Measures: See Mitigation Measures HAZ-1 and HAZ-2.

- (c) **Less than Significant Impact with Mitigation Incorporated.** The project site currently contains an existing church preschool operated by the United Methodist Church and an existing Head Start facility operated by the County. In addition, the Saint Columbian Elementary School has been identified within 0.25 mi of the project site. Although Garden Grove High School is not located within 0.25 mile (mi) of the project site, it should be noted that it is located approximately 0.30 mi east of the project site. Additionally, the proposed project would result in the replacement of the existing Head Start facility with a new Head Start Facility on the western portion of the site and would not result in any changes to the existing church preschool.

Construction. Construction activities would involve the routine use of hazardous materials such as vehicle fuels, oils, and transmission fluids. However, with the implementation of standard best management practices (BMPs) for water quality such as Erosion Control and Sediment Control BMPs designed to minimize erosion and retain sediment on site and Good Housekeeping BMPs to prevent spills, leaks, and discharge of construction debris and waste into receiving water and Mitigation Measure HAZ-1, any risks associated with the storage, handling, or disposal of hazardous materials during construction would be reduced to a level that is less than significant. In addition, there are no reported releases on site or off site that would pose a potential concern during construction activities. Mitigation Measure HAZ-2, which outlines the preparation and use of a contingency plan, would reduce impacts related to the possible discovery of unknown hazardous materials, substances, or waste during construction activities. Therefore, with implementation of Mitigation Measures HAZ-1 and HAZ-2, the proposed project would result in a less than significant hazard to the public or the environment, including Saint Columbian Elementary School or the existing on-site church preschool and new Head Start facilities.

Additionally, although construction of the proposed project would use construction equipment that would generate dust and particulate matter during site preparation activities, these activities would not result in hazardous emissions that would impact the existing pre-school and Head Start facilities on the project site, Garden Grove High School, or Saint Columbian Elementary School,

and no mitigation would be required. See Section 3.3, Air Quality, for further discussion of potential fugitive dust impacts.

Operation. The project site is located 445 ft away from the Saint Columbian Elementary School and approximately 0.30 mi west of Garden Grove High School. Additionally, the existing church preschool and Head Start facilities would continue to operate after implementation of the proposed project. During operation, the proposed project would involve the use of potentially hazardous materials (e.g., solvents, cleaning agents, paints, and pesticides) typical of residential, commercial, and community facility uses that, when used properly, in accordance with applicable regulations, would not produce hazardous emissions or result in the handling of substantial amounts of acutely hazardous materials, substances, or waste. Therefore, compliance with applicable regulations would ensure that operation of the proposed project would result in a less than significant hazard to the public or the environment, including Garden Grove High School, Saint Columbian Elementary School, and the existing church preschool and Head Start facilities on the project site, and no mitigation would be required.

Mitigation Measures: See Mitigation Measures HAZ-1 and HAZ-2.

- (d) **No Impact.** As discussed in the Phase I ESA, the proposed project site is not included on any hazardous materials sites pursuant to Government Code Section 65962.5 and would not create a significant hazard to the public or the environment. No mitigation would be required.

Mitigation Measures: No mitigation would be required.

- (e) **No Impact.** The proposed project is not located within an airport land use plan or located within 2 mi of a public airport or public use (Google Maps). The nearest public airports are the Seal Beach Naval Base located at 800 Seal Beach Boulevard, approximately 4 mi west of the project site, the Fullerton Municipal Airport (FMA), a general aviation airport located at 4011 West Commonwealth Avenue, approximately 7.7 mi north of the project site, and John Wayne International Airport located at 3160 Airway Avenue, approximately 11 mi south of the project site. As a result, the proposed project would not cause an airport safety hazard for people residing or working in the project area. Therefore, no impacts are anticipated, and no mitigation would be required.

Mitigation Measures: No mitigation would be required.

- (f) **No Impact.** The proposed project is not located within the vicinity of a private airstrip, and as a result, the proposed project would not result in a safety hazard for people residing or working in the project area. Therefore, no impacts are anticipated, and no mitigation would be required.

Mitigation Measures: No mitigation would be required.

- (g) **Less than Significant Impact with Mitigation Incorporated.**

Construction. Implications of construction include increased travel time due to flagging or stopping of traffic to accommodate trucks entering and exiting the project site. While it is unlikely that such activities would result in complete closure of Stanford Avenue, Main Street, or

Acacia Parkway, they may temporarily close a single travel lane. The development of a Construction Staging and Traffic Management Plan as required by Mitigation Measure TRAFFIC-1 (refer to Section 3.16, Traffic) would ensure that emergency vehicles would be able to navigate through streets adjacent to the project site. Traffic management personnel (flagpersons), required as part of the Congestion Staging and Traffic Management Plan, would be trained to assist in emergency response by restricting or controlling the movement of traffic that could interfere with emergency vehicle access. With implementation of the Construction Staging and Traffic Management Plan, it is not anticipated that construction of the proposed project would impede any pass-through emergency vehicles or impair any emergency evacuation plans. Therefore, impacts to emergency response and evacuation plans associated with construction of the proposed project would be reduced to a less than significant level with implementation of Mitigation Measure TRAFFIC-1.

Operation. The proposed project would not physically interfere with an adopted emergency response plan or emergency evacuation plan. The proposed project would be developed in accordance with the City emergency access standards. Access to, from, and on site for emergency vehicles would be reviewed and approved by the GGFD prior to project construction. The proposed project would also be required to comply with all applicable codes and ordinances for emergency vehicle access, which would ensure adequate access to, from, and on site for emergency vehicles. Therefore, operation of the proposed project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. Potential project impacts would be less than significant, and no mitigation would be required.

Mitigation Measures: See Mitigation Measure TRAFFIC-1 (Section 3.16, Traffic)

- (h) **No Impact.** The area surrounding the project site is considered urban. The project site is bound by commercial, and residential, and community facility uses on all sides and is not adjacent to wildland areas. As a result, the proposed project would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires. Therefore, no impacts are anticipated, and no mitigation measures would be required.

Mitigation Measures: No mitigation would be required.

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3.9 HYDROLOGY AND WATER QUALITY

Would the project:		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(a)	Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(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 a 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 through 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 storm water 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 checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input type="checkbox"/>
(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 checked="" type="checkbox"/>	<input type="checkbox"/>
(j)	Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Impact Analysis:

The proposed project is requesting a GPA and rezone, which would allow for a potential maximum density of 5 additional units (for a total of 21 units) on the 0.51-acre parcel. However, the following analysis does not include a separate maximum-density scenario since hydrology and water quality impacts related to 5 additional units would be the same as for the proposed project and would remain less than significant.

- (a) **Less than Significant Impact.** Pollutants of concern during project construction include sediments, trash, petroleum products, concrete waste (dry and wet), sanitary waste, and chemicals. Each of these pollutants on its own or in combination with other pollutants can have a detrimental effect on water quality. Excavated soil¹ would be exposed during construction activities, and there would be an increased potential for soil erosion and sedimentation compared to existing conditions. During construction, the total disturbed soil area would be approximately

¹ "Excavated soil" means soil removed from the surface or subsurface during grading activities.

2.5 acres (ac). In addition, chemicals, liquid products, petroleum products (such as paints, solvents, and fuels), and concrete-related waste may be spilled or leaked and have the potential to be transported via storm runoff into receiving waters. Implementation of the proposed project on a 2.5 ac portion of the project site would demolish the existing Head Start facility and basketball courts, remove the parking lot on the southern portion of the project site, modify the eastern church parking lot to provide 35 additional parking spaces through curb modifications and restriping, and construct the mixed-use development comprised of 47 affordable housing units, a 2,975-square-foot (sf) leasing office/commercial space, and a new 3,485 sf Head Start facility. Modifications to the existing church parking lot would affect approximately 0.3 ac on the project site. The remaining 2.7-acre portion of the property is currently developed with the existing United Methodist Church facilities and church preschool. No structural modifications to these existing facilities would occur, and therefore would not contribute to construction-related storm water runoff.

During operation, expected pollutants associated with the residential, commercial, and community facility uses include suspended solids/sediments, nutrients, pathogens (bacteria/virus), pesticides, oil and grease, and trash and debris. Compared to existing conditions, the proposed project would increase the amount of impervious surface area on the 2.5-acre portion of the project site by approximately 0.24 acre (from approximately 1.66 acres to approximately 1.90 acres), an increase of approximately 14.5 percent. An increase in impervious area would increase the volume of runoff during a storm, which would more effectively transport pollutants to receiving waters. However, the remaining 2.7-acre developed portion of the project site would not be altered, and therefore, would not experience an increase in impervious area or runoff.

The proposed project would be required to comply with all pertinent requirements of the National Pollutant Discharge Elimination System (NPDES). The first requirement involves compliance with the State Water Resources Control Board's NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order No. 2009-0009-DWQ, NPDES No. CAS000002) (Construction General Permit) (Standard Condition WQ-1). Because the proposed project would disturb greater than 1 acre of soil during construction, the project must comply with the requirements of the Construction General Permit, including the preparation of a Storm Water Pollution Prevention Plan (SWPPP) and implementation of the construction Best Management Practices (BMPs) detailed in the SWPPP during construction activities. Construction BMPs would include, but not be limited to, Erosion Control and Sediment Control BMPs designed to minimize erosion and retain sediment on site and Good Housekeeping BMPs to prevent spills, leaks, and discharge of construction debris and waste into receiving waters. Proposed infiltration BMPs include CULTEC recharger chambers. To comply with the requirements of the Construction General Permit, the Applicant must ensure that the Permit Registration Document, including a SWPPP and Notice of Intent, are filed with the State Water Resources Control Board prior to issuance of a grading permit.

The second requirement involves the preparation, submittal, and implementation of a Water Quality Management Plan (WQMP) that includes design features and BMPs to target pollutants of concern in stormwater runoff from the 2.5-acre portion of the project site (Standard Condition WQ-2). The City is required to approve the WQMP prior to the issuance of any grading or building permit. A *Preliminary Water Quality Management Plan* has been prepared for the proposed project that details the BMPs that would be implemented to reduce impacts to water

quality from operation of the proposed project. Proposed Source Control BMPs include education for property owners, tenants, and occupants; activity restriction; common area landscape maintenance; BMP maintenance; common area litter control; employee training; common area catch basin inspection; street sweeping of the driveway and parking area, storm drain signage and stenciling; efficient irrigation systems and landscape design; and slope protection. Proposed Site Design BMPs include maximizing natural infiltration capacity, preserving existing drainage patterns and time of concentration, and disconnecting impervious areas. Proposed infiltration BMPs include CULTEC recharger chambers, which operate in a similar fashion to infiltration trenches. Chambers with a reservoir base allow the soil beneath to treat storm water and remove sediments and metals.

With adherence to the aforementioned requirements, outlined below as Standard Conditions WQ-1 and WQ-2, potential impacts related to waste discharge requirements would be less than significant.

Standard Conditions:

- WQ-1** **Construction General Permit.** Prior to issuance of a grading permit, the Applicant/Developer shall demonstrate to the City of Garden Grove (City) Public Works Department that coverage has been obtained under California's General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit) by providing a copy of the Notice of Intent (NOI) submitted to the State Water Resources Control Board and a copy of the subsequent notification of the issuance of a Waste Discharge Identification (WDID) Number or other proof of filing. A copy of the current Storm Water Pollution Prevention Program (SWPPP) required by the General Permit shall be kept at the project site and be available for review by City representatives upon request.
- WQ-2** **Final Water Quality Management Plan.** Prior to issuance of a grading permit, the project Applicant/Developer shall submit a Final Water Quality Management Plan (WQMP) to the City Public Works Department for review and approval. Both Source Control BMPs and Site Design BMPs designed to reduce impacts to water quality from operation of the proposed project shall be identified in the Final WQMP.

Mitigation Measures: No mitigation would be required.

- (b) **Less than Significant Impact.** The 5.2-acre project site is not in a designated recharge area. The *Geotechnical Investigation* prepared for the project, stated that the depth to the historically highest groundwater was approximately 20 ft below ground surface (bgs). Groundwater was not encountered in any boring conducted as part of the *Geotechnical Investigation*. However, some of the fine-grained soil (clayey and silty materials), particularly those below a depth of approximately 22 ft, contain relatively high moisture content, approaching saturation in some cases. Based on the depth of excavation, it is not anticipated that groundwater would be encountered during construction; therefore, groundwater dewatering is not anticipated to be required. In addition, operation of the project would not require groundwater extraction.

Impervious surface area would increase by approximately 14.5 percent on the 2.5-acre portion of the project site compared with the existing condition due to development of the proposed mixed-use project; however, the project includes infiltration BMPs to offset any reduction in infiltration that results from the increased impervious surface area. However, the remaining 2.7-acre portion of the project site is presently developed with the United Methodist Church, a church preschool, and associated facilities, and would not result in an increase in impervious surface area or a reduction in infiltration. Therefore, groundwater recharge on site would not be substantially altered and impacts related to depletion of groundwater supplies or interference with groundwater recharge would be less than significant, and no mitigation would be required.

Mitigation Measures: No mitigation would be required.

- (c) **Less than Significant Impact.** Implementation of the proposed project on a 2.5 ac portion of the project site would demolish the existing Head Start facility and basketball courts, remove the parking lot on the southern portion of the project site, modify the eastern church parking lot to provide 35 additional parking spaces through curb modifications and restriping, and construct the proposed mixed-use development comprised of 47 affordable housing units, a 2,975-square-foot (sf) leasing office/commercial space, and a new 3,485 sf Head Start facility. Therefore, the 2.7-acre portion of the project site not impacted by construction activities would not contribute to impacts associated with soil erosion and siltation. During construction activities on the 2.5-acre portion of the project site, soil would be exposed and disturbed, drainage patterns would be temporarily altered during grading and other construction activities, and there would be an increased potential for soil erosion and siltation compared to existing conditions. Additionally, during a storm event, soil erosion and siltation could occur at an accelerated rate. As discussed above in Response 3.9(a) and specified in Standard Condition WQ-1, the Construction General Permit requires preparation of a SWPPP to identify Construction BMPs to be implemented as part of the proposed project to reduce impacts to water quality during construction, including those impacts associated with soil erosion and siltation.

Development of the proposed mixed-use project on the 2.5-acre portion of the project site would result in a slight alteration of the existing on-site drainage patterns. However, the remaining 2.7-acre portion of the project site is presently developed, and would not be altered as part of the proposed project. According to the *Preliminary Water Quality Management Plan*, in the proposed condition, 1.99 acres of the 2.5-acre portion of the project site would be impervious surface areas and not prone to erosion or siltation. The remaining approximately 0.5 acre of the 2.5-acre portion of the project site would be landscaped; in addition, the bio-retention BMPs would collect and treat runoff and minimize erosion and siltation. The proposed project would increase the amount of impervious surface area on the 2.5-acre portion of the project site by approximately 0.24 acre compared to existing conditions, which would increase the volume of runoff during a storm and increase the potential for on- or off-site erosion or siltation. However, the proposed project includes infiltration BMPs (CULTEC recharger chambers) to offset any increase in stormwater runoff that would result from the increased impervious surface area. Through implementation of infiltration BMPs, the proposed project would not substantially increase runoff that could contribute to downstream erosion or siltation. Finally, the proposed project would not alter the course of a stream or river. With implementation of construction and infiltration BMPs, impacts related to the alteration of existing drainage pattern in a manner that would result in on- or off-site erosion or siltation would be less than significant. No mitigation would be required.

Mitigation Measures: No mitigation would be required.

- (d) **Less than Significant Impact.** As discussed above, the development of the proposed mixed-use project on the 2.5-acre portion of the project site would alter the existing on-site drainage patterns and permanently increase the impervious surface area compared to existing conditions. However, the remaining 2.7-acre portion of the project site is presently developed, and would not be altered as part of the proposed project. As a result of the increase in impervious surface area, the proposed project is anticipated to increase the runoff peak flow during storm events. However, the proposed project includes infiltration BMPs (CULTEC recharger chambers) to offset any increase in stormwater runoff that would result from the increased impervious surface area. With implementation of infiltration BMPs as part of the project design, impacts related to the alteration of the existing drainage pattern in a manner that would result in on- or off-site flooding would be less than significant. No mitigation would be required.

Mitigation Measures: No mitigation would be required.

- (e) **Less than Significant Impact.** As discussed above, the development of the proposed mixed-use project on the 2.5-acre portion of the project site would alter the existing on-site drainage patterns and permanently increase the impervious surface area compared to existing conditions. However, the remaining 2.7-acre portion of the project site is presently developed, and would not be structurally altered as part of the proposed project. As a result of the increase in impervious surface area, the proposed project is anticipated to increase the runoff peak flow during storm events. However, the proposed project includes infiltration BMPs (CULTEC recharger chambers) to offset any increase in stormwater runoff that would result from the increased impervious surface area. Therefore, the proposed project would not create or contribute runoff that would exceed the capacity of the downstream storm drain system. Project impacts related to storm drain capacity would be less than significant, and no mitigation would be required.

Mitigation Measures: No mitigation would be required.

- (f) **Less than Significant Impact.** Refer to Response 3.9(a), above.

Mitigation Measures: No mitigation would be required.

- (g) **Less than Significant Impact.** The project site is not located within a designated 100-year special flood hazard area. According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) No 0605900139J (December 3, 2009), the project site is located within Regular Flood Hazard Zone X, which is defined as the area of 0.2 percent annual chance flood (500-year flood), areas of 1 percent annual chance flood (100-year flood) with average depths of less than 1 foot or with drainage areas less than 1 square mile, and areas protected by levees from 1 percent annual chance flood.

The project site is located within the Prado Dam inundation area¹. The proposed project would not increase the chance of inundation from failure of Prado Dam. Prado Dam was designed in the 1930s, but has recently increased its functioning capability due to the Seven Oaks Dam, which was completed in November 1999 and is located approximately 40 mi upstream on the Santa Ana River. During a flood, Seven Oaks Dam would store water destined for Prado Dam for as long as the reservoir pool at Prado Dam is rising. When the flood threat at Prado Dam has passed, Seven Oaks Dam would begin to release its stored flood water at a rate that does not exceed the downstream channel capacity. Working in tandem, the Prado and Seven Oaks Dams provide increased flood protection to Orange County.

Prado Dam is maintained and inspected to ensure its integrity and to ensure that risks are minimized. Given that the proposed project is considered infill development and that it would not increase the risk of failure of Prado Dam, project impacts related to placement of housing within a 100-year flood hazard area would be less than significant. No mitigation would be required.

Mitigation Measures: No mitigation would be required.

- (h) **Less than Significant Impact.** As stated above, the project site is not located within a designated 100-year special flood hazard area. The project site is located within Regular Flood Hazard Zone X, which is defined as the area of 0.2 percent annual chance flood (500-year floodplain), areas of 1 percent annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile, and areas protected by levees from 1 percent annual chance flood. As stated above, the entire project site is located within the Prado Dam inundation area. Given that the proposed project is considered infill development and that it would not increase the risk of failure of Prado Dam, project impacts related to placement of structures within a 100-year flood hazard area would be less than significant. No mitigation would be required.

Mitigation Measures: No mitigation would be required.

- (i) **Less than Significant Impact.** As discussed above, the entire project site is located within the Prado Dam inundation area. The proposed project would not increase the chance of inundation from failure of Prado Dam. Prado Dam is maintained and inspected to ensure its integrity and to ensure that risks are minimized. Given that the proposed project is considered infill development and that it would not increase the risk of failure of Prado Dam, project impacts from exposure of people or structures to loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam, would be less than significant. As discussed above, the increase in impervious surface area as a result of the proposed project is anticipated to increase the runoff peak flow during storm events. However, the proposed project includes infiltration BMPs (CULTEC recharger chambers) to offset any increase in stormwater runoff that would result from the increased impervious surface area. Therefore, existing storm drain infrastructure would provide adequate capacity, and impacts related to flooding would be less than significant. No mitigation would be required.

Mitigation Measures: No mitigation would be required.

¹ Orange County Public Works, OC Flood Division. Prado Dam. <http://ocflood.com/sarp/prado> (accessed August 22, 2014).

- (j) **No Impact.** Seiching is a phenomenon that occurs when seismic ground shaking induces standing waves (seiches) inside water retention facilities such as reservoirs and water tanks. Such waves can cause retention structures to fail and flood downstream properties. There are no water retention facilities located in close proximity to the project site. The risk associated with possible seiche waves is, therefore, not considered a potential constraint or a potentially significant impact of the project, and no mitigation is necessary.

Tsunamis are generated wave trains generally caused by tectonic displacement of the sea floor associated with shallow earthquakes, sea floor landslides, rock falls, and exploding volcanic islands. The project site is located more than 6 miles (mi) from the ocean shoreline and is not in a tsunami inundation area (State of California Department of Conservation, Orange County Tsunami Inundation Maps). The risk associated with tsunamis is, therefore, not considered a potential hazard or a potentially significant impact, and no mitigation would be required.

Mudslides and slumps are described as a shallower type of slope failure, usually affecting the upper soil mantle or weathered bedrock underlying natural slopes and triggered by surface or shallow subsurface saturation. The project site and surrounding area is relatively flat. The risk associated with possible mudflows and mudslides is, therefore, not considered a potential constraint or a potentially significant impact of the project, and no mitigation is necessary.

Mitigation Measures: No mitigation would be required.

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3.10 LAND USE/PLANNING

Would the project:

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(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 type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Impact Analysis:

The proposed project is requesting a GPA and rezone, which would allow for a potential maximum density of 5 additional units (for a total of 21 units) on the 0.51-acre parcel. However, the following analysis does not include a separate maximum-density scenario since land use impacts related to 5 additional units would be the same as for the proposed project and would remain less than significant.

(a) **No Impact.** The proposed mixed-use project would be constructed on a 2.5-acre portion of the existing 5.2-acre project site. The existing United Methodist Church, associated facilities, and church preschool on the remaining 2.7 acres of the project site would not be structurally altered by project implementation. However, the existing Head Start facility would be demolished and rebuilt as part of the proposed project, the basketball court and southern church parking lot would be removed, and the eastern church parking lot would be modified to provide an additional 35 parking spaces through curb modifications and restriping. Because the proposed project would be constructed on an existing developed site and is considered in-fill development, implementation of the proposed project would not divide an established community. The proposed project would not disrupt or modify the existing roadway network, nor would it affect or disrupt residential neighborhoods in the project vicinity. The proposed project would convert the 2.5-acre portion of the existing project site, currently developed with a Head Start facility, parking lots, and vacant lot into a mixed-use development with 47 affordable housing units, a 2,975 sf leasing office/commercial space, and a new 3,485 sf Head Start facility; thereby providing additional community facilities, services, and housing options to the surrounding community. Vehicular access to the project site would be provided by a new driveway on Stanford Avenue and the existing driveways on Acacia Parkway. In addition, residents and visitors could access the site via the two existing United Methodist Church driveways along Main Street. Therefore, implementation of the proposed project would not result in the physical division of any established community, and no mitigation would be required.

Mitigation Measures: No mitigation would be required.

(b) **Less than Significant Impact.** The main guiding documents regulating land use on and around the project site are the City of Garden Grove's (City's) General Plan and Zoning Ordinance.

General Plan. The 2030 Garden Grove General Plan (2008) is the City's most fundamental planning document. The General Plan establishes a vision for the City's future growth and change and provides a blueprint for development throughout the community. As illustrated by Figure 1.4, General Plan Land Use Designations, the 4.7-acre parcel on the project site at 12741 Main Street has Civic Center Mixed Use (CCMU) land use designation, while the vacant 0.51 acre parcel on the project site has Medium Density Residential (MDR) land use designation. Allowable uses within the MDR General Plan land use designation include traditional multi-family apartments, condominiums, townhomes, and single-family small-lot subdivisions. The MDR land use designation allows residential densities between 18.1 and 32 dwelling units per acre (du/ac). Allowable uses within the CCMU General Plan land use designation include a combination of civic, institutional, commercial, high-density residential and open space uses. The CCMU land use designation allows residential densities of 42 du/ac.

Allowable building intensities in nonresidential land use designations are expressed in terms of FAR.¹ The FAR is used to control use intensity on a lot and not the actual building height or bulk. The CCMU land use designation allows a Floor Area Ratio (FAR) of 0.50 for non-residential uses. With implementation of the proposed project, the entire project site would have a residential density of 9.0 du/acre and a total FAR of 0.21. Although the new development proposed as part of the project would be inconsistent with the MDR land use designation on the 0.51-acre portion of the site, approval of the requested GPA to a CCMU designation would allow for the proposed project to be consistent with the land use designation for the project site. With approval of the proposed GPA, the proposed project would be consistent with the CCMU land use designation, which allows for mixed use on the project site. Therefore, following approval of the proposed project and the GPA, no inconsistency with the City's General Plan land use designation would occur and impacts would be considered less than significant.

The City's General Plan Land Use Element also contains goals and policies that are applicable to the proposed project. These applicable goals and policies from the City's General Plan are listed in Table 3.10.A, along with a consistency analysis of the proposed project with each relevant goal and policy. In order to eliminate repetitive policies and focus on key issues, policies that are not relevant to the proposed project are not included in Table 3.10.A. The purpose of this discussion is to provide a guide to the decision-makers' policy interpretation and should be considered preliminary; a final determination of consistency with plans and policies would be made by City decision-makers. As identified through this consistency analysis, the proposed project would be consistent with all applicable policies in the City's General Plan.

¹ Simply stated, the FAR is the ratio between total gross floor area of all buildings on a lot and the total area of that lot

Table 3.10.A: City of Garden Grove General Plan Consistency Analysis

Select General Plan Policies ¹	Consistency Analysis
Land Use Element	
<p>Policy LU-1.5: Mixed Use should be designed to:</p> <ul style="list-style-type: none"> • Create a pleasant walking environment to encourage pedestrian activity. • Create lively streetscapes, interesting urban spaces, and attractive landscaping. • Provide convenient shopping opportunities for residents close to their residence. • Integrate with surrounding uses to become a part of the neighborhood rather than an isolated project. • Use architectural elements or themes from the surrounding area, as appropriate. • Provide appropriate transition between land use designations to minimize neighbor compatibility conflicts 	<p>Consistent. The proposed mixed-use project would be cohesive with the surrounding area due to its architectural elements and landscaping, and would contribute to the walkability of the neighborhood because of its close proximity to the Garden Grove Civic Center and Main Street area. Furthermore, by developing the project site with a mixed-use project, the proposed project would serve as a transition between high intensity land uses along Main Street and lower intensity land uses in the surrounding neighborhood. Landscaping provided as part of the project would be located throughout the project site and along street frontages, and as such, would improve existing streetscapes along Stanford Avenue, Acacia Parkway, and Main Street.</p>
<p>Policy LU-2.2: Strive to provide a diverse mix of housing types, along with uniformly high standards of residential property maintenance to preserve residents' real estate values and their high quality of life.</p>	<p>Consistent. The proposed project would develop a portion of the existing project site with a new 3,485 sf Head Start facility, a 2,975 sf leasing office/commercial space, and 47 affordable housing units, for a total project site density of 9.0 dwelling units per acre (du/ac). The proposed 31 residential units provided in Building A are intended for occupation by families, whereas the 16 residential units provided in Building B are intended for occupation by seniors. Therefore, this mixed-use development would contribute to the diverse mix of housing types in the City, while simultaneously improving the site with commercial and community facility uses that would serve to increase property values and the quality of life of residents in the surrounding area.</p>
<p>LU-IMP-2B: New development shall be similar in scale to the adjoining residential neighborhood to preserve its character.</p>	<p>Consistent. The project's site density would be 9.0 du/ac. Therefore, the proposed project would be considered a low-density project according to the City's General Plan Land Use Element. Surrounding land uses in the project vicinity include multi-family residences ranging from low-to high-density. Further, the proposed project includes approval of a GPA to amend the land use designation on the 0.51 acre portion of the project site from MDR to CCMU. The proposed project would be similar in scale to existing development on the project site and with existing residential developments in the surrounding area.</p>

¹ City of Garden Grove. *Garden Grove General Plan 2030*. As amended.

Table 3.10.A: City of Garden Grove General Plan Consistency Analysis

Select General Plan Policies ¹	Consistency Analysis
<p>Policy LU-3.1: Preserve existing and encourage multi-family residential development in the Focus Areas allowing mixed use in older or underutilized commercial centers. Such housing provides convenient access to jobs and activities, and supplies a resident clientele to support commercial sales and services in mixed use areas.</p>	<p>Consistent. The proposed project would develop the project site with a mixed-use development comprised of 47 affordable housing units, a 2,975 sf leasing office/commercial space, and a new 3,485 sf Head Start facility in Focus Area-Civic Center (Area 1). This development would be in close proximity to employment and activities in the surrounding area, including commercial areas along Main Street and public facilities/parks at the adjacent Garden Grove Civic Center. The proposed project would supply a resident clientele to support commercial sales and services in Focus Area-Civic Center (Area 1).</p>
<p>LU-IMP-3A: Design new residential sites so that housing does not front onto a major corridor, but instead on intersecting local streets or on cul-de-sacs, in order that sight and sound buffering from traffic can be included in these new residential site plans.</p>	<p>Consistent. The proposed project does not front onto a major corridor. Instead, Buildings A and B would partially front onto Acacia Parkway and Stanford Avenue, respectively. Neither of these streets are considered major corridors. Therefore, visual and noise impacts from traffic in the surrounding area would be buffered for the proposed project.</p>
<p>LU-IMP-3B: Design multi-family housing in mixed use areas and on major corridors to provide a buffer between the corridor and lower density residential areas.</p>	<p>Consistent. The proposed project would include a mixed use development, consisting of 47 affordable housing units, a new 3,485 sf Head Start facility, and a 2,975 sf leasing office/commercial space. The 4.7 acre portion of the project site located at 2741 Main Street currently has a land use designation of Civic Center Mixed Use (CCMU). Therefore, a GPA would be required to change the land use designation of the 0.51 acre vacant portion of the project site from MDR to CCMU. With approval of the proposed GPA, the proposed project would be consistent with the existing CCMU land use designation, which allows for mixed use on the project site. Properties to the north and west of the project site are low-density single-family units and multi-family residential uses. In addition, the City's downtown/civic center core area is located across Acacia Parkway to the south of the project site. Therefore, development of the proposed project would serve as a buffer between these commercial land uses along Main Street and residential areas to the west and north of the project site.</p>
<p>LU-IMP-3C: Require attractive side and rear facades and landscaping on multi-family housing structures in order to improve the streetscape and effect a visual transition to lower density residential areas.</p>	<p>Consistent. As previously discussed, the proposed project would include a number of architectural design and landscaping features to ensure its aesthetic consistency with the surrounding community. Specifically, building materials would include the following design elements: painted stucco, brick veneer, painted metal awnings and balcony railings, painted roof shingles, painted garage doors, and colored vinyl windows. Furthermore, the proposed</p>

Table 3.10.A: City of Garden Grove General Plan Consistency Analysis

Select General Plan Policies ¹	Consistency Analysis
	<p>project would provide a transition to lower-density residential uses by serving as a buffer between the commercial land uses along Main Street and residential areas to the west and north of the project site. The density for the residential portion of the project site would be 9.0 du/ac, which would be considered low-density by the City's General Plan Land Use Element. Properties to the north and west of the project site are multi-family medium-density and single-family lower-density uses, respectively. Therefore, the density of the residential portion of the proposed project would be consistent with medium-density residential uses northwest of the site.</p>
<p>LU-IMP-3D: Front multi-family housing on local streets with appropriate setbacks to be consistent with neighborhood development patterns.</p>	<p>Consistent. The proposed project would comply with all setback standards for the Civic Center-Core (CC-3) zoning designation as outlined in the City's Municipal Code (refer to Table 3.11.B, below). Therefore, the proposed project would develop the project site in a pattern consistent with surrounding neighborhood development.</p>
<p>Policy LU-4.1: Locate higher density residential uses within proximity of commercial uses to encourage pedestrian traffic, and to provide a consumer base for commercial uses.</p>	<p>Consistent. The proposed project would develop the project site with a low-density mixed-use development. As previously stated, the City's commercial core area is located southeast of the project site, across Acacia Parkway. Therefore, development of the proposed project would encourage additional pedestrian traffic in the area with existing sidewalks and the proposed project's paseo walkway, as well as expand the existing consumer base for commercial uses along Main Street and in the surrounding area.</p>
<p>Community Design Element</p>	
<p>Policy CD-1.1: Enhance the positive qualities that give residential, commercial, and industrial areas their unique identities, while also allowing flexibility for innovative design.</p>	<p>Consistent. The proposed project would include a variety of architectural and landscape design features that would contribute to the visual character and uniqueness of the project.</p>
<p>Circulation Element</p>	
<p>Policy CIR-1.8: Ensure that new development can be accommodated within the existing circulation system, or planned circulation improvements, such that the standard of Level of Service (LOS) D is maintained.</p>	<p>Consistent. As discussed further in Section 3.16, the proposed project would be accommodated within the existing circulation system and would not cause the City's acceptable Level of Service (LOS) D to be exceeded at any study area intersection.</p>
<p>Policy CIR-3.5: Require new developments to implement access and traffic management plans that would reduce the potential for neighborhood traffic intrusion through factors such as driveway location, turn restrictions, shuttle bus operations, and/or travel demand strategies.</p>	<p>Consistent. Access to the proposed project would be provided through driveways located on Main Street, Acacia Parkway, and Stanford Avenue. Although the proposed project would be primarily accessed through the proposed Stanford Avenue Driveway and existing Acacia Parkway driveways, as a mixed-use project, access would also be provided via Main Street. As</p>

Table 3.10.A: City of Garden Grove General Plan Consistency Analysis

Select General Plan Policies ¹	Consistency Analysis
	discussed further in Section 3.16, the proposed project would not generate a significant amount of trips during peak or off- peak hours that would contribute to a negative impact on traffic patterns in the surrounding neighborhood.
Policy CIR-4.1: Strive to achieve a balance of land uses whereby residential, commercial, and public land uses are proportionally balanced.	Consistent. The proposed project is a mixed-use project, consisting of 47 affordable housing units, a 2,975 sf leasing office/commercial space, and a new 3,485 sf Head Start facility. Therefore, the proposed project would provide a balance of land uses both on the project site, and within the project vicinity.
Policy CIR-4.2: Strive to reduce the number of miles traveled by residents to their places of employment.	Consistent. The proposed mixed-use project would include the development of 47 affordable housing units, a 2,975 sf leasing office/commercial space, and a new 3,485 sf Head Start facility that would be integrated with the existing church facilities and church preschool on site. It is anticipated that some of the families living in the proposed residential units would be serviced by the Head Start facility and would attend services at the on-site United Methodist Church, thereby reducing the vehicle miles traveled (VMTs) that would otherwise be driven if these facilities were located off site. Additionally, the project site is located directly northwest of the City’s commercial core (which includes offices) along Main Street. As such, the proposed project would also be within close proximity to this commercial center, which would provide retail, entertainment, and employment opportunities to residents of the project.
Policy CIR-4.3: Ensure the reduction in vehicle miles traveled through the approval of mixed use development proposals.	Consistent. The proposed project is a mixed-use development that includes multi-family housing, a 2,975 sf leasing office/commercial space and a new 3,485 sf Head Start facility. Therefore, a reduction in VMTs would be achieved due the proximity of residences on site to the new Head Start facility and leasing office/commercial use. Also, as a mixed-use development, the project would reduce VMTs to residences, commercial centers, and offices in the surrounding area.
Policy CIR-5.1: Promote the use of public transit.	Consistent. The proposed project is located within approximately 0.2 miles (mi) of a stop on the Orange County Transportation Authority’s (OCTA) Route 37/37A La Habra to Fountain Valley bus service and 0.3 mi away from Route 56 Garden Grove to Orange bus service.
Policy CIR-5.3: Provide appropriate bicycle access throughout the City of Garden Grove.	Consistent. The proposed project would not interfere with any existing bike access ways. Further, because the proposed project would be within close proximity to the commercial core area along Main Street,

Table 3.10.A: City of Garden Grove General Plan Consistency Analysis

Select General Plan Policies ¹	Consistency Analysis
	<p>residents of the project site would be able to bicycle to nearby commercial, retail, and office uses. Additionally, the proposed project would include bike racks as a design feature.</p>
<p>Policy CIR-5.4: Provide appropriate pedestrian access throughout the City of Garden Grove.</p>	<p>Consistent. The proposed project would provide pedestrian access via Acacia Parkway and Stanford Avenue, and would not interfere with any existing pedestrian access ways, and would also include a paseo walkway connecting buildings on the project site. Further, because the proposed project would be within close proximity to the commercial core area along Main Street, residents of the project site would be able to walk to nearby commercial, retail, and office uses.</p>
<p>Infrastructure Element</p>	
<p>Policy INFR-1.2: New development and redevelopment projects shall ensure that water infrastructure systems are adequate to serve the development.</p>	<p>Consistent. Water provided to the proposed project would consist of water from the Lower Santa Ana River Groundwater Basin and imported water from the Metropolitan Water District of Southern California (MWD). Imported water from the MWD is treated at the Robert B. Diemer Filtration Plant located the City of Yorba Linda and the F.E. Weymouth Treatment Plant in the City of La Verne. Wastewater from the proposed project would be treated by the Orange County Sanitation District (OCSD). As discussed further in Section 3.17, Utilities, it is not anticipated that the project would result in demands for water or wastewater services that would result in significant impacts to existing water and wastewater infrastructure systems.</p>
<p>Policy INFR-2.3: Support sustainable wastewater services that respect and improve the natural environment.</p>	<p>Consistent. As previously stated, wastewater from the proposed project would be treated by the OCSD.</p>
<p>Policy INFR 3.3: Minimize the adverse effects of urbanization upon drainage and flood control facilities.</p>	<p>Consistent. As discussed further in Section 3.9, Hydrology and Water Quality, the proposed project would comply with all Best Management Practices (BMPs) for the new development and would not result in significant increases in stormwater runoff or changes to existing drainage patterns on the project site. Therefore, development of the proposed project would not result in significant adverse impacts related to drainage and flood control facilities.</p>
<p>INFR-IMP-3A: Continue to participate in the NPDES permit program.</p>	<p>Consistent. As discussed further in Section 3.9, Hydrology and Water Quality, the proposed project would obtain a National Pollutant Discharge Elimination System (NPDES) permit, thus ensuring the project's compliance with the NPDES permit program.</p>

Table 3.10.A: City of Garden Grove General Plan Consistency Analysis

Select General Plan Policies ¹	Consistency Analysis
INFR-IMP-3B: Require new development and redevelopment projects (greater than one acre) to provide a Water Quality Management Plan.	Consistent. As part of the environmental review and documentation process for the proposed project, a site-specific Water Quality Management Plan (WQMP) (Appendix G) was prepared for the proposed project.
INFR-IMP-3D: Continue to require the implementation of adequate erosion control measures for development or redevelopment projects in order to minimize sedimentation damage to drainage facilities.	Consistent. The proposed project would be required to implement erosion control measures in order to minimize sedimentation damage to drainage facilities in compliance with the NPDES and the site-specific WQMP.
Policy INFR-4.1: Provide sufficient levels of storm drainage service to protect the community from flood hazards and minimize the discharge of materials into the storm drain system that are toxic or which would obstruct flows.	Consistent. As discussed further in Section 3.9, Hydrology and Water Quality, the proposed project would not result in significant impacts related to flooding. Further, the proposed project would be required to comply with BMPS to minimize discharge of materials into the storm drain system.
Noise Element	
Policy N-1.1: Require all new residential construction in areas with an exterior noise level greater than 55 dBA to include sound attenuation measures.	Consistent. The nearest sensitive receptors to the project site would be the residential uses approximately 10 feet (ft) to the west of the project site. The proposed project would incorporate Mitigation Measure NOISE-1 to minimize noise impacts on the proposed residential uses.
Policy N-1.3: Require noise reduction techniques in site planning, architectural design, and construction, where noise reduction is necessary consistent with the standards in Tables 7-1 and 7-2, Title 24 of the California Code of Regulations, and Section 8.47 of the Municipal Code.	Consistent. As discussed further in Section 3.12, Noise, the proposed project would comply with the standards for noise and land use compatibility (Table 7-1), the Garden Grove Noise Ordinance Standards (Table 7-2), Title 24 of the California Code of Regulations, and Section 8.47.060 of the City's Municipal Code. The proposed project would also incorporate Standard Condition NOISE-1 and Mitigation Measure NOISE-1 to minimize noise impacts during construction and on the proposed residential uses.
Policy N-1.4: Ensure acceptable noise levels are maintained near schools, hospitals, convalescent homes, churches, and other noise sensitive areas.	Consistent. The existing land uses at the project site include the United Methodist Church and two pre-school facilities (including the Head Start facility). The proposed project is not anticipated to generate noise levels that would significantly impact surrounding sensitive receptors including the onsite church preschool and Head Start facility. The proposed project would incorporate Standard Condition NOISE-1 and Mitigation Measure NOISE-1 to minimize noise impacts on sensitive receptors and the proposed residential uses.

Table 3.10.A: City of Garden Grove General Plan Consistency Analysis

Select General Plan Policies ¹	Consistency Analysis
<p>Policy N-1.7: Avoid locating noise-sensitive land use in existing and noise-impacted areas.</p>	<p>Consistent. The existing project site includes a church preschool, a Head Start facility, and the United Methodist Church and associated structures. The existing onsite church preschool and United Methodist Church facilities would not be altered as part of the proposed project. However, the existing Head Start facility would be demolished to allow for construction of a new 3,485 sf Head Start facility, and 35 new parking spaces with landscaping would be added to the church parking lot through curb modifications and restriping. Land uses surrounding the project site are primarily residential. Therefore, although development of the proposed project would develop the 2.5 acre portion of the project site with a noise sensitive land use (i.e., residential uses and new Head Start facility), the project site is not located within an existing noise-impacted area. The proposed project would incorporate Mitigation Measure NOISE-1 to minimize noise impacts on the proposed residential uses.</p>
<p>N-IMP-1D: Require construction activity to comply with the limits established in the City's Noise Ordinance.</p>	<p>Consistent. As discussed further in Section 3.12, Noise, the proposed project would comply with noise limitations outlined in the City's Noise Ordinance.</p>
<p>N-IMP-1E: Require buffers or appropriate mitigation of potential noise sources on noise sensitive areas.</p>	<p>Consistent. As discussed further in Section 3.12, Noise, construction of the proposed project would generate noise levels that would result in significant impacts to adjacent noise-sensitive receptors (i.e., single-family and multi-family residential uses west and southeast of the project site). Therefore, the proposed project would incorporate Standard Condition NOISE-1 to reduce construction noise to a less than significant level on these sensitive receptors.</p> <p>Frontline dwelling units along Stanford Avenue and Acacia Parkway could be exposed to noise levels exceeding City standards. Mitigation Measure NOISE-1 requires that air conditioning is installed to ensure that windows and/or doors can remain closed for prolonged periods of time to maintain the interior noise standards, and reduce impacts to a less than significant level.</p>
<p>N-IMP-1H: Orient residential units away from major noise sources, particularly in mixed use projects.</p>	<p>Consistent. The proposed project involves a mixed-use development, comprised primarily of two residential buildings, a 2,975 sf leasing office/commercial space, and a new 3,485 sf Head Start facility that would be integrated with the existing church facilities and church preschool. The two residential buildings would be oriented towards the central portion of the site and would be oriented away from any major noise sources, including surrounding roadways. The proposed project</p>

Table 3.10.A: City of Garden Grove General Plan Consistency Analysis

Select General Plan Policies ¹	Consistency Analysis
	would incorporate Mitigation Measure NOISE-1 to minimize noise impacts on the proposed residential uses.
<p>N-IMP-1I: Encourage the location of balconies and operable windows of residential units in mixed use projects away from arterials and other major noise sources.</p>	<p>Consistent. As previously stated, the proposed project would include two residential buildings that would be oriented towards the central portion of the site, away from surrounding roadways and other major noise sources. As such, although the two residential buildings to be developed by the proposed project would include operable windows and balconies, these design features would not face any arterials or major noise sources. The proposed project would incorporate Mitigation Measure NOISE-1 to minimize noise impacts on the proposed residential uses.</p>
<p>Policy N-2.3: Incorporate noise reduction features for items such as, but not limited to, parking and loading areas, ingress/egress points, and refuse collection areas, during site planning to mitigate anticipated noise impacts on affected noise sensitive land uses.</p>	<p>Consistent. As discussed further in Section 3.12, Noise, the proposed project would incorporate Mitigation Measure NOISE-1 to minimize noise impacts on the proposed residential uses resulting from potentially high-traffic noise levels along Stanford Avenue and Acacia Parkway.</p>
<p>IMP-4A: Install sound attenuation measures, including but not limited to, retrofitting existing residential units or sensitive receptors with double-glazed windows and sound insulation; construction of sound walls and landscaping, use of low walls and landscaped berms, enclose courtyards, rubberized asphalt, or relocation of driveways.</p>	<p>Consistent. As discussed further in Section 3.12, Noise, the proposed project would include dual-paned windows, as is required by the California Building Code (CBC) for energy conservation. Additionally, the proposed project would include the installation of landscaping along street frontages that would further reduce traffic noise levels.</p>
Air Quality Element	
<p>Policy AQ-1.2: Strive to achieve conformance with the state-mandated congestion management plans (CMPs), transportation demand management, or other like State or federally required pollution reduction plans.</p>	<p>Consistent. As discussed further in Section 3.3, Air Quality, the proposed project would not conflict with the City's ability to achieve conformance with the state-mandated congestion management plans, or other plans, such as State or federally required pollution reduction plans.</p>
<p>Policy AQ-2.3: Continue to improve existing sidewalks, bicycle trails, and parkways, and require sidewalk and bicycle trail improvements and parkways for new development or redevelopment projects.</p>	<p>Consistent. The proposed project would include construction of an internal pedestrian pathway, thus enhancing the existing sidewalk connectivity in the area surrounding the project site.</p>
<p>Policy AQ-2.4: Relieve congestion on major arterials and reduce emissions.</p>	<p>Consistent. The proposed project includes development of 47 affordable housing units, a 2,975 sf leasing office/commercial space, and a 3,485 sf Head Start facility that would be integrated with the existing church facilities and church preschool. Therefore, the proposed development would provide residents with childcare services on-site, in addition to the existing church preschool and church services on the site, thus</p>

Table 3.10.A: City of Garden Grove General Plan Consistency Analysis

Select General Plan Policies ¹	Consistency Analysis
	reducing VMTs for childcare needs, which would relieve both congestion and emissions levels. Further, because of its proximity to the commercial, retail, and office uses on Main Street, the proposed project would reduce VMTs by developing the project on a site within walking and biking distance to the City's commercial core.
Policy AQ-2.5: Separate, buffer, and protect sensitive receptors from significant sources of pollution to the greatest extent possible.	Consistent. The proposed new Head Start facility would provide childcare services to children ages 0-5 years. This building would be located centrally on the project site, away from any streets, as to avoid any exposure of sensitive receptors to pollution from vehicle exhaust emissions. Further, as previously stated, the proposed residential buildings would be oriented away from adjacent roadways, thereby minimizing exposure to air pollutants from vehicles traveling along Stanford Avenue and Acacia Parkway.
AQ-IMP-2B: Require new development or redevelopment projects to provide pedestrian and bicycle trails access to nearby shopping and employment centers.	Consistent. The proposed project would not conflict with pedestrian or bicycle access to nearby shopping or employment centers. Further, because the project includes the development of a mixed use project with onsite residential, commercial, and community facility uses, and because of its proximity to the commercial, retail, and office uses on Main Street, the proposed project would reduce VMTs by developing the project on a site within walking and biking distance to the City's commercial core.
Policy AQ-4.3: Encourage "walkable" neighborhoods with pedestrian walkways and bicycle paths in residential and other types of developments to encourage pedestrian rather than vehicular travel.	Consistent. The proposed project would include an internal pedestrian pathway linking the main entrances to the development from Acacia Parkway on the southern portion of the property to Stanford Avenue on the northern end of the property. Further, because the project includes the development of a mixed use project with onsite residential, commercial, and community facility uses, and because of its proximity to the commercial, retail, and office uses on Main Street, the proposed project would reduce VMTs by developing the project on a site within walking and biking distance to the City's commercial core.
AQ-IMP-4C: Require sidewalks through parking lots, bicycle racks near building entrances and other provisions for the safety and convenience of pedestrian and bicycle riders at all commercial, mixed use, and production facilities.	Consistent. The proposed project would include an internal pedestrian pathway linking the entrances to the development from Acacia Parkway on the southern portion of the property, to Stanford Avenue on the northern end of the property, and to Main Street on the eastern side of the property. Further, because the project includes the development of a mixed use project with onsite residential, commercial, and community facility uses, and because of its proximity to the commercial, retail, and office uses on Main

Table 3.10.A: City of Garden Grove General Plan Consistency Analysis

Select General Plan Policies ¹	Consistency Analysis
	Street, the proposed project would reduce VMTs by developing the project on a site within walking and biking distance to the City's commercial core.
Policy AQ-5.1: Support mixed use developments.	Consistent. The proposed project includes the development of a mixed-use project consisting of a new 3,485 sf Head Start facility, and 2,975 sf of leasing office/commercial space and two residential buildings on a site currently developed with the United Methodist Church and its associated facilities.
Policy AQ-5.5: Avoid locating multiple-family developments close to areas that emit harmful air contaminants.	Consistent. Because land uses in the vicinity of the project site include multi- and single-family dwellings, commercial uses, a park, and community facilities, the potential for these land uses to emit harmful air contaminants is low. Therefore, the residential, commercial, and community facility uses dwellings proposed as part of the project would not be located near uses emitting harmful air contaminants. Further, as required by Mitigation Measure NOISE-1, the proposed project would be required to install mechanical ventilation systems for those residential units along Stanford Avenue and Acacia Parkway, which would allow residents to close windows fronting these roadways for longer periods of time, thereby minimizing on-site residents' exposure to vehicular exhaust contaminants.
Policy AQ-5.6: Increase residential and commercial densities around bus and/or rail transit stations, and along major arterial corridors.	Consistent. The proposed project would increase the density of the project site by developing 47 medium-density affordable housing units, a 2,975 sf leasing office/commercial space, and a new Head Start facility, on a site located 0.2 mi from OCTA Route 37/37A La Habra to Fountain Valley bus service and 0.3 mi away from Route 56 Garden Grove to Orange bus service.
AQ-IMP-5A: Encourage mixed use developments that combine residential and commercial or industrial business locations, thereby improving convenience and reducing trip generation.	Consistent. The proposed project would include the development of 47 affordable housing units, a 2,975 sf leasing office/commercial space, and a new 3,485 sf Head Start facility that would be integrated with the existing church facilities and church preschool, thereby providing both residential, commercial, and community facilities on the project site that would serve to improve convenience and reduce trip generation.
AQ-IMP-6D: Require new development to comply with the energy use guidelines in Title 24 of the California Administrative Code.	Consistent. As described in Section 3.7, Greenhouse Gas Emission, the proposed project would be required to comply with the energy use guidelines in Title 24 of the CBC.

Table 3.10.A: City of Garden Grove General Plan Consistency Analysis

Select General Plan Policies ¹	Consistency Analysis
Policy AQ-7.4: Continue to enforce procedures that control dust from building demolition, grading, and construction activities.	Consistent. As described in Section 3.3, Air Quality, the proposed project would be required to comply with all dust control procedures from construction activities as specified by SCAQMD Rule 403.
Policy AQ-7.5: Reduce reactive organic compounds and particulate emissions	Consistent. As described in Section 3.3, Air Quality, the project would be required to comply with regional rules that assist in reducing short-term and long-term air pollutant emissions.
Parks, Recreation, and Open Space Element	
Policy PRK-1.3: Allow for a variety of active and passive space for recreation and leisure use.	Consistent. The proposed project includes a total of 16,720 square feet (sf) of open space areas (i.e., courtyards, play grounds, and tot lots), including both active and passive uses, to serve on-site residents.
Policy PRK-1.4: Encourage the provision of parks and recreation space in new development and redevelopment projects.	Consistent. As previously stated, the proposed project would include a total of 21,127sf of common and private recreation areas.
PRK-IMP-2A: Maintain compliance with the requirements identified in the Americans with Disabilities Act (ADA).	Consistent. All development included as part of the proposed project would be required to comply with all requirements identified in the ADA.
Policy PRK-4.1: Preserve and enhance open space resources in Garden Grove.	Consistent. As previously stated, the proposed project would include a total of 16,720 sf of open space uses.
Policy PRK-5.1: Continue to require that adequate, usable, and permanent private open space is provided in residential developments.	Consistent. The proposed project would incorporate a total of 4,198 sf of private patio areas in Building A and 1,498 sf of private patio areas in Building B as required by the City's Zoning Code
Housing Element	
Policy 1.8: Reduce lead-based paint hazard in the housing stock.	Consistent. As previously discussed in Section 3.8, Hazards and Hazardous Materials, there is a potential to encounter lead-based paint (LBP) during project demolition of the existing Head Start facility, due to the age of this structure. As such, the proposed project would be required to comply with Mitigation Measure HAZ-1, which requires the completion of predemolition surveys to identify any on-site LBP. Therefore, with implementation of Mitigation Measure HAZ-1, the proposed project would minimize impacts associated with LBP. Further, the proposed project would not develop the proposed residential buildings or the Head Start facility with building materials containing LBP.
Policy 2.1: Preserve and expand the City's supply of affordable rental and ownership housing for lower-income households.	Consistent. The proposed project would include the development of 47 affordable housing units, thus contributing to the City's housing supply for lower-income households.
Policy 2.6: Preserve the City's supply of affordable rental housing units.	Consistent. The proposed project would not only preserve the City's supply of affordable rental housing units, but also add to the supply through development of 47 affordable housing units.

Table 3.10.A: City of Garden Grove General Plan Consistency Analysis

Select General Plan Policies¹	Consistency Analysis
Policy 2.7: Improve housing affordability by promoting energy conservation programs and sustainable development as outlined in the Land Use, Air Quality, and Conservation Elements of the General Plan.	Consistent. As previously stated, the proposed project would be required to comply with Title 24, requiring the provision of energy conservation features in all new development. With implementation of these measures, the project would add to the affordability of the proposed 47 affordable housing units.
Policy 3.1: Provide adequate sites to encourage housing development that would meet the needs of all income groups.	Consistent. The proposed project would develop the existing vacant lot and parking lot into 47 affordable housing units that would help the City serve the needs of lower-income households.
Policy 3.2: Promote a balance of housing types, including mixed-use development, to meet the needs of the community.	Consistent. The proposed project would include a mixed-use development comprised of 47 affordable housing units, a 2,975 sf mixed use development, and a new 3,485 sf Head Start facility that would be integrated with the existing church and church preschool facilities. The proposed 31 residential units provided in Building A are intended for occupation by families, whereas the 16 residential units provided in Building B are intended for occupation by seniors. Therefore, the proposed project would provide a range of housing types to help meet the varying housing needs of the community.
Policy 3.3: Maintain an inventory of vacant and underutilized land and make available to the development community.	Consistent. The proposed project would develop an existing vacant lot, as well as an underutilized parking lot on the United Methodist Church property.
Policy 3.4: Promote the provision of housing for households with special needs, including but not limited to, large families, persons with disabilities, families with children, the elderly, and the homeless.	Consistent. As previously stated, the proposed project would provide 16 residential units for occupation by seniors in Building B.
Policy 4.2: Provide avenues for the development of housing for extremely low-income and special needs persons.	Consistent. The proposed project would provide 47 affordable housing units, thereby increasing the affordable housing stock in the City.
Policy 5.3: Broaden the accessibility and availability of housing to special needs residents such as the homeless, disabled, developmentally disabled, elderly, large households, families with children, and female-headed households.	Consistent. As previously stated, the proposed project would provide 47 affordable housing units, 16 of which would be designated as senior housing, in an effort to broaden the accessibility of housing for special needs residents, including the elderly, in the community.
Conservation Element	
Policy CON-1.2: Reduce the waste of potable water through efficient technologies, conservation efforts, and design and management practices, and by better matching the source and quality of water to the user's needs.	Consistent. The proposed project would implement a number of sustainable project design features intended to reduce the waste of potable water such as efficient landscape irrigation and low-flow appliances.
Policy CON-1.3: Promote water conservation in new development or redevelopment project design, construction, and operations.	Consistent. The proposed project would implement a number of sustainable project design features intended to reduce the waste of potable water such as efficient landscape irrigation and low-flow appliances.

Table 3.10.A: City of Garden Grove General Plan Consistency Analysis

Select General Plan Policies ¹	Consistency Analysis
CON-IMP-1B: Require on-site infiltration whenever feasible for new development or redevelopment projects.	Consistent. As discussed further in Section 3.9, Hydrology and Water Quality, the proposed project would implement storm water BMPs to improve on-site infiltration.
Policy CON-2.1: Enhance water infiltration throughout watersheds by decreasing accelerated runoff rates and enhancing groundwater recharge. Whenever possible, maintain or increase a site's pre-development infiltration to reduce downstream erosion and flooding.	Consistent. As discussed further in Section 3.9, Hydrology and Water Quality, through compliance with the project's WQMP and implementation of storm water BMPs, the proposed project would not significantly increase runoff from the project site. As such, the proposed project would result in less than significant impacts related to downstream erosion and flooding.
Policy CON-2.2: Encourage practices that enable water to percolate into the surrounding soil, instead of letting sediment, metals, pesticides and chemicals runoff directly into the storm drain system, creeks, or regional flood control facilities.	Consistent. As discussed further in Section 3.9, Hydrology and Water Quality, through compliance with the project's WQMP and implementation of storm water BMPs, the proposed project would not significantly increase runoff from the project site. As such, the proposed project would result in less than significant impacts related to downstream erosion and flooding.
Policy CON-2.4: Continue to comply with federal, State, and regional governments and agencies to protect and improve the quality of local and regional groundwater resources available to the City.	Consistent. The proposed project would comply with all federal, State, and regional governments and agencies to protect and improve the quality of local and regional groundwater resources.
CON-IMP-2D: Minimize impervious surfaces for new development, and incorporate technologies such as pervious paving, landscaped roofs, planter boxes, and rainwater capture and reuse.	Consistent. As discussed further in Section 3.9, Hydrology and Water Quality, the proposed project would increase impervious surfaces on a 2.5 acre portion of the project site by 0.24 acre from existing conditions; however, this increase in impervious surfaces would be minimal and would not result in significant impacts related to stormwater runoff. Further, the proposed project would include the addition of onsite landscaping to offset the loss in impervious area associated with project development, and includes infiltration BMPs (CULTEC recharger chambers) to offset any increase in stormwater runoff that would result from the increased impervious surface area.
CON-IMP-3B: Encourage materials recycling during renovation or demolition of old buildings.	Consistent. As discussed further in Section 3.17, Utilities and Service Systems, the proposed project would be expected to recycle materials during the demolition of old buildings in cooperation with the City's waste hauler, Republic Services.
CON-IMP-3D: Encourage the use of recycled or rapidly renewable materials, and building reuse and renovation over new construction, where feasible.	Consistent. The proposed project would divert at least 50 percent of site's construction waste from landfills for recycling or reuse.

Table 3.10.A: City of Garden Grove General Plan Consistency Analysis

Select General Plan Policies ¹	Consistency Analysis
Policy CON-7.1: Preserve and protect Garden Grove’s significant historical, archaeological and cultural value resources.	Consistent. As discussed further in Section 3.5, Cultural Resources, the proposed project site is not anticipated to have any significant impacts to historical, archaeological, or cultural resources.
Policy CON-7.2: Preserve Garden Grove’s significant historic resources to promote community identity, stability, and aesthetic character.	Consistent. As discussed further in Section 3.5, Cultural Resources, the proposed project is not anticipated to result in any significant impacts to any historical resources.
CON-IMP-7A: Preserve significant archeological sites in conformance with Public Resources Code Section 21083.2 or Section 21084.1, as applicable.	Consistent. Due to the site’s location in a developed urban area and the high degree of soil disturbance on site from previous construction and development, the proposed project is not anticipated to have an impact on any significant archeological sites.
Safety Element	
SAF-IMP-2A: Encourage site design using the following: increased pedestrian-level lighting, pedestrian routes that avoid blind corners and provide escape route choices, low fences or well-placed landscaping, and building entrances visible from public streets.	Consistent. The proposed project includes an internal pedestrian pathway that would be visible from public streets. This pathway would include ornamental landscaping that would be of a height and scale so as to not introduce any potential blind corners.
IMP-2B: Encourage mixed use development throughout the City in order to decrease commercial areas that are left vacant during nighttime hours.	Consistent. The proposed project would include mixed-use development of both 47 affordable housing units, a 2,975 sf leasing office/commercial space, and a new 3,485 sf Head Start facility that would be integrated with the existing church facilities and church preschool, thereby developing an existing vacant lot and part of an existing parking lot with a mixed-use development.
Policy SAF-5.2: Ensure that the City has adequate resources to respond to health and fire emergencies, such as Fire Stations, personnel, and equipment.	Consistent. Due to the scale of the proposed project, it is not expected that the development of the 47 affordable housing units, 2,975 sf leasing office/commercial space, or new 3,485 sf Head Start facility would result in an adverse impact to the City’s resources to respond to health and fire emergencies.
SAF-IMP-5A: Continue to require installation of automatic fire sprinkler systems in all new structures and existing structures undergoing substantial remodeling, and provide incentives for sprinkler installation in all other habitable structures.	Consistent. The proposed project would install automatic fire sprinkler systems in compliance with the City of Garden Grove Municipal Code Section 18.32.050 Section 903.2.
SAF-IMP-5D: Continue to require compliance with all provisions of the most recently adopted version of the California Fire Code (with local amendments).	Consistent. The proposed project would be expected to comply with all provision of the California Fire Code.
SAF-IMP-5F: Continue to provide adequate staffing of fire response personnel based upon changing conditions, density, and development type.	Consistent. As discussed further in Section 3.14, Public Services, the proposed project would not interfere with the City’s ability to provide adequate staffing of fire response personnel.

Table 3.10.A: City of Garden Grove General Plan Consistency Analysis

Select General Plan Policies ¹	Consistency Analysis
Policy SAF-6.1: Avoid or minimize to the greatest extent feasible, hazards resulting from development on unstable ground conditions.	Consistent. As discussed further in Section 3.6, Geology and Soils, the proposed project would not result in significant impacts related to unstable ground conditions.
Policy SAF-6.3: Ensure that new structures are seismically safe through the proper design and construction. The minimum level of design necessary would be in accordance with seismic provisions and criteria contained in the most recent version of the State and County Codes. Construction shall require effective oversight and enforcement to ensure adherence to the earthquake design criteria.	Consistent. As discussed further in Section 3.6, Geology and Soils, the proposed project would not result in significant impacts related to seismic activity. Further, the proposed project would comply with all provisions and criteria for seismic safety. Refer to Mitigation Measure GEO-1 in Section 3.6, Geology and Soils.
SAF-IMP-6C: All new development, with the exception of detached single-family homes, shall be subject to the preparation and submittal of a site specific geology report prepared by a registered geologist or soils engineer to the City Building Services Division for approval.	Consistent. As part of the environmental review and documentation process for the proposed project, a site-specific geotechnical report was prepared for the proposed project and is included as Appendix C.
Policy SAF-7.2: Improve defensive measures against 100-year, or other State-defined scenario, flood conditions through land use and design, such as increased pervious surfaces, on-site water capture and re-use, minimized building footprints, etc.	Consistent. As discussed further in Section 3.9, Hydrology and Water Quality, the proposed project is not located within a designated 100-year special flood hazard area. Although the project site is located within the Prado Dam Inundation Area, the project would have no impact on the likelihood of the dam's failure. Therefore, the proposed project would not result in any significant impacts related to flooding.
SAF-IMP-7B: Encourage use of Low Impact Development (LID) methods that capture and treat water on-site, therefore, reducing flows to storm drain systems.	Consistent. As discussed further in Section 3.9, Hydrology and Water Quality, the proposed project would implement infiltration BMPs, including CULTEC recharge chambers. Therefore, the proposed project would result in less than significant impacts related to flow to storm drain systems.
SAF-IMP-7C: Maintain and improve capacity levels of storm drainage service, where appropriate.	Consistent. As discussed further in Section 3.9, Hydrology and Water Quality, the proposed project would result in less than significant impacts related to the capacity of existing storm drains to receive runoff from the project site due to implementation of infiltration BMPs, including CULTEC recharge chambers that allow soil to treat stormwater before reaching storm drains. Therefore, with implementation of these recharge chambers, storm drainage capacity levels would be maintained.
Policy SAF-9.1: Continue to strictly enforce federal, State, and local laws and regulations related to the use, storage, and transportation of toxic, explosive, and other hazardous and extremely hazardous materials to prevent unauthorized discharges.	Consistent. As discussed further in Section 3.8, Hazards and Hazardous Materials, the proposed project would comply with all applicable federal, State, and local laws and regulations related to the use, storage, and transportation of toxic, explosive, and other hazardous and extremely hazardous materials.

Source: City of Garden Grove. *Garden Grove General Plan*. As amended.

Zoning Ordinance. The City's Zoning Ordinance is the primary implementation tool for the Land Use Element and the goals and policies contained therein. For this reason, the Zoning Map must be consistent with the General Plan Land Use Map. The General Plan Land Use Map indicates the general location and extent of future land use in the City. The Zoning Ordinance, which includes the Zoning Map, contains more detailed information about permitted land uses, building intensities, and required development standards.

As previously stated, the base Zoning Ordinance designation for the 4.7-acre parcel of the proposed project site located at 12741 Main Street site is Civic Center Core (CC-3). The base zoning designation for the vacant 0.51-acre parcel of the project site located at 10882 Stanford Avenue is Community Center Specific Plan-Community Center Residential Area 20 (CCSP-CCR20). The CC-3 zoning designation allows a FAR of 0.50 for non-residential uses, and residential densities up to 42 dwelling units per acre (du/ac). Allowable uses within the CC-3 zoning designation include, but are not limited to, multifamily residential, commercial/office, professional studio, recreation/entertainment, and retail uses. The CCSP-CCR20 zoning designation allows up to 23 du/acre in Area 20 where the proposed project would be located. Allowable uses within the CC-3 zoning designation include condominiums, townhouses, apartments, and churches. As previously discussed, the proposed project would require re-zoning of the 0.51-acre portion of the project site to a CC-3 zoning designation to ensure that the proposed project would be consistent with the zoning designation for the project site.

Table 3.10.B provides a list of applicable development standards and an evaluation of the project's consistency with each standard. Although the proposed project would not conflict with most of the provisions in the City's Development Standards for CC-3 zoning designation, the project would require a variance to reduce the number of parking spaces required by the City's Zoning Code for the church, preschool, Head Start facility, and leasing office/commercial space provided on the site. The proposed project would provide a total of 77 new parking spaces (74 of which would be reserved for the residential uses) consistent with Section 65915 of Senate Bill 1818 for affordable housing developments (i.e., one on-site space per one-bedroom unit and two on-site spaces per two- and three-bedroom units), as well as two spaces reserved for the Head Start drop-off area and one space reserved for United States Postal Service (USPS) that could also be used for residential or visitor purposes after-hours. Building A would provide 28 garage spaces for residents and Building B would provide 10 garage spaces for residents. In addition, carports would provide an additional 9 parking spaces and there would be 30 open parking stalls.

Implementation of the proposed project would reduce the existing church parking supply of 192 spaces by 39 spaces. However, the church parking lot would provide 35 additional new parking spaces through curb modifications and restriping, leaving a total of 153 spaces available to the United Methodist Church, preschool, Head Start, and commercial use. The total proposed parking spaces would therefore total 230 spaces for the entire project site. However, the reduction to the parking is only being evaluated for the commercial use as the residential use complies with the State Code. Based on the City's parking requirement, church, preschools, and commercial space would require 424 parking spaces, and therefore the proposed project does not conform to parking requirements outlined in the City's Municipal Code. The Parking Analysis provided in Appendix E of this Initial

Table 3.10.B: Zoning Ordinance Development Standards Consistency Analysis

City of Garden Grove Development Zoning Standards for Multi-Family Residential Uses within All Mixed Use Zones ¹	Project Consistency Analysis
<p>Height</p> <p>The maximum building height permitted is 75 ft, with the exception of those structures proposed within 20 ft of street facing property lines, which are subject to a maximum height of 45 ft.</p>	<p>Consistent. Building A would be 42 feet (ft); Building B would be 41 ft; and the new Head Start building would be 17 ft in height. Therefore, none of the structures proposed as part of the project would be constructed at a height that would exceed maximum building heights permitted in the City's Zoning Code.</p>
<p>Setbacks</p> <ul style="list-style-type: none"> • Stanford Avenue: Minimum of 7 ft, maximum of 15 ft • Side (Main Street): Minimum 0 ft, maximum 5 ft Side Adjacent to Residentially Zoned Properties-10ft • Corner Side: Minimum 0 ft, maximum 5 ft • (Acacia Parkway: Minimum 0 ft, maximum 5 ft <p>In the CC-3 zone, building setbacks are required for any new development with a property line abutting Acacia Parkway, Main Street, or Stanford Avenue east of Euclid Street and where a building would be located within 20 ft of the subject street. Where a building with frontage on a subject street is located more than 20 ft from the subject street, no additional building setback shall be required.</p>	<p>Consistent. The proposed project would be consistent with all setback requirements for the uses within the Civic Center Core (CC-3) zone.</p>
<p>Maximum Density</p> <ul style="list-style-type: none"> • Maximum Floor Area Ratio: 0.5 • Maximum Residential Density: 42 units/acre 	<p>Inconsistent. The proposed project's density would be 9.0 dwelling units per acre (du/ac), which is within the range for maximum residential density for the CC-3 zone. A Floor Area Ratio (FAR) for commercial uses of 0.5 is allowable on the project site. The proposed commercial component of the project has a FAR of 0.21, and therefore, would not meet the minimum FAR of 0.5 for the project site. Therefore, a concession would be required to allow a FAR less than the allowable range for the project site.</p>
<p>Minimum Dwelling Unit Area</p> <ul style="list-style-type: none"> • 0 Bedroom: 500 sf • 1 Bedroom: 750 sf • 2 Bedroom: 900 sf • 3 or More Bedroom: 1,050 sf 	<p>Consistent. The one-bedroom units for the proposed development would be a minimum of 752 square feet (sf), the two-bedroom units would be a minimum of 913 sf; and the three-bedroom units would be a minimum of 1,152 sf. Therefore, all dwelling units meet the minimum dwelling unit area for residential units proposed in the CC-3 zoning designation.</p>

¹ City of Garden Grove. Garden Grove *Municipal Code*. As amended.

Table 3.10.B: Zoning Ordinance Development Standards Consistency Analysis

<p>City of Garden Grove Development Zoning Standards for Multi-Family Residential Uses within All Mixed Use Zones¹</p>	<p>Project Consistency Analysis</p>
<p>Maximum Number of Bedrooms per Unit: No single dwelling unit shall have more than four bedrooms.</p>	<p>Consistent. The proposed project does not include the development of any four-bedroom units on the site.</p>
<p>Minimum Residential Building Separation</p> <ul style="list-style-type: none"> • From Rear Property Line: 10 ft • From Interior Side Property Line: 10 ft 	<p>Consistent. The proposed project boundaries is a minimum of 10 ft from any abutting residential buildings.</p>
<p>Open Space, Recreation, and Leisure Area</p> <ul style="list-style-type: none"> • Private Open Space. Private open space shall be provided at each unit. Private open space may be provided in the form of a patio, yard, balcony, or combination thereof and shall be directly adjacent to and accessible from each unit. Private open space shall have a minimum area of 90 square feet and a minimum dimension of six ft. • Active Recreation. Active recreation areas shall include areas that promote recreational activities, such as a pool or tennis court, and shall be open and accessible to all residents. Active recreation areas shall never have a minimum dimension of less than 20 ft. Active recreation areas may be located indoors, at the outdoor portions of habitable levels, or on roof decks. • Passive Recreation. Passive recreation areas shall consist of landscape areas that incorporate pathways, waterscape, hardscape, and unique features that enhance the appearance, desirability and usability of the area. The intent is to provide landscaped areas that can be utilized for walking, sitting, viewing plants and vegetation, reading, and similar types of activities. Passive recreation areas shall have a minimum dimension of 10 ft in width and 30 ft in length. Said areas shall not contribute more than 50 percent of the required open space, recreation, and leisure areas. 	<p>Private Open Space</p> <ul style="list-style-type: none"> • Inconsistent. The proposed project would provide private space for each residential unit in the form of a patio or balcony directly adjacent to and accessible from each unit. However, some balconies would provide less square footage than required by the City's Zoning Code, and therefore, a concession would be required. <p>Active Recreation</p> <ul style="list-style-type: none"> • Inconsistent. Active recreation would be provided by open space areas (including a tot lot and playground) and the fitness center, accessible to all residents. However, the active recreation area would require reconfiguration of the minimum 20 ft active recreation areas, and would be inconsistent with the City's Zoning Code's development standards. Therefore, a concession would be required. <p>Passive Recreation</p> <ul style="list-style-type: none"> • Consistent. The internal pedestrian pathway linking the main entrances on Acacia Parkway and Stanford Avenue would also serve as a passive recreation area. Shared passive recreation area provided by the proposed project includes a landscaped courtyard.
<p>Residential Parking Requirements: Enclosed Parking Required. Required residential parking, per Section 9.18.140 (Parking), shall be provided within a parking structure or enclosed one- and two-car garages. Parking spaces shall be assigned to each individual unit.</p>	<p>Consistent. The proposed project would provide a total of 77 parking spaces. Of these parking spaces, 74 would be reserved for residential use, two would be designated for the Head Start drop-off, and one would be reserved for the United States Postal Service (USPS). Parking provided by the proposed project would comply with the 74 parking spaces required by the Affordable Housing Act and the</p>

Table 3.10.B: Zoning Ordinance Development Standards Consistency Analysis

<p align="center">City of Garden Grove Development Zoning Standards for Multi-Family Residential Uses within All Mixed Use Zones¹</p>	<p align="center">Project Consistency Analysis</p>
<p>Individual One- and Two-Car Garages: Garages shall maintain a minimum clear parking area of not less than 10 ft by 20 ft for a one-car garage and not less than 20 ft by 20 ft for a two-car garage. No storage cabinets or mechanical equipment, including but not limited to water heaters, utility sinks, or washers and dryers shall encroach into the required parking area.</p>	<p>City’s Zoning Code for residential development. However, the proposed project would require a parking variance to reduce the parking required by the City’s Zoning Code for the church, preschool, new Head Start Facility, and leasing office/commercial space. After approval of the parking variance, the project would be consistent with the City’s Municipal Code. For residential uses, the proposed project would provide 28 garage spaces in Building A, 10 garage spaces in Building B, and 9 carport spaces, thus providing a parking space for each of the 47 units. A total of 28 parking spaces in on-site surface parking lots would be available to both residents of and visitors to the project site, as well as 2 drop-off and pick-up parking spaces for the new Head Start facility that could be used as additional resident or visitor parking after-hours. Additional parking for the new Head Start facility, leasing office/commercial space, and 47 housing units would be shared with the existing church and church preschool facility parking lots</p>
<p>Additional Regulations Specific to the CC-3 Zone: All new commercial, mixed use, educational, and institutional/civic developments, and any additions or improvements to an existing development whereby the new construction equals or exceeds 50 percent of the replacement value of the existing construction, shall integrate into the development a pathway, paseo, walkway, or similar pedestrian access that connects the primary entrance along an adjacent public street or alley to either another adjacent public street or alley, or to a similar pathway on an abutting property. The area devoted to such pathway can be credited toward any open space requirement of the development.</p>	<p>Consistent. The proposed project would include an internal pedestrian pathway that would connect the main entrances to the project site on Stanford Avenue and Acacia Parkway, therefore providing residents with full access to all aspects of the mixed-use development on the project site and encouraging pedestrian traffic to the surrounding Main Street area and Civic Center</p>

Source: City of Garden Grove. *Garden Grove Mixed Use Zones Zoning Ordinance Amendment*. As amended.

Study/Mitigated Negative Declaration (IS/MND) was prepared to determine if the demand for church, preschool, Head Start facility, and leasing office/commercial space parking would exceed parking supply if the proposed project reduced parking supply from 192 to 153 spaces. However, as discussed in the Parking Analysis, the peak trip generation for the church occurs on Sundays. Therefore, the peak parking demand and trip generation period for the existing church would not occur concurrently with the proposed mixed-use project’s weekday a.m. or p.m. peak generation periods. The peak trip generation and parking demand of the United Methodist Church facilities occurs on Sundays while

the peak trip generation and parking demand of the proposed project mixed-use development would occur on weekdays.

The Parking Analysis concluded that the proposed 153 spaces provided for the church, preschool, Head Start, and commercial use would be sufficient to accommodate the peak-parking demand generated by the proposed mixed use project and the existing United Methodist Church. The residential units for the proposed project are parked to code per the State Affordable Housing Law.

The proposed project would not meet three of the development standards in the City's Zoning Code. However, the State Affordable Housing project allows up to three concessions (waivers) for affordable housing projects of similar size to the proposed project. Implementation of the proposed project would require concessions (waivers) to allow a FAR of 0.21 for the proposed project rather than the 0.5 FAR required for the project site; reconfiguration of the minimum 20 ft dimension for active recreations area on the project site; and private balconies less than 90 sf in size to meet private open space requirements. As illustrated by Table 3.11.B, with re-zoning of the 0.51-acre vacant lot, allowance of the three development standard waivers, and approval of the requested parking variances and conditional use permit, the proposed project would be consistent with applicable development standards established by the City's zoning ordinance and impacts would be considered less than significant. No mitigation would be required.

As illustrated by Tables 3.10.A and 3.10.B, with implementation of a GPA and re-zoning of the 0.51-acre vacant portion of the project site, and approval of the parking variance, the proposed project would be consistent with applicable goals and policies outlined in the City's General Plan and development standards outlined in the City's Zoning Code. Therefore, implementation of the proposed project would not result in conflicts with any applicable land use plan, policy, or regulation applicable to the project.

Mitigation Measures: No mitigation would be required.

(c) **No Impact.** The project site is currently developed with the United Methodist Church, and its associated facilities, a church preschool, a Head Start facility, and associated parking. No natural or native habitats are found within the site or in the surrounding area. The project area is not located within the boundaries of the Orange County Central Coastal Natural Community Conservation Plan/Habitat Conservation Plan (NCCP)/ (HCP). The project does not conflict with local ordinances or the adopted Orange County NCCP/HCP, or other approved local, regional, or State HCPs. Therefore, the proposed project would not result in an impact related to any applicable HCP or NCCP, and no mitigation would be required.

Mitigation Measures: No mitigation would be required.

3.11 MINERAL RESOURCES

Would the project:		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(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"/>

Impact Analysis:

The proposed project is requesting a GPA and rezone, which would allow for a potential maximum density of 5 additional units (for a total of 21 units) on the 0.51-acre parcel. However, the following analysis does not include a separate maximum-density scenario since there are no impacts related to mineral resources for either the proposed project or a maximum density scenario.

- (a) **No Impact.** No known commercially valuable mineral resources exist on or near the project site. There are no oil wells located in, or immediately adjacent to, the proposed project site according to the State of California Department of Conservation Regional Wildcat District W1-6 Map.¹ Further, the City’s General Plan Conservation Element does not discuss mineral extraction or oil production in the City. The proposed project is not located in a Significant Mineral Aggregate Resource Area (SMARA), and no mining activity has been conducted on site.² Therefore, the proposed project would not result in the loss of a valuable commercial or locally important mineral resource. No significant impacts related to mineral resources would result from project implementation, and no mitigation would be required.

Mitigation Measures: No mitigation would be required.

- (b) **No Impact.** As stated above, no known commercially valuable mineral resources exist on or near the project site. In addition, the project site is not identified on a local General Plan, Specific Plan, or other land use plan as the location of a locally important mineral resource. The proposed project would not result in the loss of a locally important mineral resource. No significant impacts related to mineral resources would result from project implementation, and no mitigation would be required.

Mitigation Measures: No mitigation would be required.

¹ California Department of Conservation. *District 1 Wild Cat Maps*. (August, 2014).

² California Department of Conservation. Publications of the SMARA Mineral Land Classification Project Dealing with Mineral Resources in California Publications for the SMARA Mineral Land Classification Project Dealing with Mineral Resources in California.

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3.12 NOISE.

Would the project result in:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(c) A substantial permanent increase in ambient noise levels in the project vicinity 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"/>
(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 levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Introduction:

A project would normally have a significant effect on the environment related to noise if it would substantially increase the ambient noise levels for adjoining areas or conflict with the adopted environmental plans and goals of the community in which it is located. The applicable noise standards governing the project site are the criteria in the City of Garden Grove's (City's) General Plan and in its Noise Ordinance that are for multifamily residential uses (i.e., 50 to 70 A-weighted decibels [dBA] is considered normally acceptable to conditionally acceptable) contained in Table 3.12.A.

General Plan Noise Element. The Noise Element of the General Plan contains noise standards for residential structures. Specifically, the City's Noise Policy N-1.1 requires "all new residential construction in areas with exterior noise level greater than 55 dBA to include sound attenuation measures." In addition, the City enforces the California Building Code for indoor noise levels, which is 45 dBA Community Noise Equivalent Level (CNEL).

Municipal Code. The City's Municipal Code, Chapter 47, Noise Control, sets forth exterior and interior noise standards for residential and commercial uses. Table 3.12.B lists the exterior noise standards for daytime and nighttime noise standards.

In addition, Section 8.47.060 of the Garden Grove Municipal Code states that:

"It shall be unlawful for any person within a residential area, or within a radius of five hundred (500) feet there from, to operate equipment or perform any outside construction or repair work on buildings, structures, or projects, or to operate any pile driver, power shovel, pneumatic hammer, derrick, power hoist, or any other construction type device between the hours of 10 p.m. of one day and 7 a.m. of the next day in such a manner that a person of normal sensitiveness, as determined utilizing the criteria established in Section 8.47.050(B), is caused discomfort or annoyance unless such operations are of an emergency nature."

Table 3.12.A: Land Use Compatibility for Exterior Community Noise

Land Use Category	Noise Range (L_{dn} or CNEL), dB			
	I	II	III	IV
Passively used open spaces	50	50-55	55-70	70+
Auditoriums, concert halls, amphitheaters	45-50	50-65	65-70	70+
Residential—low-density single-family, duplex, mobile homes	50-55	55-70	70-75	75+
Residential—multifamily	50-60	60-70	70-75	75+
Transient lodging—motels, hotels	50-60	60-70	70-80	80+
Schools, libraries, churches, hospitals, nursing homes	50-60	60-70	70-80	80+
Actively used open spaces—playgrounds, neighborhood parks	50-67	—	67-73	73+
Golf courses, riding stables, water recreation, cemeteries	50-70	—	70-80	80+
Office buildings, business commercial, and professional	50-67	67-75	75+	—
Industrial, manufacturing, utilities, agriculture	50-70	70-75	75+	—

Source: California Department of Health, Office of Noise Control (1976), and the City of Garden Grove General Plan.

Notes: Noise Range I—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.

Noise Range II—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 are included in the design. Conventional construction, but with closed windows and fresh air supply systems or air-conditioning, would normally suffice.

Noise Range III—Normally Unacceptable: New construction or development should generally 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.

Noise Range IV—Clearly Unacceptable: New construction or development should generally not be undertaken.

dB = decibels

CNEL = community noise equivalent level

L_{dn} = day-night average level

Table 3.12.B: City of Garden Grove Ambient Base Noise Levels

Land Use Designation		Daytime (7:00 a.m.–10:00 p.m.) dBA	Nighttime (10:00 p.m.–7:00 a.m.) dBA
Sensitive Uses	Residential Use	55	50
	Institutional Use	65	65
Conditionally Sensitive Uses	Office-Professional Use	65	65
	Hotels and Motels	65	65
	Commercial Use	65	65
Non-Sensitive Uses	Commercial/Industrial Uses within 150 feet of Residential Uses	65	50
	Industrial Uses	70	70

Source: City of Garden Grove Municipal Code, Section 8.47.040.

dBA = A-weighted decibels

L_{50} = median noise level

Baseline Noise Levels. In addition to the existing United Methodist Church facilities, church preschool, and Head Start facility on the project site, the primary existing noise sources in the project area are transportation facilities. Traffic on Main Street, Stanford Avenue, Acacia Parkway, Westlake Street, and other local streets is a steady source of ambient noise.

The Federal Highway Administration (FHWA) *Highway Traffic Noise Prediction Model* (FHWA RD-77-108) was used to evaluate highway traffic-related noise conditions along roadway segments in the project vicinity. The standard vehicle mix for the County of Orange (County) roadways was used for traffic on these roadway segments. The modeled 24-hour CNEL levels for existing conditions are shown in Table 3.12.C. These traffic noise levels are representative of a worst-case scenario, which assumes a flat terrain and no shielding between the traffic and the noise contours. Traffic noise levels in the project vicinity are generally low to moderate.

Table 3.12.C: Existing Weekday Traffic Noise Levels

Roadway Segment	ADT	Centerline to 70 CNEL (ft)	Centerline to 65 CNEL (ft)	Centerline to 60 CNEL (ft)	CNEL (dBA) 50 ft from Centerline of Outermost Lane
Euclid Street north of Main Street	31,900	< 50	83	179	67.6
Main Street between Euclid Street and Stanford Avenue	5,900	< 50	< 50	59	60.3
Main Street between Stanford Avenue and Acacia Parkway	5,100	< 50	< 50	53	59.7
Main Street south of Acacia Parkway	3,300	< 50	< 50	< 50	57.8
Stanford Avenue between Nelson Street and Main Street	2,100	< 50	< 50	< 50	55.8
Stanford Avenue west of Nelson Street	4,300	< 50	< 50	< 50	58.9
Acacia Parkway between Nelson Street and Main Street	2,600	< 50	< 50	< 50	56.7
Acacia Parkway east of Main Street	2,400	< 50	< 50	< 50	56.4
Nelson Street north of Stanford Avenue	4,900	< 50	< 50	52	59.5
Nelson Street between Stanford Avenue and Acacia Parkway	6,800	< 50	< 50	64	60.9
Nelson Street south of Acacia Parkway	6,400	< 50	< 50	62	60.6

Source: LSA Associates, Inc. (September 2014).

Note: Traffic noise within 50 ft of the roadway centerline should be evaluated with site-specific information.

Modeled using the Soft setting and the Orange County default fleet percentages.

ADT = average daily traffic

CNEL = Community Noise Equivalent Level

dBA = A-weighted decibels

ft = feet/foot

Sensitive Land Uses in the Project Vicinity. The project site is bound by Stanford Avenue to the north, Main Street to the east, Acacia Parkway to the south, and existing residential uses to the west. The project site is located in an urbanized area, surrounded by multifamily residences to the north, a park and community facility to the east, an assisted living facility to the south, and single-family homes to the west. These uses would potentially be affected by noise from the project site during construction and operation.

Impact Analysis:

(a) Less than Significant with Mitigation Incorporated.

Short-Term Construction Noise Impacts. Short-term noise impacts would be associated with excavation, grading, and the erection of buildings on site during construction of the proposed project. Construction-related short-term noise levels would be higher than existing ambient noise levels in the project area at the present time, but would no longer occur once construction of the project is completed.

Two types of short-term noise impacts could occur during the construction of the proposed project. First, construction crew commutes and the transport of construction equipment and materials to the site for the proposed project would incrementally increase noise levels on access roads leading to the site. Although there would be a relatively high single-event noise exposure potential causing intermittent noise nuisance (passing trucks at 50 feet (ft) would generate up to a maximum of 87 dBA), the effect on longer term (hourly or daily) ambient noise levels would be small. Therefore, short-term construction-related impacts associated with worker commute and equipment transport to the project site would be less than significant.

The second type of short-term noise impact is related to noise generated during excavation, grading, and building erection on the project site. Construction is completed in discrete steps, each of which has its own mix of equipment, and consequently, its own noise characteristics. These various sequential phases would change the character of the noise generated on the site, and therefore, the noise levels surrounding the site as construction progresses. Despite the variety in the type and size of construction equipment, similarities in the dominant noise sources and patterns of operation allow construction-related noise ranges to be categorized by work phase. Table 3.12.D lists typical construction equipment noise levels recommended for noise impact assessments, based on a distance of 50 ft between the equipment and a noise receptor, taken from the *FHWA Roadway Construction Noise Model* ([RCNM]; *FHWA Highway Construction Noise Handbook*, August 2006).

Typical noise levels range up to 90 dBA maximum instantaneous noise level (L_{max}) at 50 ft during the noisiest construction phases. The site preparation phase, which includes excavation and grading of the site, tends to generate the highest noise levels because the noisiest construction equipment is earthmoving equipment. Earthmoving equipment includes excavating machinery such as backfillers, bulldozers, draglines, and front loaders. Earthmoving and compacting equipment includes compactors, scrapers, and graders. Typical operating cycles for these types of construction equipment may involve 1 or 2 minutes of full-power operation followed by 3 or 4 minutes at lower power settings.

Construction of the proposed project is expected to require the use of earthmovers, bulldozers, and water and pickup trucks. This equipment would be used on the project site. Based on the information in Table 3.12.D, the maximum noise level generated by each scraper on the proposed project site is assumed to be 84 dBA L_{max} at 50 ft from the scraper. Each bulldozer would also generate 82 dBA L_{max} at 50 ft. The maximum noise level generated by water and pickup trucks is approximately 75 dBA L_{max} at 50 ft from these vehicles. Each doubling of the sound sources with equal strength increases the noise level by 3 dBA. Assuming that each piece of construction

Table 3.12.D: Default Noise Emission Reference Levels and Usage Factors

Equipment Description	Impact Device?	Acoustical Usage Factor	Spec. 721.560 L _{max} at 50 ft (dBA, slow)	Actual Measured L _{max} at 50 ft (dBA, slow)	Number of Actual Data Samples (Count)
All other Equipment > 5 HP	No	50	85	N/A	0
Auger Drill Rig	No	20	85	84	36
Backhoe	No	40	80	78	372
Bar Bender	No	20	80	N/A	0
Chainsaw	No	20	85	84	46
Clam Shovel (dropping)	Yes	20	93	87	4
Compactor (ground)	No	20	80	83	57
Compressor (air)	No	40	80	78	18
Concrete Batch Plant	No	15	83	N/A	0
Concrete Mixer Truck	No	40	85	79	40
Concrete Pump Truck	No	20	82	81	30
Concrete Saw	No	20	90	90	55
Crane	No	16	85	81	405
Dozer	No	40	85	82	55
Drill Rig Truck	No	20	84	79	22
Dump Truck	No	40	84	76	31
Excavator	No	40	85	81	170
Flatbed Truck	No	40	84	74	4
Front End Loader	No	40	80	79	96
Generator	No	50	82	81	19
Generator (< 25 kVA, VMS Signs)	No	50	70	73	74
Grader	No	40	85	N/A	0
Grapple (on backhoe)	No	40	85	87	1
Jackhammer	Yes	20	85	89	133
Man Lift	No	20	85	75	23
Mounted Impact Hammer (hoe ram)	Yes	20	90	90	212
Pavement Scarifier	No	20	85	90	2
Paver	No	50	85	77	9
Pickup Truck	No	40	75	75	1
Pneumatic Tools	No	50	85	85	90
Pumps	No	50	77	81	17
Roller	No	20	85	80	16
Sand Blasting (single nozzle)	No	20	85	96	9
Scraper	No	40	85	84	12
Soil Mix Drill Rig	No	50	80	N/A	0
Tractor	No	40	84	N/A	0
Vacuum Excavator (Vac-Truck)	No	40	85	85	149
Vacuum Street Sweeper	No	10	8	82	19
Ventilation Fan	No	100	85	79	13
Vibrating Hopper	No	50	85	87	1
Vibratory Concrete Mixer	No	20	80	80	1
Vibratory Pile Driver	No	20	95	101	44
Warning Horn	No	5	85	83	12
Welder/Torch	No	40	73	74	5

Source: FHWA Highway Construction Noise Handbook (August 2006).

dBA = A-weighted decibels

FHWA = Federal Highway Administration

ft = foot/feet

ft-lb/blow = foot-pounds per blow

HP = horsepower

kVA = kilovolt-amperes

L_{max} = maximum instantaneous noise level

N/A = Not Applicable

RCNM = Roadway Construction Noise Model

VMS = variable message sign

equipment operates at some distance from the other equipment, the worst-case combined noise level during this phase of construction would be 90 dBA L_{max} at a distance of 50 ft from the active construction area.

The nearest residential uses, located adjacent to the western and southeastern boundaries of the project site, would be potentially exposed to construction noise up to 103 dBA L_{max} . Although this range of construction noise would be higher than the ambient noise, it would cease to occur once project construction is completed. Section 8.47.060 of the Garden Grove Municipal Code prohibits construction activity and repair work where the use of any power tool, device, or equipment would disturb persons occupying sleeping quarters in any dwelling, hotel, apartment, or other place of residence between the hours of 10:00 p.m. and 7:00 a.m., Monday through Saturday. All such activities are also prohibited on Sundays and all federal holidays. Therefore, as required by Standard Condition NOISE-1, compliance with the construction hours specified in the City's Noise Ordinance would reduce the construction noise impacts to a less than significant level. In addition, in order to further reduce the construction noise on the nearest residential uses, Standard Condition NOISE-1 allows only one piece of construction equipment to operate at any one time within 50 ft of the nearest residential uses. By restricting the operation to one piece of construction equipment, the level of construction noise would be reduced from 103 dBA L_{max} to a maximum of 97 dBA L_{max} .

Long-Term Traffic Noise Impacts. Noise impacts can be described in three categories. The first category includes audible impacts that refer to increases in noise levels noticeable to humans. Audible increases in noise levels generally refer to a change of 3 dBA or greater because this level has been found to be barely perceptible in exterior environments. The second category, potentially audible, refers to a change in the noise level between 1 and 3 dBA. This range of noise levels has been found to be noticeable only in laboratory environments. The last category includes changes in noise levels of less than 1 dBA, which are inaudible to the human ear. Only audible changes (i.e., 3 dBA or greater) in existing ambient or background noise levels are considered potentially significant.

For typical wood-frame construction with stucco and gypsum board wall assemblies, the noise level reduction within a structure is as follows:

- Partly open windows: 12 dBA
- Closed single-paned windows: 20 dBA
- Closed dual-paned windows: 30 dBA

Use of dual-paned windows is required by the California Building Code (CBC) for energy conservation in new residential construction. It is noted that where window closure is a requirement for interior noise control, the CBC requires provision of supplemental ventilation at a specified rate with a specified fraction of fresh make-up air. The provision of supplemental ventilation is a standard construction practice.

The CBC also requires that horizontal sound transmission be controlled between adjacent units, and the vertical noise and footfall impact be mitigated within staked units. Party walls and floor-ceiling assemblies must be constructed to achieve a sound transmission class (STC) of 50. The impact isolation class (IIC) must be 50 or higher for floor-ceiling transmission. If standard structural

assemblies are used, their sound and impact characteristics have been tested, and test report results are shown on building plans at plan check. Nonstandard assemblies must be field-tested before any certificate of occupancy can be issued. The provision of walls and floors with minimum STCs and IICs, respectively, is a standard construction practice. If required by the City, documentation of intra-unit sound isolation would be included in a final acoustical report produced as part of the building plan check process.

Noise Impacts on Sensitive Uses Due to Proposed Project. The FHWA highway traffic noise prediction model (FHWA RD-77-108) was used to evaluate traffic-related noise conditions along roadway segments in the project vicinity. This model requires various parameters, including traffic volumes, vehicle mix, vehicle speed, and roadway geometry to compute typical equivalent noise levels during daytime, evening, and nighttime hours. Traffic noise levels were weighted and summed over a 24-hour period in order to determine the CNEL values of any increase in noise. This analysis is based on total project average daily traffic (ADT) of 440 daily trips.

The proposed project includes a mixed-use development on a 2.5-acre portion of the project site and requires a General Plan Amendment (GPA) to change the land use designation of a vacant 0.51-acre parcel within the project site from Medium Density Residential (MDR) to Civic Center Mixed-Use (CC), and a zone change to rezone the 0.51-acre parcel from a designation of Community Center Specific Plan-Community Center Residential-20 Area 20 (CCSP-CCR20) to Civic Center Core (CC-3). Because the project Applicant is requesting a GPA and rezone, the following technical analysis includes a maximum-density scenario which accounts for the maximum development that could occur under the requested GPA and rezone. It should be noted that this maximum-density scenario is not the proposed mixed-use project and is for comparison purposes only to represent a worst-case analysis.

Tables 3.12.E through 3.12.I list traffic noise levels for the existing weekday with project, existing weekday with maximum density scenario, existing Sunday baseline, existing Sunday with project, and existing Sunday with maximum density scenario. Potential Sunday traffic noise impacts are evaluated here due to higher church related traffic but lower overall ambient traffic volumes. Evaluation of such scenario would provide additional information on project-related traffic noise impacts. Tables 3.12.E and 3.12.F show the change in noise levels due to the projected project traffic from the proposed mixed-use development under the Existing Weekday with project conditions and with maximum density scenario. These noise levels represent worst-case scenarios, which assume that no shielding is provided between the traffic and the location where the noise contours are drawn. The specific assumptions used in developing these noise levels and model printouts are provided in Appendix D of this Initial Study/Mitigated Negative Declaration (IS/MND). It can be seen that project-related traffic noise level increases would be small and negligible, with up to a 0.2 dBA increase along Main Street, Acacia Parkway, and Stanford Avenue in the project vicinity. Since this range of traffic noise level increases in the outdoor environment would not be perceptible by the human ear when it occurs gradually over a period of time, no significant off-site traffic noise impacts would occur as a result of the proposed project in the project area. These noise levels are used to determine the potential traffic noise impacts on the proposed on-site residences.

Table 3.12.E: Existing Weekday With Project Traffic Noise Levels

Roadway Segment	ADT	Centerline to 70 CNEL (ft)	Centerline to 65 CNEL (ft)	Centerline to 60 CNEL (ft)	CNEL (dBA) 50 ft from Centerline of Outermost Lane	Increase CNEL (dBA) 50 ft from Centerline of Outermost Lane
Euclid Street north of Main Street	32,000	< 50	84	180	67.6	0.0
Main Street between Euclid Street and Stanford Avenue	6,000	< 50	< 50	59	60.4	0.1
Main Street between Stanford Avenue and Acacia Parkway	5,100	< 50	< 50	53	59.7	0.0
Main Street south of Acacia Parkway	3,400	< 50	< 50	< 50	57.9	0.1
Stanford Avenue between Nelson Street and Main Street	2,200	< 50	< 50	< 50	56.0	0.2
Stanford Avenue west of Nelson Street	4,300	< 50	< 50	< 50	58.9	0.0
Acacia Parkway between Nelson Street and Main Street	2,700	< 50	< 50	< 50	56.9	0.2
Acacia Parkway east of Main Street	2,500	< 50	< 50	< 50	56.6	0.2
Nelson Street north of Stanford Avenue	4,900	< 50	< 50	52	59.5	0.0
Nelson Street between Stanford Avenue and Acacia Parkway	6,900	< 50	< 50	65	61.0	0.1
Nelson Street south of Acacia Parkway	6,500	< 50	< 50	62	60.7	0.1

Source: LSA Associates, Inc. (September 2014).

Note: Traffic noise within 50 ft of the roadway centerline should be evaluated with site-specific information.

Modeled using the Soft setting and the Orange County default fleet percentages.

ADT = average daily traffic

CNEL = Community Noise Equivalent Level

dBA = A-weighted decibels

ft = feet/foot

Table 3.12.F: Existing Weekday With Maximum Density Scenario Traffic Noise Levels

Roadway Segment	ADT	Centerline to 70 CNEL (ft)	Centerline to 65 CNEL (ft)	Centerline to 60 CNEL (ft)	CNEL (dBA) 50 ft from Centerline of Outermost Lane	Increase CNEL (dBA) 50 ft from Centerline of Outermost Lane
Euclid Street north of Main Street	32,000	< 50	84	180	67.6	0.0
Main Street between Euclid Street and Stanford Avenue	6,000	< 50	< 50	59	60.4	0.1
Main Street between Stanford Avenue and Acacia Parkway	5,200	< 50	< 50	54	59.7	0.0
Main Street south of Acacia Parkway	3,500	< 50	< 50	< 50	58.0	0.2
Stanford Avenue between Nelson Street and Main Street	2,200	< 50	< 50	< 50	56.0	0.2
Stanford Avenue west of Nelson Street	4,300	< 50	< 50	< 50	58.9	0.0
Acacia Parkway between Nelson Street and Main Street	2,700	< 50	< 50	< 50	56.9	0.2
Acacia Parkway east of Main Street	2,500	< 50	< 50	< 50	56.6	0.2
Nelson Street north of Stanford Avenue	4,900	< 50	< 50	52	59.5	0.0
Nelson Street between Stanford Avenue and Acacia Parkway	6,900	< 50	< 50	65	61.0	0.1
Nelson Street south of Acacia Parkway	6,600	< 50	< 50	63	60.8	0.2

Source: LSA Associates, Inc. (September 2014).

Note: Traffic noise within 50 ft of the roadway centerline should be evaluated with site-specific information.

Modeled using the Soft setting and the Orange County default fleet percentages.

ADT = average daily traffic

CNEL = Community Noise Equivalent Level

dBA = A-weighted decibels

ft = feet/foot

Table 3.12.G: Existing Sunday Baseline Traffic Noise Levels

Roadway Segment	ADT	Centerline to 70 CNEL (ft)	Centerline to 65 CNEL (ft)	Centerline to 60 CNEL (ft)	CNEL (dBA) 50 ft from Centerline of Outermost Lane
Euclid Street north of Main Street	21,800	< 50	65	139	66.0
Main Street between Euclid Street and Stanford Avenue	4,200	< 50	< 50	< 50	58.8
Main Street between Stanford Avenue and Acacia Parkway	3,800	< 50	< 50	< 50	58.4
Main Street south of Acacia Parkway	10	< 50	< 50	< 50	32.6
Stanford Avenue between Nelson Street and Main Street	1,900	< 50	< 50	< 50	55.4
Stanford Avenue west of Nelson Street	3,500	< 50	< 50	< 50	58.0
Acacia Parkway between Nelson Street and Main Street	3,100	< 50	< 50	< 50	57.5
Acacia Parkway east of Main Street	3,000	< 50	< 50	< 50	57.4
Nelson Street north of Stanford Avenue	4,800	< 50	< 50	51	59.4
Nelson Street between Stanford Avenue and Acacia Parkway	6,300	< 50	< 50	61	60.6
Nelson Street south of Acacia Parkway	6,000	< 50	< 50	59	60.4

Source: LSA Associates, Inc. (September 2014).

Note: Traffic noise within 50 ft of the roadway centerline should be evaluated with site-specific information.

Modeled using the Soft setting and the Orange County default fleet percentages.

ADT = average daily traffic

CNEL = Community Noise Equivalent Level

dBA = A-weighted decibels

ft = feet/foot

Table 3.12.H: Existing Sunday With Project Traffic Noise Levels

Roadway Segment	ADT	Centerline to 70 CNEL (ft)	Centerline to 65 CNEL (ft)	Centerline to 60 CNEL (ft)	CNEL (dBA) 50 ft from Centerline of Outermost Lane	Increase CNEL (dBA) 50 ft from Centerline of Outermost Lane
Euclid Street north of Main Street	21,800	< 50	65	139	66.0	0.0
Main Street between Euclid Street and Stanford Avenue	4,200	< 50	< 50	< 50	58.8	0.0
Main Street between Stanford Avenue and Acacia Parkway	3,800	< 50	< 50	< 50	58.4	0.0
Main Street south of Acacia Parkway	100	< 50	< 50	< 50	42.6	10.0
Stanford Avenue between Nelson Street and Main Street	2,000	< 50	< 50	< 50	55.6	0.2
Stanford Avenue west of Nelson Street	3,500	< 50	< 50	< 50	58.0	0.0
Acacia Parkway between Nelson Street and Main Street	3,200	< 50	< 50	< 50	57.6	0.1
Acacia Parkway east of Main Street	3,000	< 50	< 50	< 50	57.4	0.0
Nelson Street north of Stanford Avenue	4,800	< 50	< 50	51	59.4	0.0
Nelson Street between Stanford Avenue and Acacia Parkway	6,400	< 50	< 50	62	60.6	0.0
Nelson Street south of Acacia Parkway	6,100	< 50	< 50	60	60.4	0.0

Source: LSA Associates, Inc. (September 2014).

Note: Traffic noise within 50 ft of the roadway centerline should be evaluated with site-specific information.

Modeled using the Soft setting and the Orange County default fleet percentages.

ADT = average daily traffic

CNEL = Community Noise Equivalent Level

dBA = A-weighted decibels

ft = feet/foot

Table 3.12.I: Existing Sunday With Maximum Density Scenario Traffic Noise Levels

Roadway Segment	ADT	Centerline to 70 CNEL (ft)	Centerline to 65 CNEL (ft)	Centerline to 60 CNEL (ft)	CNEL (dBA) 50 ft from Centerline of Outermost Lane	Increase CNEL (dBA) 50 ft from Centerline of Outermost Lane
Euclid Street north of Main Street	21,800	< 50	65	139	66.0	0.0
Main Street between Euclid Street and Stanford Avenue	4,200	< 50	< 50	< 50	58.8	0.0
Main Street between Stanford Avenue and Acacia Parkway	3,800	< 50	< 50	< 50	58.4	0.0
Main Street south of Acacia Parkway	130	< 50	< 50	< 50	43.7	11.1
Stanford Avenue between Nelson Street and Main Street	2,000	< 50	< 50	< 50	55.6	0.2
Stanford Avenue west of Nelson Street	3,500	< 50	< 50	< 50	58.0	0.0
Acacia Parkway between Nelson Street and Main Street	3,300	< 50	< 50	< 50	57.8	0.3
Acacia Parkway east of Main Street	3,000	< 50	< 50	< 50	57.4	0.0
Nelson Street north of Stanford Avenue	4,800	< 50	< 50	51	59.4	0.0
Nelson Street between Stanford Avenue and Acacia Parkway	6,400	< 50	< 50	62	60.6	0.0
Nelson Street south of Acacia Parkway	6,100	< 50	< 50	60	60.4	0.0

Source: LSA Associates, Inc. (September 2014).

Note: Traffic noise within 50 ft of the roadway centerline should be evaluated with site-specific information.

Modeled using the Soft setting and the Orange County default fleet percentages.

ADT = average daily traffic

CNEL = Community Noise Equivalent Level

dBA = A-weighted decibels

ft = feet/foot

Similarly, Tables 3.12.H and 3.12.I show that, under the Existing Sunday with project scenarios, the increase in project-related traffic noise levels would be 0.2 dBA or smaller along most of the roadway segments in the project vicinity, except along Main Street south of Acacia Parkway, where the project-related traffic noise level increases would range from 10.0 dBA to 11.1 dBA, due to the increase of the daily traffic volumes from 10 under the baseline condition to 100 under the proposed project and to 130 under the maximum density scenario. Because there are no noise-sensitive uses along this segment of Main Street and the projected 60 dBA CNEL contour would be confined to within the roadway right-of-way, no significant traffic noise impact would occur, and no mitigation measures are required for off-site land uses.

Stanford Avenue. Tables 3.12.E, 3.12.F, 3.12.H, and 3.12.I show that the 70 and 65 dBA CNEL traffic noise contours along Stanford Avenue directly adjacent to the project site (between Nelson Street and Main Street) would remain confined within the roadway right-of-way under the existing plus project condition. The 60 dBA CNEL noise contour would extend to 30 ft from the centerline of Stanford Avenue. The proposed buildings along Stanford Avenue would be located approximately 40 ft from the roadway centerline and would potentially be exposed to traffic noise up to 58.1 dBA CNEL. Therefore, any outdoor active use areas such as patios or balconies associated with dwelling units along and directly exposed to traffic noise along Stanford Avenue would be exposed to a traffic noise level below the City’s 65 dBA CNEL exterior noise standard. Therefore, no mitigation would be required for outdoor active use areas along Stanford Avenue.

Based on the United States Environmental Protection Agency's (EPA) *Protective Noise Levels* (EPA 550/9-79-100, November 1978), with windows or doors open, interior noise levels at the frontline dwelling units would potentially exceed the 45 dBA CNEL (i.e., 58 dBA - 12 dBA = 46 dBA) interior noise standard. With windows closed, interior noise levels in these frontline dwelling units would not exceed the 45 dBA CNEL (58 dBA - 20 dBA = 38 dBA) standard for residential uses. Therefore, windows with STC ratings higher than those provided by standard building construction (STC-24 to STC-28) would not be required for dwelling units directly adjacent to Stanford Avenue. However, as previously stated, and as required by Mitigation Measure NOISE-1, air-conditioning, a form of mechanical ventilation, is required for all dwelling units along Stanford Avenue to ensure that windows can remain closed for prolonged periods of time. Therefore, following implementation of Mitigation Measure NOISE-1, impacts related to high traffic noise along Stanford Avenue would be less than significant.

Acacia Parkway. Tables 3.12.E, 3.12.F, 3.12.H, and 3.12.I show that the 70 and 65 dBA CNEL along Acacia Parkway directly adjacent to the project site (between Nelson Street and Main Street) would be confined to within the roadway right-of-way under the existing plus project condition. The 60 dBA CNEL noise contour would extend to 40 ft from the roadway centerline. The project's boundary or residential lot line along Acacia Parkway would be approximately 50 ft from the Acacia Parkway centerline. Outdoor active use areas such as patios and balconies/decks would be exposed to traffic noise levels reaching 58.5 dBA CNEL. Since the projected exterior noise level for dwelling units along Acacia Parkway would remain below the 65 dBA CNEL exterior noise standard, no mitigation measures, such as sound barriers, would be required for outdoor active use areas along Acacia Parkway.

Based on the EPA's *Protective Noise Levels* (EPA 550/ 9-79-100, November 1978), with windows or doors open, interior noise levels at the frontline dwelling units along Acacia Parkway would potentially exceed the 45 dBA CNEL (i.e., 58 dBA - 12 dBA = 46 dBA) interior noise standard. With windows closed, interior noise levels in these frontline dwelling units would not exceed the 45 dBA CNEL (58 dBA - 20 dBA = 38 dBA) standard for residential uses. However, as previously stated and required by Mitigation Measure NOISE-1, air conditioning is required to ensure that windows and/or doors can remain closed for prolonged periods of time to maintain the interior noise standards. Therefore, following implementation of Mitigation Measure NOISE-1, impacts related to high traffic noise along Acacia Parkway would be less than significant.

Since buildings along Acacia Parkway are projected to be exposed to traffic noise levels below 69 dBA CNEL, windows with STC ratings provided by standard building construction (STC-24 to STC-28) would be sufficient for dwelling units along Acacia Parkway.

However, because the proposed mixed-use development includes residential uses that would be exposed to potentially high traffic noise levels along Stanford Avenue and Acacia Parkway, mitigation measures would be required. As stipulated in Mitigation Measure NOISE-1, the proposed project would be required to install mechanical ventilation for those residential units fronting Stanford Avenue and Acacia Parkway to ensure that these residences would receive proper air ventilation with windows closed so that they would not be subjected to potential noise impacts that would occur with windows opened.

Long-Term Stationary Noise Impacts. The proposed project site is not adjacent to any industrial or commercial uses and would not be exposed to any significant stationary-source noise impacts from adjacent residential uses to the east and west of the project site. Residential uses to the north across Stanford Avenue and to the south across Acacia Parkway also would not cause any significant stationary source noise impacts on the proposed residential uses. The proposed Head Start playground and the existing preschool playground would be shielded by the buildings surrounding them. They are also at least 120 ft from the office/commercial building that would provide 8 dBA or more distance attenuation when compared to the noise level measured at 50 ft. Therefore, the on-site outdoor playgrounds would not be exposed to high noise levels associated with loading/unloading activities at the office/future commercial use portion on the project site (at the parking lot in front of the building). The on-site playgrounds would also not expose adjacent residential uses to the east, west, north, or south to activity noise that would exceed the City's exterior noise standards at these off-site sensitive uses. No significant stationary source noise impacts would occur. No mitigation measures would be required.

Standard Conditions

Standard Condition NOISE-1: Construction of the proposed project would potentially result in relatively high noise levels and annoyance at the closest off-site residential and commercial uses. The following measures would reduce short-term construction-related noise impacts resulting from the proposed project to a less than significant level:

- During all project site excavation and grading, the project contractors shall allow only one piece of construction equipment to operate at any one time within 50 ft of the nearest residential uses to the west and southwest.
- During all project site excavation and grading, the project contractors shall equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers consistent with manufacturers' standards.
- The project contractor shall place all stationary construction equipment so that emitted noise is directed away from the sensitive receptors nearest the project site.
- The construction contractor shall locate equipment staging in areas that would create the greatest distance between construction-related noise sources and noise-sensitive receptors nearest the project site during all project construction.
- Section 8.47.060 of the Garden Grove Municipal Code prohibits construction activity and repair work where the use of any power tool, device, or equipment would disturb persons occupying sleeping quarters in any dwelling, hotel, apartment, or other place of residence between the hours of 10:00 p.m.

and 7:00 a.m., Monday through Saturday. All such activities are also prohibited on Sundays and all federal holidays.

Mitigation Measures

Mitigation Measure NOISE-1: Prior to issuance of occupancy permits, the City of Garden Grove (City) Building Official, or designee, shall verify that mechanical ventilation, such as an air-conditioning system, has been installed in all frontline dwelling units along Stanford Avenue and Acacia Parkway.

(b) **Less Than Significant Impact.** Construction activities generate groundborne vibration when heavy equipment travels over unpaved surfaces or when it is engaged in soil movement. The effects of groundborne vibration include discernible movement of building floors, rattling of windows, shaking of items on shelves or hanging on walls, and rumbling sounds. Vibration-related problems generally occur due to resonances in the structural components of a building because structures amplify groundborne vibration. Within the soft sedimentary surfaces of much of Southern California, ground vibration is quickly damped out. Groundborne vibration is almost never annoying to people who are outdoors (Federal Transit Administration [FTA] 2006). Construction of the proposed project would not require the use of pile drivers. Therefore, the primary source of vibration during the construction phase would be heavy earthmoving equipment. Based on Table 18 from the California Department of Transportation (Caltrans) *Transportation and Construction-Induced Vibration Manual* (2004), it is estimated that the on-site construction equipment would generate vibration levels of up to 0.089 inch per second (in/sec) at a distance of 25 ft. Construction activities for the proposed project would be located approximately 10 ft from the residential uses to the north or west of the project site. Using Equation 12 from the *Vibration Guidance Manual*, the vibration level at these residential uses would be below 0.01 in/sec. This level would not exceed the 0.50 in/sec threshold, below which there is virtually no risk of resulting in architectural damage to normal buildings. In addition, since this level would be less than the 0.50 in/sec level that is safe for residential buildings, construction of the proposed project would not result in substantial groundborne vibration or groundborne noise on properties adjacent to the project site. Similarly, project operation would not generate substantial groundborne noise or vibration. Therefore, groundborne noise and vibration impacts are considered less than significant, and no mitigation measures would be required.

Mitigation Measures: No mitigation would be required.

(c) **Less Than Significant Impact.** Development of the 2.5-acre portion of the project site with the proposed mixed-use development would result in an increase in daily traffic trips in the project vicinity over existing conditions; therefore, there would be a potential increase in traffic noise along access roads leading to the project site. However, as described in Response 3.12(a), the project-increase in traffic-related noise would be less than significant.

The proposed project includes the construction of a mixed-use development comprised of 47 affordable housing units, a 2,975 square foot (sf) leasing office/commercial space, and new 3,485 sf Head Start facility on a site currently developed with United Methodist Church facilities and a

church preschool. Due to the nature of the existing and proposed land uses, no significant on-site noise-generating activity would occur, and no mitigation measures would be required.

Mitigation Measures: No mitigation would be required.

- (d) **Less than Significant Impact with Mitigation Incorporated.** Although there would at times be high intermittent construction noise in the project area during project construction, construction of the project would not significantly affect land uses adjacent to the project site. In addition, construction on the 2.5-acre portion of the project site would comply with the hourly limits specified by the City's Noise Control Ordinance and Standard Condition NOISE-1. Therefore, compliance with Standard Condition NOISE-1 would ensure that potential noise impacts would remain at a less than significant level.

Mitigation Measures: Refer to Mitigation Measure NOISE-1.

- (e) **No Impact.** The nearest airports are the Seal Beach Naval Base located at 800 Seal Beach Boulevard approximately 4 miles (mi) west of the project site, the Fullerton Municipal Airport (FMA), a general aviation airport located at 4011 West Commonwealth Avenue, approximately 7.7 mi north of the project site, and John Wayne International Airport located at 3160 Airway Avenue, approximately 11 mi south of the project site. At these distances, the project site is not located within the 65 dBA CNEL airport noise contour. Therefore, no impacts related to excessive airport noise are anticipated, and no mitigation would be required.

Mitigation Measures: No mitigation would be required.

- (f) **No Impact.** The project site is not located within the vicinity of a private airstrip. Therefore, there are no impacts related to this issue, and no mitigation would be required.

Mitigation Measures: No mitigation would be required.

3.13 POPULATION AND HOUSING

Would the project:		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(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 type="checkbox"/>	<input checked="" type="checkbox"/>
(c)	Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Impact Analysis:

The proposed project is requesting a GPA and rezone, which would allow for a potential maximum density of 5 additional units (for a total of 21 units) on the 0.51-acre parcel. However, the following analysis does not include a separate maximum-density scenario since population and housing impacts related to 5 additional units would be similar to the proposed project and would remain less than significant.

- (a) **Less than Significant Impact.** The proposed project would intensify the project site's existing uses by developing a 2.5-acre portion of the property with a mixed-use development consisting of 47 affordable housing units (89 bedrooms), a 2,975 sf leasing office/commercial space, and a new 3,485 sf Head Start Facility. Although the existing residential use on the project site would not be affected by the proposed project (pastor's residence), development of 47 affordable housing units is anticipated to slightly increase the residential population in the City of Garden Grove (City). According to the California Department of Finance City/County Population and Housing Estimates (January 1, 2014), the average number of persons per dwelling unit in the City is 3.74 persons.¹ Based on the City's average occupancy rate of 3.74 persons per unit,² the proposed project would introduce approximately 176 persons into the project area. However, the addition of 176 new residents would be approximately 0.103 percent of the City's population of 170,883 persons in 2010,³ 0.103 percent of the City's population of 175,953⁴ in 2014, and 0.098 percent of the City's projected population of 179,400 in 2020⁵ (the closest year to project build out for which projections are available). As such the project-related increase in population would represent a less than significant portion of the City's current and projected population.

In addition, the vacant portion of the proposed project site currently has a General Plan land use designation of Medium Density Residential (MDR), which allows for up to 23 dwelling units/acre (du/ac). The remaining portion of the project site has a General Plan land use designation of Civic Center Mixed Use (CCMU), which allows for up to 42 du/ac. The proposed project would involve construction of Building B on the 0.51-acre portion of the project site designated as MDR. Because Building B would have a greater density than the permissible 23 du/ac, a GPA

¹ California Department of Finance. E-5 City/County Population and Housing Estimates, May 2014.

² Ibid.

³ United States Census Bureau, 2010 Census.

⁴ California Department of Finance. Op. cit.

⁵ Southern California Association of Governments, Integrated Growth Forecast, Regional Transportation Plan 2012.

would be required to change the land use designation of the vacant portion of the proposed project site from MDR to CCMU. Following approval of the GPA, the proposed project would be consistent with the City's General Plan CCMU land use designation, which allows a maximum of 42 du/acre and 0.5 floor-to-area ratio (FAR). The City's growth estimates take into account the population planned for the remaining portion of the site based on the allowable density of 42 du/acre associated with the CCMU General Plan land use designation. In addition, the increase in population resulting from the proposed project is not considered to be significant because it only comprises a small portion (0.103 in 2014 and 0.098 percent in 2020) of the total population of the City and does not represent a substantial increase in population.

According to the Garden Grove General Plan Housing Element, the City's Regional Housing Need Allocation (RHNA) as determined by the Southern California Association of Governments (SCAG) indicates that the City has an RHNA of 747 units for the 2014-2021 period, which includes the need for 164 units for very low-income residents and 120 units for low-income residents. The proposed project includes the provision of 47 affordable housing units, and thus is in compliance with the City's Housing Element and would further the City's goal of providing affordable housing units. Therefore, the proposed project would help to meet the housing needs of the City per the RHNA mandated by the California State Housing Element law.

Additionally, the proposed project is located in an established area of the City that is developed with urban land uses, including multifamily and single-family residential, commercial, community facility, and park uses. The proposed project does not propose to expand surrounding utility infrastructure in the project vicinity. Therefore, the proposed project would not directly or indirectly induce population growth through the extension of roads or other infrastructure. Therefore, impacts related to inducement of population growth would be less than significant, and no mitigation would be required.

Mitigation Measures: No mitigation would be required.

- (b) **No Impact.** The proposed project site is currently developed with the United Methodist Church and its associated facilities, a church preschool, a Head Start facility, and parking lots. No alterations to the existing church facilities or church preschool would occur as a result of project implementation. However, the existing Head Start facility and basketball courts would be demolished, the church parking lot on the southern portion of the church parking lot would be removed, and the eastern church parking lot would be modified to provide an additional 35 parking spaces through curb modifications and restriping. No housing currently exists on the project site (with the exception of the pastor's residence, which would not be altered as part of the project), and housing displacement would not occur as a result of project implementation. Therefore, the proposed project would not result in an impact related to housing displacement, and no mitigation would be required.

Mitigation Measures: No mitigation would be required.

- (c) **No Impact.** The proposed project site is currently developed with the United Methodist Church and its associated facilities, a church preschool, a Head Start facility, and parking lots. No alterations to the existing church facilities or church preschool would occur as a result of project implementation. However, the existing Head Start facility and basketball courts would be

demolished, the church parking lot on the southern portion of the church parking lot would be removed, and the eastern church parking lot would be modified to provide an additional 35 parking spaces through curb modifications and restriping. No housing is located on the project site (with the exception of the pastor's residence, which would not be altered as part of the project), and no people would be displaced as a result of project implementation. Therefore, the proposed project would not result in an impact related to the displacement of people, and no mitigation would be required.

Mitigation Measures: No mitigation would be required.

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3.14 PUBLIC SERVICES

Would the project:		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(a)	Would the project result in substantial adverse physical impacts associated with the provision of or 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:				
	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"/>

Impact Analysis:

The proposed project is requesting a GPA and rezone, which would allow for a potential maximum density of 5 additional units (for a total of 21 units) on the 0.51-acre parcel. However, the following analysis does not include a separate maximum-density scenario since public service impacts related to 5 additional units would be similar to the proposed project and would remain less than significant.

- (a) i) **Less than Significant Impact.** The City of Garden Grove Fire Department (GGFD) provides fire protection and emergency services throughout the City of Garden Grove (City). The GGFD provides a wide array of services to the community, including emergency medical service, fire suppression and prevention, response to hazardous and toxic material release, and technical rescue. The GGFD operates seven fire stations and has 29 firefighters on duty daily. Total emergency activity includes 25 percent fire protection and 75 percent emergency medical services.

The project site is located in the service area of Fire Station No. 1, which is located approximately 0.4 mile (mi) southeast of the project site at 11301 Acacia Parkway. This fire station is equipped with one engine, one truck, one paramedic squad, one shift commander, one air utility unit, one paramedic squad (reserve), and one shift commander (reserve). The proposed project includes the development of 47 affordable housing units, a 2,975 sf leasing office, and a new 3,485 sf Head Start facility. In addition to the continued operation of the existing uses, the proposed project would represent a small increase in demand for fire protection service. Therefore, the proposed project would not trigger the need for new or altered facilities.

The proposed project would comply with the California Fire Code in effect at the time of the application for the building permit. The proposed project would also submit a fire master plan prior to issuance of a building permit to identify standard design features including the design of fire department connections. In addition, for firefighting purposes, all buildings on the project site would include fire suppression sprinklers. The City may also impose additional standard design features required by the City to be included in the design and construction of new development such as fire hydrants, fire-resistant doors, fire flow standards, and other

measures designed to increase fire safety. Therefore, the impact of the proposed project on fire protection would be less than significant, and no mitigation would be required.

Mitigation Measures: No mitigation would be required.

- (a) ii) **Less than Significant Impact.** The City of Garden Grove Police Department (GGPD) provides police protection services throughout the City. The GGPD station located closest to the project site is within the Civic Center Complex located at 11301 Acacia Parkway, approximately 0.4 mi southeast of the project site. Captain Travis Whitman of the Garden Grove Police Department indicated in an email to LSA Associates dated October 8th, 2014 that police service needs are determined by doing periodic analysis of various factors including officer per capita ratio, number of calls for service, and officer unstructured time. According to Captain Whitman, the current GGPD staffing level is 159 officers to 170,000 residents, or a ratio of 0.935 GGPD staff per 1,000 residents. Response times are calculated from time of dispatch to first officer on-scene. As of the most recent reporting for the GGPD (September 16, 2014), Captain Whitman indicated that the citywide average response time for emergency calls was 4m 05sec. Furthermore, Captain Whitman indicated that the proposed project would not substantially increase response times or create a substantial increase in demand for staff, facilities, equipment or police or other emergency services; and that the Garden Grove Police Department would be able to adequately serve the proposed project.²

No increase in population would occur from the continued operation of the existing United Methodist Church facilities or church preschool. The population increase associated with 47 units would be minimal compared to the number of officers currently employed by the City, and would not trigger the need for new or physically altered police facilities. Although the proposed project would incrementally contribute to demand for additional police protection services, impacts to police services would be less than significant, and no mitigation would be required.

Mitigation Measures: No mitigation would be required.

- (a) iii) **Less than Significant Impact.** The proposed project is located within the Garden Grove Unified School District (GGUSD). Stanley Elementary School, Ralston Intermediate School, and Garden Grove High School are the public schools serving the project site. Stanley Elementary School is located approximately 0.7 mi southwest of the project site at 12201 Elmwood Street in the City. Ralston Intermediate School is located approximately 0.4 mi northwest of the project site at 10851 Lampson Avenue. Garden Grove High School is located approximately 0.5 mi east of the project site at 11271 Stanford Avenue. GGUSD student generation rates for single-family residential units were used to analyze the estimated students generated as a result of the project implementation. It should be noted that this reflects a conservative analysis due to the fact that the proposed project would develop the site with apartment units, which would generate fewer students than a single-family residential development. However, based on these generation factors, it is assumed that the 31 family units proposed would generate approximately 16 elementary/middle school children and 7 high school students (refer to Table 3.14.A, Projected School Enrollments).

Table 3.14.A: Projected School Enrollments

Grade Levels	Student Generation Factor	Projected Enrollment
Elementary/Middle School	0.5 student/unit	16
High School	0.205 student/unit	7
Total	-	23

Further, because the units reserved for seniors would not generate school-age children, they were not included in the total.

The small increase in students projected as a result of project implementation would incrementally increase the demand for school facilities. Should seating be unavailable for students, they could be assigned to other schools within the GGUSD on a space-available basis. If and when students are assigned to other schools, the GGUSD would provide transportation, and bus fees may be assigned to the parents.

Pursuant to California Education Code Section 17620(a)(1), the governing board of any school district is authorized to levy a fee, charge, dedication, or other requirement against any construction within the boundaries of the district for the purpose of funding the construction or reconstruction of school facilities. The project Applicant would be required to pay such fees to reduce any impacts of new residential development on school services as provided in Section 65995 of the California Government Code. Pursuant to the provisions of Government Code Section 65996, a project's impact on school facilities is fully mitigated through payment of the requisite school facility development fees current at the time a building permit is issued. Therefore, with payment of the required fees, potential impacts to school services and facilities associated with implementation of the proposed project would be less than significant, and no mitigation would be required.

Mitigation Measures: No mitigation would be required.

- (a) iv) **Less than Significant Impact.** As discussed further in Section 3.15, Recreation, the City owns 14 park properties and uses five public schools as additional park facilities through joint-use agreements with the GGUSD. According to the City's General Plan Parks, Recreation, and Open Space Element, the total amount of parkland in the City is estimated at 157.1 ac. The closest parks to the project site include the following: Courtyard Center/ Village Green Civic Center Park, Westhaven Park, and Woodbury Park. Courtyard, Center/ Village Green is located approximately 0.2 mile (mi) from the project site at 12732 Main Street Linda Lane and includes amenities such as benches and open space grassy areas. Civic Center Park is located 0.3 mi from the project site, and includes on-site amenities such as benches and open space, in addition to the on-site Community Center, library, and pond. Amenities included as part of this Community Center include an indoor atrium garden and a kitchen. Westhaven Park is located approximately 1.25 mi from the project site at 12252 West Street. The Westhaven Park is approximately 10 acres and includes amenities such as a play area, reserveable picnic areas, and an open field. Woodbury Park is located 1.2 mi from the project site at 13800 Rosita Place. This park is 3.3 acres and includes amenities such as a playground, basketball court, and pool.

As discussed above, development of the proposed project would result in an increase of an estimated 176 new residents within the project area. No increase in population would occur from the continued operation of the existing onsite uses. Therefore, although implementation of the proposed project would cause an incremental increase in demand for parks, this increase would be offset by the inclusion of private recreational amenities on site such as the proposed project's features, which include a playground, podium level terraces, courtyards, private balconies, a fitness center in Buildings A and B, and a tot lot. The proposed project would provide 21,127 sf of recreation area in the form of outdoor, indoor, and private areas. In addition, the City of Garden Grove requires payment of an in-lieu fee for upgrade of existing parks. Therefore, impact to parks and parkland facilities would be less than significant, and no mitigation would be required.

Mitigation Measures: No mitigation would be required.

- (a) v) **Less than Significant Impact.** The City is served by Orange County Public Library's Garden Grove Regional Branch located at 11200 Stanford Avenue, located approximately 0.4 mi from the project site, as well as the Garden Grove Chapman Branch located at 9182 Chapman Avenue, approximately 2.5 mi from the project site. In addition, the Garden Grove West Branch located at 11962 Bailey Street is 1.7 mi from the project site. However, this branch will be closed for renovation beginning in Fall 2014. Each branch is operated as a community resource providing library materials, computer access, meeting room space, and study areas. As discussed above, development of the proposed project would result in an increase of an estimated 176 new residents within the project area. No increase in population would occur from the continued operation of the existing United Methodist Church facilities or church preschool. Therefore, although implementation of the proposed project would cause an incremental increase in demand for library facilities, this increase would be minimal, and impacts to library facilities would be less than significant. No mitigation would be required.

Mitigation Measures: No mitigation would be required.

3.15 RECREATION

Would the project:		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(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"/>
(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"/>

Impact Analysis:

The proposed project is requesting a GPA and rezone, which would allow for a potential maximum density of 5 additional units (for a total of 21 units) on the 0.51-acre parcel. However, the following analysis does not include a separate maximum-density scenario since recreation impacts related to 5 additional units would be similar to the proposed project and would remain less than significant.

- (a) **Less than Significant Impact.** The City of Garden Grove (City) currently owns 14 park properties, consisting of approximately 157.1 ac,¹ in addition to five public schools that serve as additional park facilities through joint-use agreements with the Garden Grove Unified School District. Parks within the City are categorized as community parks, neighborhood parks, and mini parks, all of which provide a range of passive and active recreation opportunities.

As discussed previously in Section 3.10, Land Use, the proposed project would increase the housing density on the project site to 9.0 du/acre and intensify the existing land uses on the project site by developing the property with a mixed-use development. The additional 47 housing units proposed as part of the mixed-use project would incrementally increase usage of City parks and recreational facilities. No increase in population would occur from the continued operation of the existing uses on the project site. Based on the National Recreation and Park Association's recommendation of 2 acres of parks per a population of 1,000, the proposed project's 176 residents would result in an increased demand for 0.352-acre of parkland in the City, which would be approximately 0.0022 percent of the parkland currently available in the City.² This increase in demand for parkland would also be offset by the proposed project's provision of 21,127 sf of recreation area (indoor, outdoor, and private areas). In addition, the City of Garden Grove requires payment of an in-lieu fee for upgrade of existing parks. s.

The proposed project is consistent with the growth projections developed for the City by the Southern California Association of Governments (SCAG). Although implementation of the proposed project would cause an incremental increase in demand for parks, this increase would be offset by the inclusion of the proposed on-site recreational amenities. As previously stated, these amenities include a tot lot, a fitness Center in Buildings A and B, and playgrounds for the proposed new Head Start facility and existing church preschool as required per State Department

¹ City of Garden Grove General Plan. *General Plan 2030: Parks, Recreation, and Open Space Element*. as amended.

² If the project were to increase the population in the City by 176 residents, the proposed project would result in an increased demand for 0.352 acre of parkland. This increase in demand would be minimal in comparison to the total parkland in the City.

of Social Services licensing requirement. As a result, increased usage of parks and facilities in the City from the project residents is not anticipated to cause substantial deterioration of the parks, facilities, or open space. Therefore, potential impacts related to parks and other recreational facilities would be less than significant, and no mitigation would be required.

Mitigation Measures: No mitigation would be required.

- (b) **Less than Significant Impact.** As previously stated, the proposed project involves construction of recreational facilities (i.e., a tot lot, a fitness center and playgrounds). These facilities would be developed to be consistent with all established requirements for new developments as outlined in the City's Municipal Code. However, construction of the recreational facilities, which include a tot lot, playgrounds, and a fitness centers within Buildings A and B, would be limited to the project site, and would not adversely affect the surrounding environment. Therefore, impacts related to the construction or expansion of recreational facilities included as part of the proposed project would be less than significant, and no mitigation would be required.

Mitigation Measures: No mitigation would be required.

3.16 TRANSPORTATION/TRAFFIC

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(a) Conflict with an applicable plan, ordinance or policy establishing measures 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 checked="" type="checkbox"/>	<input 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"/>
(d) Substantially increase hazards due to a design feature (e. g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(e) Result in inadequate emergency access?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Impact Analysis:

- (a) **Less than Significant Impact.** The proposed project includes construction of 47 apartments, a 2,975 square foot (sf) leasing office (with the potential to serve as a commercial/retail space in the future), and a new 3,485 sf Head Start facility that would replace the existing Head Start facility on the project site. Project trips associated with the addition of the proposed 47 apartment units and 2,975 sf of potential retail use were generated using trip rates from Land Use Code 220 (Apartment) and Land Use Code 820 (Shopping Center) from the Institute of Transportation Engineers (ITE) *Trip Generation Manual*, 9th Edition (2012), as presented in Table 3.16.A.

As Table 3.16.A indicates, the proposed project has the potential to generate approximately 440 average daily trips (ADT), including 27 trips (7 inbound and 20 outbound) in the weekday a.m. peak hour, 40 trips (24 inbound and 16 outbound) in the weekday p.m. peak hour, and 33 trips (16 inbound and 17 outbound) in the Sunday peak hour.

As discussed in Section 3.10, Land Use/Planning, the 4.7-acre portion of the total 5.2-acre project site is designated as Civic Center Mixed Use (CCMU) in the City of Garden Grove's (City) General Plan and has a zoning designation of Civic Center Core (CC-3). The CCMU land use and CC-3 zoning designations allow residential densities of up to 42 dwelling units per acre (du/ac). The proposed project includes 31 of the proposed 47 units within the 4.7-acre parcel, which would be within the allowable 42 du/ac.

Table 3.16.A: Project Trip Generation

Land Use	Size	Unit	ADT	Weekday AM Peak Hour			Weekday PM Peak Hour			Sunday Peak Hour		
				In	Out	Total	In	Out	Total	In	Out	Total
Trip Rates¹												
Apartment		DU	6.65	0.10	0.41	0.51	0.40	0.22	0.62	0.26	0.25	0.51
Shopping Center		SF	42.70	0.60	0.36	0.96	1.78	1.93	3.71	1.53	1.19	3.12
Project Trip Generation												
Apartment	47	DU	313	5	19	24	19	10	29	12	12	24
Shopping Center	2.975	SF	127	2	1	3	5	6	11	4	5	9
Total			440	7	20	27	24	16	40	16	17	33
Project Plus Increased Density Trip Generation												
Apartment	52	DU	346	5	22	27	21	11	432	14	13	27
Shopping Center	2.975	SF	127	2	1	3	5	6	11	4	5	9
Total			473	7	23	39=0	26	17	43	18	18	36

¹ Trip rates referenced from Land Use Codes 220 (Apartment) and 820 (Shopping Center), Institute of Transportation Engineers *Trip Generation Manual*, 9th Edition (2012).

ADT = average daily traffic
 DU = dwelling unit
 SF = square feet

The remaining vacant 0.51-acre parcel is designated as Medium Density Residential (MDR) in the City's General Plan and has a zoning designation of Community Plan Specific Plan-Community Center Residential-20 Area 20 (CCSP-CCR20). The CCSP-CCR20 zoning designation allows residential densities of 23 du/ac in Area 20. Implementation of the project would require a General Plan Amendment (GPA) to change the land use designation of the 0.51-acre parcel from MDR to CCMU and a zone change to rezone the 0.51-acre parcel from a designation of CCSP-CCR20 to CC-3. The proposed project includes 16 of the proposed 47 units within the 0.51-acre parcel, which would be within the allowable 42 du/ac of CC-3. With approval of the CC-3 zoning designation and an allowable increase in density, an additional 5 units (or a total of 21 units) could be constructed on the 0.51-acre parcel. Therefore, the following analysis includes a maximum-density scenario which accounts for the maximum development that could occur under the requested GPA and rezone. This is for comparison purposes only to represent a worst-case analysis.

The project peak-hour trip generation falls below the City's threshold of 50 or more peak-hour trips that trigger the requirement for preparation of a traffic study. The peak-hour trip generation of the project is equivalent to 1 trip every 2.2 minutes in the weekday a.m. peak hour, 1 trip every 1.5 minutes in the weekday p.m. peak hour, and 1 trip every 1.8 minutes in the Sunday peak hour. As such, the project-related trips would represent a minimal addition to existing traffic within the project area during the weekday a.m. peak hour, weekday p.m. peak hour, and the Sunday peak hour.

Although a traffic study is not required for the project, an intersection level of service (LOS) analysis has been provided to demonstrate the effects of the proposed project on the surrounding circulation network.

Based on discussions with City staff, the following analysis periods have been evaluated:

1. Weekday a.m. peak hour (between 7:00 a.m. and 9:00 a.m.)
2. Weekday p.m. peak hour (between 4:00 p.m. and 6:00 p.m.)
3. Sunday peak hour (between 9:00 a.m. and 11:00 a.m.)

Consistent with the City's traffic study requirements, the weekday peak hours (i.e., highest 1-hour period between 7:00 a.m. and 9:00 a.m. and highest 1-hour period between 4:00 p.m. and 6:00 p.m.) are evaluated because they represent peak commute times (i.e., residents driving to work in the morning and employees driving home in the evening). The Sunday peak hour (i.e., highest 1-hour period 9:00 a.m. and 11:00 a.m.) is analyzed because it corresponds to the peak operations of the United Methodist Church.

The study area includes the following nine intersections:

1. Euclid Avenue/Main Street
2. Main Street/Stanford Avenue
3. Main Street/Acacia Parkway
4. Nelson Street/Stanford Avenue
5. Nelson Street/Acacia Parkway
6. Main Street/Northerly Church Driveway
7. Main Street/Southerly Church Driveway
8. Right-In/Right-Out (RIRO) Driveway/Acacia Parkway
9. Project Driveway/Stanford Avenue (Proposed)

Traffix (Version 8.0 R1) computer software was utilized to determine the study area intersection LOS based on the intersection capacity utilization (ICU) methodology for signalized intersections (i.e., Euclid Avenue/Main Street). Consistent with the City's requirements, the ICU methodology compares the volume-to-capacity (v/c) ratios of conflicting turn movements at an intersection, sums up these critical conflicting v/c ratios for each intersection approach, and determines the overall ICU. The resulting ICU is expressed in terms of LOS, where LOS A represents free-flow activity and LOS F represents overcapacity operation. LOS is a qualitative assessment of the quantitative effects of such factors as traffic volume, roadway geometrics, speed, delay, and maneuverability on roadway and intersection operations.

The relationship between LOS and the ICU value (i.e., v/c ratio) is as follows in Table 3.16.B.

Table 3.16.B: LOS and ICU

LOS	ICU
A	0.00–0.60
B	0.61–0.70
C	0.71–0.80
D	0.81–0.90
E	0.91–1.00
F	> 1.00

ICU = Intersection Capacity Utilization
 LOS = Levels of Service

The 2000 Highway Capacity Manual (HCM 2000) methodology was used to determine intersection LOS at unsignalized study area intersections. For the HCM methodology, the LOS is presented in terms of total intersection delay (in seconds per vehicle). The relationship between LOS and the delay at unsignalized intersections is as follows in Table 3.16.C.

Table 3.16.C: LOS and HCM

LOS	Unsignalized Intersection Delay (seconds) per Vehicle
A	≤10.0
B	>10.0 and ≤15.0
C	>15.0 and ≤25.0
D	>25.0 and ≤35.0
E	>35.0 and ≤50.0
F	>50.0

HCM = Highway Capacity Manual
 LOS = Levels of Service

According to the City’s General Plan Circulation Element, LOS D is the upper limit of satisfactory intersection operation. Mitigation is required for any intersection where project traffic causes the intersection to deteriorate from a satisfactory LOS (LOS D or better) to LOS E or F.

Existing peak-hour intersection turn volumes were collected by National Data & Surveying Services (NDS) in September 2014 for the study area intersections. The existing peak-hour count data, which includes vehicle trips generated by the Church and its ancillary uses (including the preschool, Head Start, etc.), is provided in Appendix A. Trip distribution and assignment for the proposed project (47 units and 2,975 sf of retail use) are based on the location of the project, logical travel corridors, minimum time paths, and access type (i.e., full-access or RIRO driveway).

Table 3.16.D summarizes the results of the existing and existing plus project (47 units and 2,975 sf of retail use) LOS analysis for the study area intersections. As previously discussed, the LOS was determined using the ICU methodology for signalized intersections and the HCM methodology for unsignalized intersections.

Table 3.16.D: Existing and Existing Plus Project Intersection LOS Summary

	Intersection	Control	Weekday AM Peak Hour		Weekday PM Peak Hour		Sunday Peak Hour	
			ICU or Delay	LOS	ICU or Delay	LOS	ICU or Delay	LOS
1	Euclid Avenue/Main Street	Signal						
	Existing No Project		0.483	A	0.522	A	0.340	A
	Existing Plus Project		0.485	A	0.524	A	0.342	A
	Δ		0.002		0.002		0.002	
2	Main Street/Stanford Avenue	AWSC						
	Existing No Project		9.6	A	9.5	A	8.4	A
	Existing Plus Project		9.6	A	9.6	A	8.4	A
	Δ		0.0		0.1		0.0	
3	Main Street/Acacia Parkway	AWSC						
	Existing No Project		10.0	A	9.6	A	8.9	A
	Existing Plus Project		10.0	A	9.7	A	9.0	A
	Δ		0.0		0.1		0.1	
4	Nelson Street/Stanford Avenue	AWSC						
	Existing No Project		15.4	C	12.4	B	10.7	B
	Existing Plus Project		15.4	C	12.4	B	10.7	B
	Δ		0.0		0.0		0.0	
5	Nelson Street/Acacia Parkway	TWSC						
	Existing No Project		13.2	B	12.1	B	11.6	B
	Existing Plus Project		13.7	B	12.4	B	11.8	B
	Δ		0.5		0.3		0.2	
6	Main Street/Northerly Church Driveway	TWSC						
	Existing No Project		9.7	A	11.0	B	10.1	B
	Existing Plus Project		9.8	A	11.1	B	10.1	B
	Δ		0.1		0.1		0.0	
7	Main Street/Southerly Church Driveway	TWSC						
	Existing No Project		10.5	B	10.8	B	9.9	A
	Existing Plus Project		10.5	B	10.9	B	9.9	A
	Δ		0.0		0.1		0.0	
8	RIRO Driveway/Acacia Parkway	TWSC						
	Existing No Project		9.3	A	8.8	A	8.8	A
	Existing Plus Project		9.4	A	8.9	A	8.8	A
	Δ		0.1		0.1		0.0	
9	Project Driveway/Stanford Avenue (New)	TWSC						
	Existing No Project		-	-	-	-	-	-
	Existing Plus Project		9.3	A	9.1	A	8.9	A
	Δ		9.3		9.1		8.9	

Note: Delay is reported in seconds (sec) for unsignalized intersections using the Highway Capacity Manual (HCM) methodology.

Δ = exceeds City's LOS criteria

LOS = level of service

AWSC = all-way stop-controlled

RIRO = right-in/right-out

ICU = Intersection Capacity Utilization

TWSC = two-way top-controlled

As shown in Table 3.16.D, all study area intersections currently operate at satisfactory LOS (defined as LOS D or better) during the weekday and Sunday peak hours. With implementation of the proposed project, all study area intersections would continue to operate at satisfactory LOS during all peak-hour periods. All LOS worksheets are contained in Appendix B.

Table 3.16.E summarizes the results of the existing and existing plus project conditions with maximum allowable density (52 units and 2,975 sf of retail use) LOS analysis for the study area intersections. As shown in Table 3.16.E, with implementation of the proposed project and maximum allowable density on the project site, all study area intersections would continue to operate at satisfactory LOS during all peak-hour periods.

The proposed project would require a variance to reduce the number of parking spaces required on the project site by the City's Zoning Code for the church, preschool, Head Start facility, and leasing office/commercial space. The proposed project would provide a total of 77 new parking spaces (74 of which would be reserved for the residential uses) consistent with Section 65915 of Senate Bill 1818 for affordable housing developments (i.e., one on-site space per one-bedroom unit and two on-site spaces per two- and three-bedroom units), as well as two spaces reserved for the Head Start drop-off area and one space reserved for United States Postal Service (USPS) that could also be used for residential or visitor purposes after-hours. Building A would provide 28 garage spaces for residents and Building B would provide 10 garage spaces for residents. In addition, carports would provide an additional 9 parking spaces and there would be 30 open parking stalls.

Implementation of the proposed project would reduce the existing church parking supply of 192 spaces by 39 spaces. However, the church parking lot would provide 35 additional new parking spaces through curb modifications and restriping, leaving a total of 153 spaces available to the United Methodist Church. The total proposed parking spaces would therefore total 230 spaces for the entire project site. However, the reduction to the parking is only being evaluated for the commercial use, as the residential use complies with the State Code. Based on the City's parking requirement, church, preschools, and commercial space would require 424 parking spaces, and therefore the proposed project does not conform to parking requirements outlined in the City's Municipal Code. The Parking Analysis provided in Appendix E of this Initial Study/Mitigated Negative Declaration (IS/MND) was prepared to determine if the demand for church, preschool, Head Start facility, and leasing office/commercial space parking would exceed parking supply if the proposed project reduced parking supply from 192 to 153 spaces. However, as discussed in the Parking Analysis, the peak trip generation for the church occurs on Sundays. Therefore, the peak parking demand and trip generation period for the existing church would not occur concurrently with the proposed mixed-use project's weekday a.m. or p.m. peak generation periods. The peak trip generation and parking demand of the United Methodist Church facilities occurs on Sundays while the peak trip generation and parking demand of the proposed project mixed-use development would occur on weekdays.

Table 3.16.E: Existing and Existing Plus Project With Allowable Density Intersection LOS Summary

	Intersection	Control	Weekday AM Peak Hour		Weekday PM Peak Hour		Sunday Peak Hour	
			ICU or Delay	LOS	ICU or Delay	LOS	ICU or Delay	LOS
1	Euclid Avenue/Main Street	Signal						
	Existing No Project		0.483	A	0.522	A	0.340	A
	Existing Plus Project With Allowable Density		0.486	A	0.524	A	0.342	A
	Δ		0.003		0.002		0.002	
2	Main Street/Stanford Avenue	AWSC						
	Existing No Project		9.6	A	9.5	A	8.4	A
	Existing Plus Project With Allowable Density		9.6	A	9.6	A	8.5	A
	Δ		0.0		0.1		0.1	
3	Main Street/Acacia Parkway	AWSC						
	Existing No Project		10.0	A	9.6	A	8.9	A
	Existing Plus Project With Allowable Density		10.1	B	9.8	A	9.0	A
	Δ		0.1		0.2		0.1	
4	Nelson Street/Stanford Avenue	AWSC						
	Existing No Project		15.4	C	12.4	B	10.7	B
	Existing Plus Project With Allowable Density		15.4	C	12.4	B	10.7	B
	Δ		0.0		0.0		0.0	
5	Nelson Street/Acacia Parkway	TWSC						
	Existing No Project		13.2	B	12.1	B	11.6	B
	Existing Plus Project With Allowable Density		13.8	B	12.5	B	11.9	B
	Δ		0.6		0.4		0.3	
6	Main Street/Northerly Church Driveway	TWSC						
	Existing No Project		9.7	A	11.0	B	10.1	B
	Existing Plus Project With Allowable Density		9.8	A	11.1	B	10.1	B
	Δ		0.1		0.1		0.0	
7	Main Street/Southerly Church Driveway	TWSC						
	Existing No Project		10.5	B	10.8	B	9.9	A
	Existing Plus Project With Allowable Density		10.5	B	10.9	B	9.9	A
	Δ		0.0		0.1		0.0	
8	RIRO Driveway/Acacia Parkway	TWSC						
	Existing No Project		9.3	A	8.8	A	8.8	A
	Existing Plus Project With Allowable Density		9.4	A	8.9	A	8.9	A
	Δ		0.1		0.1		0.1	

Table 3.16.E: Existing and Existing Plus Project With Allowable Density Intersection LOS Summary

	Intersection	Control	Weekday AM Peak Hour		Weekday PM Peak Hour		Sunday Peak Hour	
			ICU or Delay	LOS	ICU or Delay	LOS	ICU or Delay	LOS
9	Project Driveway/Stanford Avenue (New)	TWSC						
	Existing No Project		-	-	-	-	-	-
	Existing Plus Project With Allowable Density		9.3	A	9.1	A	8.9	A
	Δ		9.3		9.1		8.9	

Note: Delay is reported in seconds (sec) for unsignalized intersections using the Highway Capacity Manual (HCM) methodology.

- Δ = exceeds City's LOS criteria
- AWSC = all-way stop-controlled
- LOS = level of service
- RIRO = right-in/right-out
- TWSC = two-way top-controlled

The Parking Analysis concluded that the 153 spaces provided by the proposed for the church, preschool, Head Start, and commercial use would be sufficient to accommodate the peak-parking demand generated by the proposed mixed use project and the existing United Methodist Church. The residential units for the proposed project are parked to code per the State Affordable Housing Law. Therefore, there would be no impact to on-site traffic and circulation from implementation of the proposed project.

Therefore, project-related increases in traffic would be less than significant and are not anticipated to result in conflicts with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system.

Mitigation Measures: No mitigation would be required.

- (b) **No Impact.** As previously described, the proposed residential project would generate a maximum of 40 peak-hour trips, which is less than the City's threshold for preparation of a traffic study. Furthermore, there are no County of Orange (County) Congestion Management Program (CMP) facilities within the vicinity of the project site. As a result, no impacts to CMP locations are anticipated.

Mitigation Measures: No mitigation would be required.

- (c) **No Impact.** The proposed mixed-use project would not result in a change in air traffic patterns. Furthermore, the nearest airports are the Seal Beach Naval Base located at 800 Seal Beach Boulevard approximately 4 miles (mi) west of the project site, the Fullerton Municipal Airport (FMA), a general aviation airport located at 4011 West Commonwealth Avenue, approximately 7.7 mi north of the project site, and John Wayne International Airport located at 3160 Airway

Avenue, approximately 11 mi south of the project site. Therefore, no impacts are anticipated, and no mitigation would be required.

Mitigation Measures: No mitigation would be required.

- (d) **No Impact.** Access to the project site would be provided via an existing right-in right-out driveway on Acacia Parkway and a new full-access driveway on Stanford Avenue. The project design features (including the new Stanford Avenue driveway) would comply with all City standards. Furthermore, there are no sight distance obstructions along Acacia Parkway or Stanford Avenue, and the existing/proposed driveways would intersect with the public streets (Acacia Parkway and Stanford Avenue) at 90 degrees.

Therefore, the project would not introduce or increase hazards due to its design features. As a result, no impacts are anticipated.

Mitigation Measures: No mitigation would be required.

- (e) **Less than Significant Impact with Mitigation.** As previously described, the existing and proposed driveways along Acacia Parkway and Stanford Avenue, as well as the internal circulation roadways, would comply with all City design standards. Therefore, adequate access would be provided for all vehicles (i.e., resident, guest, and emergency vehicles). As a result, no impacts are anticipated. Furthermore, a Construction Staging and Traffic Management Plan shall be prepared for approval by the Director of the City of Garden Grove Public Works Department, or designee, prior to issuance of any demolition or grading permits.

Mitigation Measures:

TRAFFIC-1

Construction Staging and Traffic Management Plan. A Construction Staging and Traffic Management Plan shall be prepared for approval by the Director of the City of Garden Grove Public Works Department, or designee, prior to issuance of any demolition or grading permits.

The Construction Staging and Traffic Management Plan would also include the name and phone number of a contact person who can be reached 24 hours a day regarding construction traffic complaints or emergency situations. In addition, the Construction Staging and Traffic Management Plan shall take into account and be coordinated with other Construction Staging and Traffic Management Plans that are in effect or have been proposed for other projects in the City of Garden Grove. The Construction Staging and Traffic Management Plan shall include, but not be limited to, the following:

- All emergency access to the project site and adjacent areas shall be kept clear and unobstructed during all phases of demolition and construction.

- Flag persons shall be provided in adequate numbers to minimize impacts to traffic flow and to ensure safe access into and out of the site.
- Flag persons shall be trained to assist in emergency response by restricting or controlling traffic movements that could interfere with emergency vehicle access.
- Construction vehicles, including construction personnel vehicles, shall not park on public streets.
- Construction vehicles shall not stage or queue where they would interfere with pedestrian and vehicular traffic or block access to nearby businesses or residential areas.

If feasible, any traffic lane closures would be limited to off-peak traffic periods, as approved by the City of Garden Grove Public Works Department.

- (f) **No Impact.** The Orange County Transit Authority (OCTA) provides public transit service throughout the City and in proximity to the project site (i.e., Euclid Avenue and Garden Grove Boulevard). The proposed project would not affect existing transit service (i.e., bus stops or routes). The proposed project is located within approximately 0.2 mi of a stop on the OCTA Route 37/37A La Habra to Fountain Valley bus service and 0.3 mi away from Route 56 Garden Grove to Orange bus service. The project would not decrease the performance or safety of any public transit, bicycle, or pedestrian facilities, and would include bike racks as a project design feature. As a result, no impacts are anticipated.

Mitigation Measures: No mitigation would be required.

3.17 UTILITIES/SERVICE SYSTEMS

Would the project:		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(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 or collection 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 checked="" type="checkbox"/>	<input 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"/>
(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 insufficient 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 wastes.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Impact Analysis:

The proposed project is requesting a GPA and rezone, which would allow for a potential maximum density of 5 additional units (for a total of 21 units) on the 0.51-acre parcel. However, the following analysis does not include a separate maximum-density scenario since utilities/service systems impacts related to 5 additional units would be similar to the proposed project and would remain less than significant.

(a) and (b)

Less than Significant Impact. The Orange County Sanitation District (OCSD) is responsible for the collection, treatment, and disposal of domestic, commercial, and industrial wastewater generated by over 2.5 million people living and working in the central and northwestern County of Orange (County). OCSD facilities would receive wastewater generated from the proposed project. Wastewater from the project site would be treated at OCSD's Reclamation Plant No. 2 in Huntington Beach. This facility is responsible for disposal of treated wastewater. The Santa Ana Regional Water Quality Control Board (RWQCB) regulates the treatment of wastewater at treatment plants and the discharge of treated wastewater into receiving waters. Reclamation Plant No. 2 has been designed to treat typical wastewater flows from different land uses in Orange County, including the City of Garden Grove (City). The estimated average daily effluent received at Plant No. 2 is 129 million gallons per day (mgd). This facility currently has a total primary treatment capacity of 168 mgd, with an average daily treatment of approximately 129 mgd. Therefore, there is an excess primary treatment capacity of approximately 41 mgd at OCSD Plant No. 2. Plant No. 2 also has 90 mgd of secondary treatment capacity.

As shown in Table 3.17.A, the existing on-site uses generate approximately 3,736 gallons per day (gpd) of wastewater. As shown in Table 3.17.B, the proposed project, which includes the continued operation of the existing on-site uses, would generate a total of 13,316 gpd of wastewater, which would represent an increase of 9,580 gpd, (a 156 percent increase), compared to the wastewater generation from existing on-site uses.

Table 3.17.A: Existing Wastewater Generation on Project Site

Land Use	Area (sf)	Annual Wastewater Generation (mgpy)	Daily Wastewater Generation (gpd)
Church Facilities ¹	30,214	0.95	2,590
Preschools ²	14,424	0.42	1,146
Totals	44,638	1.37	3,736

Source: CalEEMod, version 2013.2.2; LSA Associates, Inc. (September 2014).

¹ Includes the existing Sanctuary, Chapel, Administrative Offices, Community Room, Lounge/Kitchen buildings; calculated based on the Places of Worship land use in CalEEMod.

² Includes the existing church preschool and Head Start facility; calculated based on the Elementary School land use in CalEEMod.

CalEEMod = California Emission Estimator Model

gpd = gallons per day

mgpy = gallons per year

sf = square feet

Table 3.17.B: Wastewater Generation at Project Build Out

Land Use	Area (sf)	Annual Wastewater Generation (mgpy)	Daily Wastewater Generation (gpd)
Church Facilities ¹	30,214	0.95	2,590
Preschools ²	11,198	0.32	890
Residential ³	44,303	3.06	8,384
Leasing Office/ Commercial Space ⁴	2,975	0.53	1,452
Totals	88,690	4.86	13,316
Net Increase over Existing Uses		3.49	9,580

Source: CalEEMod, version 2013.2.2; LSA Associates, Inc. (September 2014).

¹ Includes the existing Sanctuary, Chapel, Administrative Offices, Community Room, Lounge/Kitchen buildings; calculated based on the Places of Worship land use in CalEEMod.

² Includes the existing church preschool and proposed Head Start Facility, but will be slightly smaller than the existing preschool facilities due to the decrease in the size of the Head Start building; calculated based on the Elementary School land use in CalEEMod.

³ Includes the proposed 47 affordable housing units in Buildings A and B; calculated based on the Low Rise Apartment land use in CalEEMod.

⁴ Includes the proposed Leasing Office/Commercial Space; calculated based on General Office Commercial land use in CalEEMod.

CalEEMod = California Emission Estimator Model

gpd = gallons per day

mgpy = gallons per year

sf = square feet

This effluent generation rate would be 0.01 percent of the 90 mgd excess treatment capacity at Reclamation Plant No. 2, and would, therefore, represent a small proportion of the remaining total treatment capacity of Treatment Plant No. 2. The proposed project would generate wastewater flows typical of other mixed-use developments in the City. Although the proposed project would require a General Plan Amendment (GPA) for the 0.51-acre parcel of the project site, that parcel currently has a General Plan land use designation of Medium Density Residential (MDR). As such, the General Plan assumed a wastewater demand factor typical of MDR development for the project site. With approval of the proposed GPA to a Civic Center Mixed Use designation, the proposed uses would be of a similar intensity as that of the MDR land use designation. Therefore, the proposed project would not generate wastewater at a higher rate than the land use originally intended by the General Plan. Wastewater generated by the proposed project would not require or result in the construction of new wastewater treatment facilities or expansion of existing facilities; and would not result in a determination by the wastewater treatment provider that they have inadequate capacity to serve the proposed project's projected demand in addition to existing commitments. Thus, no potential exists for the proposed project to exceed wastewater treatment requirements of the Santa Ana RWQCB, and potential impacts would be less than significant. No mitigation would be required.

Water. The City's main sources of water supply are groundwater from the Lower Santa Ana River Groundwater Basin and imported water from the Metropolitan Water District of Southern California (MWD) provided by the Municipal Water District of Orange County. Today, the City relies on 62 percent groundwater and 38 percent imported.¹ It is projected that by 2035, the water supply mix would remain roughly the same. This imported water is treated at both the Robert B. Diemer Filtration Plant located north of Yorba Linda and the F.E. Weymouth Treatment Plant in the City of La Verne.

Delivery of domestic water service in the City is provided by the Water Services Division of the City's Public Works Department. The Water Services Division is responsible for maintaining the wells, reservoirs, import water connections, and the distribution systems that deliver water throughout the City. To meet its infrastructure needs, the Water Services Division collaborates with other jurisdictions, agencies, and service providers, as required.

The City's water supply system provides reliable service to a population of nearly 174,389 within the service area. According to the City's Urban Water Management Plan (UWMP) (June 2011), the total projected water demand for the retail customers served by the City annually is approximately 27,500 acre feet (af) annually.

According to the City's 2011 UWMP, the City consumed approximately 28,792 af in 2010, with an average baseline water use of 162.4 gallons per capita per day (gpd) during the 10-year period from July 1, 1995, to June 30, 2005. According to the City's 2011 UWMP, the projected water demand for 2015 is 29,240 af per year and 30,907 af per year by 2035. According to the UWMP, the City's water supplies are projected to meet full service demands.

¹ City of Garden Grove. Urban Water Management Plan (2010).

As shown in Table 3.17.C, the existing on-site uses generate a water demand of approximately 10,731 gpd. As shown in Table 3.17.D, the proposed project, which includes the continued operation of the existing on-site uses, would generate a total water demand of 25,845 gpd. Therefore, implementation of the proposed project would result in an increase of 15,114 gpd in water demand (a 140 percent increase) when compared to the existing water demand on the project site. Therefore, the estimated increase in water demand associated with new development proposed as part of the project would represent 0.06 percent of the City’s current annual water demand, based on the City’s consumption of 28,792 af in 2010, and would be within the projected citywide water demands evaluated in the 2011 UWMP. Although the proposed project would require a GPA for the 0.51-acre parcel of the project site, that parcel currently presently has a General Plan land use designation of MDR. As such, the General Plan assumed a water demand factor typical of MDR development for the project site. With approval of the proposed GPA to a Civic Center Mixed-Use (CCMU) land use designation, the proposed uses would be of a similar intensity as that of the MDR land use designation. Therefore, the proposed project would not generate water demand higher than the land use originally intended by the General Plan. Water supply would be available to meet the incremental increase in demand from the proposed project as well as water demand associated with the continued operation of the existing United Methodist Church facilities and church preschool. The proposed project would not necessitate new or expanded water entitlements, and the City would be able to accommodate the increased demand for potable water. In addition, the proposed project would implement a number of water conservation measures, including low-flow appliances and efficient landscape irrigation that would further reduce the water demand as a result of the proposed project. Therefore, project impacts associated with an increase in potable water demand are considered less than significant, and no mitigation would be required.

Table 3.17.C: Existing Water Demand on the Project Site

Land Use	Area (sf)	Annual Water Demand (mgpy)	Water Demand (gpd)
Church Facilities ¹	30,214	2.42	6,640
Preschools ²	14,424	1.49	4,091
Totals	44,638	3.91	10,731

Source: CalEEMod, version 2013.2.2; LSA Associates, Inc. (September 2014).

¹ Includes the existing Sanctuary, Chapel, Administrative Offices, Community Room, Lounge/Kitchen buildings; calculated based on the Places of Worship land use in CalEEMod.

² Includes the existing church preschool and Head Start facility; calculated based on the Preschool land use in CalEEMod.

CalEEMod = California Emission Estimator Model

gpd = gallons per day

mgpy = gallons per year

sf = square feet

Table 3.17.D: Water Demand at Project Build Out

Land Use	Area (sf)	Annual Water Demand (mgpy)	Water Demand (gpd)
Church Facilities ¹	30,214	2.42	6,640
Preschools ²	11,198	1.16	3,178
Residential ³	44,303	4.99	13,671
Leasing Office/ Commercial Space ⁴	2,975	0.86	2,356
Totals	88,690	9.43	25,845
Net Increase over Existing Uses		5.52	15,114

Source: CalEEMod, version 2013.2.2; LSA Associates, Inc. (September 2014).

- ¹ Includes the existing Sanctuary, Chapel, Administrative Offices, Community Room, Lounge/Kitchen buildings; calculated based on the Places of Worship land use in CalEEMod.
- ² Includes the existing church preschool and proposed Head Start Facility, but will be slightly smaller than the existing preschool facilities due to the decrease in the size of the Head Start building; calculated based on the Preschool land use in CalEEMod.
- ³ Includes the proposed 47 affordable housing units in Buildings A and B; calculated based on the Low Rise Apartment land use in CalEEMod.
- ⁴ Includes the proposed Leasing Office/Commercial Space; calculated based on General Office Commercial land use in CalEEMod.

CalEEMod = California Emission Estimator Model

gpd = gallons per day

mgpy = gallons per year

sf = square feet

Wastewater. The Garden Grove Sanitary District is responsible for installation and maintenance of local wastewater collection facilities, which convey wastewater to OCSD trunk sewers. The OCSD is responsible for the collection, treatment, and disposal of domestic, commercial, and industrial wastewater generated by over 2.5 million people living and working in central and northwestern Orange County. Most of the surrounding developed areas in the City area surrounding the project site are located within the OCSD. Wastewater generated by the proposed project would be treated at OCSD Reclamation Plant No. 2. OCSD currently has plans to expand its treatment capacity in order to respond to the countywide increased need for sewage treatment. OCSD is proposing to upgrade the level of wastewater treatment at both of its treatment plants to meet secondary treatment standards for the projected 2030 effluent flow of 261 mgd. A portion of the sewage fee charged to developers in the City would be paid to the County for regional facilities improvements. In addition, OCSD's Capital Facilities Capacity Charge is applied to cities and developers for new or expanded residential, commercial, and industrial development and is used for improving the efficiency and effectiveness of OCSD operations.

Therefore, development of the proposed project would not require, nor would it result in, the construction of new wastewater treatment or collection facilities or expansion of existing facilities other than those facilities to be constructed on site, because the project's demands can be accommodated by OCSD based on the planned capital improvements. Project impacts related to the construction of wastewater treatment or collection facilities would be less than significant, and no mitigation would be required.

Mitigation Measures: No mitigation would be required.

- (c) **Less than Significant Impact.** The City is served by the Orange County Flood Control District (OCFCD), which operates and maintains regional and municipal storm drainage facilities. As discussed further in Section 3.9, Hydrology and Water Quality, the proposed project would include new construction on a 2.5-acre portion of the project site, which would permanently increase the on-site impervious surface area by 0.24 acre compared to the existing condition. Development of the proposed project would not affect the on-site impervious surface area of the remainder of the project site presently developed with the United Methodist Church facilities, church preschool, Head Start facility, and parking lots. The projected storm water runoff is not anticipated to significantly increase due to the project's inclusion of two bio-retention CULTEC recharge chambers that would collect and treat runoff and minimize erosion and siltation. Storm water infiltration Best Management Practices (BMPs) and catch basins would increase infiltration and reduce the rate and amount of surface runoff from the project site.

Therefore, the proposed project would not contribute additional runoff to the downstream storm water drainage facilities or cause the expansion of existing facilities, and no mitigation would be required.

Mitigation Measures: No mitigation would be required.

- (d) **Less than Significant Impact.** Refer to Response 3.17(b). The relatively moderate increase in water use from implementation of the proposed project in conjunction with the continued operation of existing United Methodist Church facilities and the church preschool on the project site would represent approximately 0.06 percent of the City's annual water demand. The proposed project, when considered both individually and with the existing development on the project site would not necessitate new or expanded water entitlements, and the City would be able to accommodate the increased demand for potable water. Although the proposed project would require a GPA for the 0.51-acre parcel of the project site, that parcel currently has a General Plan land use designation of MDR. As such, the General Plan assumed a water demand factor typical of MDR development for the project site. With approval of the proposed GPA to a CCMU designation, the proposed uses would be of a similar intensity as that of the MDR land use designation. Therefore, the proposed project would not generate wastewater at a higher rate than the land use originally intended by the General Plan. Therefore, incremental water demand increases from the proposed project would have sufficient water supplies available to serve the project from existing entitlements and resources and would not require new or expanded entitlements. Therefore, impacts related to water supplies would be less than significant, and no mitigation would be required.

Mitigation Measures: No mitigation would be required.

- (e) **Less than Significant Impact.** Refer to Response 3.17(b). Although the proposed project would increase wastewater demand on site, the increased wastewater flows from the proposed project would not interfere with the City's Sewer Water Management Plan (2005). This document provides guidance for the City in replacing deficient sewer systems over a 10-year period, and sets priorities for sewer system capital improvements. Therefore, impacts related to wastewater generation are less than significant, and no mitigation would be required.

Mitigation Measures: No mitigation would be required.

- (f) **Less than Significant Impact.** The project site is located within OC Waste & Recycling's (OCWR) service area. OCWR administers the countywide Integrated Waste Management Plan. OCWR owns and operates three active landfills (i.e., Olinda Alpha Landfill in Brea, Frank R. Bowerman Landfill in Irvine, and Prima Deshecha Landfill in San Juan Capistrano), as well as four household hazardous waste collection centers. All three landfills are permitted as Class III landfills. Class III landfills accept all types of nonhazardous municipal solid waste for disposal.

Within the City, collection of solid waste is contracted to Republic Services. Republic Services collects solid waste, green waste (grass clippings, tree and shrub clippings), and items for recycling. The company provides three different carts for automated collection of trash, recyclables, and green waste. By providing these three carts, the City aims to encourage residents and businesses to reduce the amount of solid wastes that enter the aforementioned regional landfills.

Olinda Alpha Landfill, located at 1942 North Valencia Avenue, Brea, is the closest OCWR landfill to the project site and would provide waste disposal for the proposed project once operational. This landfill is permitted to accept up to 8,000 tons of solid waste per day (tpd) and currently accepts a daily average of approximately 6,000 tpd. The anticipated closure date for the landfill is 2021. As illustrated by Table 3.17.E, existing uses on the project generate a total of 0.52 tons of solid commercial waste per day, which represents 0.006 percent of the capacity (8,000 tpd) at the Olinda Alpha landfill. The proposed project, which includes the continued operation of the existing on-site uses as shown on Table 3.17.F, would generate approximately 0.58 tons of solid waste per day, or a 120 percent increase, in solid waste generation compared to existing on-site uses. The incremental increase of solid waste generated by the proposed project would constitute approximately 0.007 percent of the daily available capacity (8,000 tpd) at the Olinda Alpha Landfill. Therefore, solid waste generated by the proposed project would not cause the capacity of the Olinda Alpha Landfill to be exceeded. The proposed project would result in a less than significant impact to solid waste and landfill facilities, and no mitigation would be required.

Mitigation Measures: No mitigation would be required.

Table 3.17.E: Existing Solid Waste Generation

Land Use	Area (sf)	Annual Solid Waste Generation (tons)	Solid Waste Generation (tons/day)
Church ¹	30,214	172.20	0.47
Preschool ²	14,424	18.75	0.05
Totals	44,638	190.95	0.52

Source: CalEEMod, version 2013.2.2; LSA Associates, Inc. (September 2014).

¹ Includes the existing Sanctuary, Chapel, Administrative Offices, Community Room, Lounge/Kitchen buildings; calculated based on the Places of Worship land use in CalEEMod.

² Includes the existing church preschool and Head Start facility; calculated based on the Preschool land use in CalEEMod.

CalEEMod = California Emission Estimator Model

gpd = gallons per day

gpy = gallons per year

sf = square feet

Table 3.17.F: Solid Waste Generation at Project Build Out

Land Use	Area (sf)	Annual Solid Waste Generation (tons)	Solid Waste Generation (tons/day)
Church ¹	30,214	172.2	0.47
Preschool ²	11,198	14.6	0.04
Residential ³	44,303	21.6	0.06
Leasing Office/ Commercial Space ⁴	2,975	2.8	0.007
Totals	88,690	211.2	0.58
Net Increase over Existing Uses		20.25	0.06

Source: CalEEMod, version 2013.2.2; LSA Associates, Inc. (September 2014).

¹ Includes the existing Sanctuary, Chapel, Administrative Offices, Community Room, Lounge/Kitchen buildings; calculated based on the Places of Worship land use in CalEEMod.

² Includes the existing church preschool and proposed Head Start Facility but will be slightly smaller than the existing preschool facilities due to the decrease in the size of the Head Start building; calculated based on the Preschool land use in CalEEMod.

³ Includes the proposed 47 affordable housing units in Buildings A and B; calculated based on the Low-Rise Apartment land use in CalEEMod.

⁴ Includes the proposed Leasing Office/Commercial Space; calculated based on General Office Commercial land use in CalEEMod.

CalEEMod = California Emission Estimator Model

gpd = gallons per day

gpy = gallons per year

sf = square feet

- (g) **Less than Significant Impact.** The California Integrated Waste Management Act (Assembly Bill [AB] 939) changed the focus of solid waste management from landfill to diversion strategies such as source reduction, recycling, and composting. The purpose of the diversion strategies is to reduce dependence on landfills for solid waste disposal. AB 939 established mandatory diversion goals of 25 percent by 1995 and 50 percent by 2000. According to the City's General Plan Conservation Element, in 2005, approximately 199,737 tons of waste produced by the City was disposed in a landfill while 64 tons were burned at a waste-to-energy facility. Of this, household disposal consisted of 52 percent of waste disposal while business disposal consisted of 48 percent. The City provides curbside recycling for both residential and commercial uses, which counts toward the City's solid waste diversion rate. The City also collects curbside residential green waste, which also counts toward the City's diversion rate. In addition, the City currently offers free recycling to all businesses within the City.

The proposed project would comply with existing and future statutes and regulations, including waste diversion programs mandated by City, State, or federal law. In addition, as discussed above, the proposed project would not result in an excessive production of solid waste that would exceed the capacity of the existing landfill serving the project site. Therefore, the proposed project would not result in an impact related to federal, State, and local statutes and regulations related to solid wastes, and no mitigation would be required.

Mitigation Measures: No mitigation would be required.

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3.18 MANDATORY FINDINGS OF SIGNIFICANCE

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to 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 type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(c) Does the project have environmental effects which would cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Impact Analysis:

- (a) **Less than Significant With Mitigation Incorporated.** The project site is located in a fully developed urban environment characterized by a variety of residential, commercial, community facility, and park land uses. Based on the project description and the preceding responses, development of the proposed project does not have the potential to degrade the quality of the natural environment. Additionally, due to the developed nature of the site in an urbanized location, there are no rare or endangered plant or animal species on the project site. Existing landscaping may, however, provide suitable habitat for nesting birds. Disturbing or destroying active nests is a violation of the Migratory Bird Treaty Act (MBTA). In addition, nests and eggs are protected under Fish and Game Code Section 3503. Compliance with the requirements of the MBTA would ensure that the proposed project adheres to the MBTA, thereby reducing potential project impacts related to biological resources to a less than significant level.

It is not anticipated that the proposed project would eliminate important examples of the major periods of California history or prehistory because the project site has been previously developed, and the likelihood of encountering significant historic or prehistoric artifacts during grading, excavation, and site development activities would be minimal. However, if any archaeological or paleontological resources are discovered during grading and construction activities, work in the area would cease and deposits would be treated in accordance with federal, State, and local guidelines, including those set forth in California Public Resources Code (PRC) Section 21083.2. In addition, if it is determined that an archaeological site is a historical resource, the provisions of Section 21084.1 of the PRC and *California Environmental Quality Act (State CEQA) Guidelines* Section 15064.5 would be implemented.

Mitigation Measures: See BIO-1, CUL-1, CUL-2, and CUL-3.

- (b) **Less than Significant Impact.** The project site is located in a fully developed urban environment characterized by a variety of residential, commercial, community facility, and park

land uses. In the existing condition, the project site is developed with the Garden Grove United Methodist Church and its associated structures, a church preschool, a Head Start facility, and associated parking. Following approval of the requested General Plan Amendment (GPA) and the rezone (discussed further in Section 3.10, Land Use), the proposed project would be consistent with the City of Garden Grove's (City's) General Plan land use and zoning designations for the site. Impacts related to the proposed project would be less than significant.

As discussed above (refer to Response 3.16.a) with the addition of cumulative project traffic (maximum allowable density scenario), all study area intersections would continue to operate at acceptable LOS (LOS D or better) during the a.m. and p.m. peak hours. Therefore, with the addition of project traffic, the proposed project was determined to have a less than significant cumulative effect related to traffic and circulation in the area surrounding the project site, and no mitigation would be required.

As discussed above, (refer to Response 3.7.a & b) the proposed project would generate 1,570 MT/yr of CO₂e emissions under the cumulative project scenario (maximum allowable density scenario), which would be below the 10,000 tpy threshold recommended by the SCAQMD for mixed-use development projects. Therefore, the proposed project would result in a less than significant impact related to greenhouse gas (GHG) emissions and would not impede or interfere with achieving the State's emission reduction objectives in Assembly Bill (AB) 32 (and Executive Order [EO] S-03-05). As a result, the proposed project would not result in or substantially contribute to cumulatively considerable GHG emissions, and no mitigation would be required.

As discussed above, (refer to Response 3.3.b) the proposed project would not exceed any of the established SCAQMD thresholds for pollutant emissions under the cumulative project scenario (maximum allowable density scenario). Therefore, because the proposed project does not exceed the South Coast Air Quality Management District's (SCAQMD's) localized and significance thresholds and would be consistent with the SCAQMD Air Quality Management Plan (AQMP), the proposed project would not result in cumulative air quality impacts that would be considered cumulatively considerable, and no mitigation would be required.

The proposed project, considered together with the existing Church uses, will not have any impacts related to agricultural and mineral resources and would therefore not have any cumulatively significant impacts related to these topics.

Impacts from the proposed project related to aesthetics, biological resources, cultural resources, geology and soils, hazards or hazardous materials, hydrology and water quality, noise, public services, recreation, or utilities/service systems are less than significant or can be reduced to a less than significant level with mitigation. Therefore, the proposed project, in combination with the existing Church uses, would not cumulatively contribute to significant impacts related to any of these environmental topics.

In summary, the proposed project would rely on and can be accommodated by the existing road system, public services, and utilities. Therefore, impacts from the proposed project, in addition to the continued operation of existing facilities on the project site, would not be cumulatively considerable.

Mitigation Measures: No mitigation would be required.

- (c) **Less than Significant With Mitigation Incorporated.** The project site is located in a fully developed urban environment characterized by a variety of residential, commercial, community facility, and park land uses. In the existing condition, the project site is developed with the Garden Grove United Methodist Church and its associated structures, a church preschool, a new Head Start facility, and associated asphalt parking. Following approval of the requested General Plan Amendment (GPA) and the rezone (discussed further in Section 3.10, Land Use), the proposed project would be consistent with the City of Garden Grove's (City's) General Plan land use and zoning designations for the site. Based on the project description and the preceding responses, development of the proposed project and continued operation of the existing facilities on the project site would not cause substantial adverse effects on human beings because all potentially significant impacts of the proposed project can be mitigated to a less than significant level.

Mitigation Measures: See NOISE-1, GEO-1, HAZ-1, HAZ-2, and HAZ-3.

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4.0 MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Monitoring Requirements

Public Resources Code (PRC) Section 21081.6 (enacted by the passage of Assembly Bill (AB) 3180) mandates that the following requirements shall apply to all reporting or mitigation monitoring programs:

- The public agency shall adopt a reporting or monitoring program for the changes made to the project or conditions of project approval in order to mitigate or avoid significant effects on the environment. The reporting or monitoring program shall be designed to ensure compliance during project implementation. For those changes which have been required or incorporated into the project at the request of a Responsible Agency or a public agency having jurisdiction by law over natural resources affected by the project, that agency shall, if so requested by the Lead Agency or a Responsible Agency, prepare and submit a proposed reporting or monitoring program.
- The Lead Agency shall specify the location and custodian of the documents or other material which constitute the record of proceedings upon which its decision is based. A public agency shall provide the measures to mitigate or avoid significant effects on the environment that are fully enforceable through permit conditions, agreements, or other measures. Conditions of project approval may be set forth in referenced documents which address required mitigation measures or in the case of the adoption of a plan, policy, regulation, or other project, by incorporating the mitigation measures into the plan, policy, regulation, or project design.
- Prior to the close of the public review period for a draft Environmental Impact Report (EIR) or Mitigated Negative Declaration (MND), a Responsible Agency, or a public agency having jurisdiction over natural resources affected by the project, shall either submit to the Lead Agency complete and detailed performance objectives for mitigation measures which would address the significant effects on the environment identified by the Responsible Agency or agency having jurisdiction over natural resources affected by the project, or refer the Lead Agency to appropriate, readily available guidelines or reference documents. Any mitigation measures submitted to a Lead Agency by a Responsible Agency or an agency having jurisdiction over natural resources affected by the project shall be limited to measures which mitigate impacts to resources which are subject to the statutory authority of, and definitions applicable to, that agency. Compliance or noncompliance by a Responsible Agency or agency having jurisdiction over natural resources affected by a project with that requirement shall not limit that authority of the Responsible Agency or agency having jurisdiction over natural resources affected by a project, or the authority of the Lead Agency, to approve, condition, or deny projects as provided by this division or any other provision of law.

Mitigation Monitoring Procedures

The mitigation monitoring and reporting program has been prepared in compliance with PRC Section 21081.6. It describes the requirements and procedures to be followed by the City of Garden Grove to ensure that all mitigation measures adopted as part of the proposed project would be carried out as described in this Initial Study (IS)/Mitigated Negative Declaration (MND). Table 4.A lists each of the mitigation measures specified in this IS/MND and identifies the party or parties responsible for implementation and monitoring of each measure.

Table 4.A: Mitigation and Monitoring Reporting Program

Mitigation Measures	Responsible Party	Timing for Mitigation Measure
3.1 Aesthetics		
The proposed project would not result in significant adverse impacts related to aesthetics. No mitigation would be required.		
3.2 Agricultural & Forest Resources		
The proposed project would not result in significant adverse impacts related to agriculture or forest resources. No mitigation would be required.		
3.3 Air Quality		
The proposed project would not result in significant adverse impacts related to air quality. No mitigation would be required.		
3.4 Biological Resources		
<p>BIO-1: Compliance with Migratory Bird Treaty Act. In the event that project construction or grading activities should occur within the active breeding season for birds (i.e., February 15 through August 15), a nesting bird survey shall be conducted by a qualified biologist prior to commencement of grading or construction activities. If active nesting of birds is observed within 100 feet (ft) of the designated construction area prior to construction, the construction crew shall establish an appropriate buffer around the active nest. The designated project biologist shall determine the buffer distance based on the specific nesting bird species and circumstances involved. Once the project biologist verifies that the birds have fledged from the nest, the buffer may be removed. Prior to commencement of grading activities and issuance of any building permits, the City of Garden Grove Director of Community Development, or designee, shall verify that all project grading and construction plans include specific documentation regarding the Migratory Bird Treaty Act (MBTA) requirements for a nesting bird survey should construction or grading occur from February 15 through August 15, that preconstruction surveys have been completed and the results reviewed by staff, and that the appropriate buffers (if needed) are noted on the plans and established in the field with orange snow fencing.</p>	City of Garden Grove Director of Community Development, or designee	Prior to the commencement of grading activities
3.5 Cultural Resources		
<p>CUL-1: Unknown Archeological Resources. Unknown Archeological Resources. Prior to the issuance of grading permits, the Applicant shall retain, with the approval of the City of Garden Grove (City) Community Development Director, or designee, a qualified archaeological monitor from the Orange County List of Qualified Archaeologists. Prior to issuance of grading permits, the Applicant, with City approval, shall also retain a Native American monitor to be selected by the City after consultation with interested tribal and Native American representatives. Both monitors shall be present on the project site during ground-disturbing activities to monitor rough and finish grading, excavation, and other ground-disturbing activities in the native soils. Because no cultural resources are likely to be encountered on the project site, monitors are not required to be present on a full-time basis, but shall spot check at the discretion of the project archaeologist ground-disturbing activities to ensure that no cultural resources are impacted during ground-disturbing activities.</p>	City of Garden Grove Director of Community Development, or designee	Prior to the issuance of grading permits

Table 4.A: Mitigation and Monitoring Reporting Program

Mitigation Measures	Responsible Party	Timing for Mitigation Measure
<p>CUL-2: Paleontological Resources. In the event that paleontological resources are encountered during project construction, work in the immediate area of the find shall be redirected. Subsequently, the Applicant shall retain, with the approval of the City's Community Development Director, or designee, a qualified paleontologist from the Orange County List of Qualified Paleontologists to assess the findings for scientific significance. If any fossil remains are discovered in sediments with a Low paleontological sensitivity rating (Young Alluvial Deposits), the paleontologist shall make recommendations as to whether monitoring shall be required in these sediments on a full-time basis.</p>	<p>City of Garden Grove Director of Community Development, or Department, or designee</p>	<p>In the event that paleontological resources are encountered during project construction</p>
<p>CUL-3: Human Remains. In the event that human remains are discovered during ground-disturbing or construction activities, the following steps shall be taken:</p> <ol style="list-style-type: none"> a. There shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until the Orange County Coroner is contacted to determine whether the remains are prehistoric and that no investigation of the cause of death is required. If the Coroner determines the remains to be Native American, then the Coroner shall contact the Native American Heritage Commission (NAHC) within 24 hours, and the NAHC shall identify the person or persons it believes to be the most likely descendant from the deceased Native American. The most likely descendant may make recommendations to the landowner or the person responsible for the excavation work for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in Public Resources Code Section 5097.98; or b. Where the following conditions occur, the landowner or his/her authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity either in accordance with the recommendations of the most likely descendant or on the property in a location not subject to further subsurface disturbance: <ol style="list-style-type: none"> 1. The NAHC is unable to identify a most likely descendant, or the most likely descendant failed to make a recommendation within 48 hours after being notified by the NAHC; 2. The identified descendant fails to make a recommendation; or 3. The landowner or his/her authorized representative rejects the recommendation of the descendant, and mediation by the NAHC fails to provide measures acceptable to the landowner. 	<p>City of Garden Grove Director of Community Development, or Department, or designee</p>	<p>In the event of the accidental discovery or recognition of any human remains in any location on the project site during excavation or construction activities</p>

Table 4.A: Mitigation and Monitoring Reporting Program

Mitigation Measures	Responsible Party	Timing for Mitigation Measure
<p>3.6 Geology and Soils</p> <p>GEO-1:</p> <p>Incorporation of and Compliance with the Recommendations in the Geotechnical Report. During project construction activities, the City of Garden Grove (City)'s Community Development Director, Director of Public Works, or designee shall ensure that all grading operations and construction are conducted in conformance with the recommendations included in the geotechnical report prepared for the proposed project that has been prepared by Harrington Geotechnical Engineering, Inc., titled <i>Preliminary Geotechnical Investigation for Site Development and Design and Construction of Affordable Housing Project at Garden Grove United Methodist Church (Preliminary Geotechnical Investigation)</i> (July 8, 2014) (Appendix C). Specific requirements in the <i>Preliminary Geotechnical Investigation</i> address:</p> <ol style="list-style-type: none"> 1. General: The Geotechnical Engineer and/or Engineering Geologist, or their authorized representative(s), shall perform observations, testing services and geotechnical consultation throughout the duration of the project. 2. Clearing/Grading: The soil throughout the site should be excavated to a minimum depth of 2 feet below the bottom of proposed footings or to the depth necessary to remove material disturbed by demolition work. The top one foot of the exposed soil should be moisture-conditioned and compacted in accordance with ASTM Test Method D1557; excavated soil that is free of deleterious matter should be placed in thin, loose lifts, moisture-conditioned, and compacted to a minimum relative compaction of 90 percent; imported soil should be sampled at the source and tested for expansion, sulfate, chloride, pH, and minimum resistivity. 3. Grading observations, testing, and monitoring: Grading and compaction operations should be observed and tested by a representative of the geotechnical engineer so that anticipated conditions can be verified and any supplemental recommendations necessary for proper development of the site provided. Results of the observations and tests should be provided in the final report for the project along with a statement by the geotechnical engineer regarding the adequacy of the work. 4. Conventional spread footing and floor slab design: footing sizes, design bearing pressures, passive soil pressures, structural reinforcements, and thickness of floor slabs shall be consistent with the Geotechnical Engineer's recommendations. 5. Seismic design: Seismic design shall conform to the 2013 California Building Code 	<p>City of Garden Grove Building Official, or designee</p>	<p>Prior to the start of grading</p>

Table 4.A: Mitigation and Monitoring Reporting Program

Mitigation Measures	Responsible Party	Timing for Mitigation Measure
<p>and the Structural Engineer Association of California guidelines.</p> <ol style="list-style-type: none"> 6. Settlement: Maximum settlement of foundations is expected to be less than one inch and differential settlement is expected to be on the order of one-quarter inch or less, with foundations designed as recommended. 7. Water vapor retarder: A water vapor retarder installed in accordance with the manufacturer's specifications is recommended for all slabs. A qualified moisture/vapor consultant be engaged to evaluate the general and specific moisture vapor transmission paths and any impact on the proposed construction. 8. Concrete quality: special sulfate-resistant concrete will not be required on this project. The exposure class (ACI 318-08, Table 4.2.1, is S0. Concrete may use Type II cement and should comply with the requirements set forth in ACI 318-08, Table 4.3.1. 9. Pavement: The recommendations of the Geotechnical Report shall be adhered to regarding a suitable pavement structural section for any new pavement associated with the project, minimum thicknesses of pavement, subgrade compaction and aggregate base materials. 10. Backfill placement and compaction: Backfills for structural excavations and utility lines should consist of site or similar materials acceptable to the geotechnical engineer. Compaction methods shall comply with ASTM Test Method D1557 and backfills should be observed by the geotechnical technician during placement and tested at maximum vertical intervals of two feet. 11. Infiltration rate: The geotechnical Engineer may require additional infiltration rate testing upon completion of grading. 12. Pre-construction conference: A pre-construction conference attended by the owner, design team, general contractor, and city inspector should be scheduled to review the findings and recommendations of this report and project plans and specifications prior to starting work on the project. 13. Plans and specifications review: Recommendation that project plans and specifications be submitted to the Geotechnical Engineer for review/comment by to confirm that the recommendations of the report have been properly interpreted and implemented. 14. Construction observations and testing: Recommendation that the project Geotechnical Engineer be retained to provide grading and construction observations and testing 		

Table 4.A: Mitigation and Monitoring Reporting Program

Mitigation Measures	Responsible Party	Timing for Mitigation Measure
<p>services, including observations periodically during: demolition/clearing work; during grading (after completion of the sub-excavation, prior to processing the bottom, and during fill placement/compaction); after completion of foundation excavations, prior to placement of forms and/or reinforcing steel; during backfilling of structural excavations and utility trenches; and during placement of any aggregate base and asphalt concrete pavement used on the project.</p> <p>Additional site testing and final design evaluation shall be conducted by the project geotechnical consultant to refine and enhance these requirements. The Applicant shall require the project geotechnical consultant to assess whether the requirements in the <i>Preliminary Geotechnical Investigation</i> need to be modified or refined to address any changes in the project that occur prior to the start of grading. If the project geotechnical consultant identifies modifications or refinements to the requirements, the project Applicant shall require appropriate changes to the final project design and specifications and shall submit any revised geotechnical reports to the Land Development Section of the Engineering Division, or designee, for approval prior to issuance of any grading or construction permits.</p> <p>The Land Development Section of the Engineering Division, or designee, shall review grading plans prior to the start of grading to verify that the requirements developed during the geotechnical design evaluation have been appropriately incorporated into the project plans. Design, grading, and construction shall be performed in accordance with the requirements of the City' Building Code and the California Building Code (CBC) applicable at the time of grading, as well as the recommendations of the project geotechnical consultant as summarized in a final report subject to review by the City's Building Official, or designee, prior to the start of grading activities. On-site inspection during grading shall be conducted by the project geotechnical consultant and the Land Development Section of the Engineering Division to ensure compliance with geotechnical specifications as incorporated into project plans</p>		

3.7 Greenhouse Gas Emissions

The proposed project would not result in significant adverse impacts related to greenhouse gas emissions. No mitigation would be required.

Table 4.A: Mitigation and Monitoring Reporting Program

Mitigation Measures	Responsible Party	Timing for Mitigation Measure
<p>3.8 Hazards and Hazardous Materials (Please also refer to TRAFFIC-1. Construction Staging and Traffic Management Plan)</p> <p>HAZ 1:</p> <p>Predemolition Surveys. Prior to commencement of demolition activities, the City of Garden Grove (City) Building Official, or designee, shall verify that predemolition surveys for asbestos-containing materials (ACMs) and lead-based paints (LBPs) (including sampling and analysis of all suspected building materials) and inspections for polychlorinated biphenyl (PCB)-containing electrical fixtures and other suspect hazardous building materials shall be performed. All inspections, surveys, and analyses shall be performed by appropriately licensed and qualified individuals in accordance with applicable regulations (i.e., American Society for Testing and Materials [ASTM] E 1527-05, and 40 Code of Federal Regulations [CFR], Subchapter R, Toxic Substances Control Act [TSCA], Part 716). If the predemolition surveys do not find ACMs, LBPs, PCB-containing electrical fixtures, or other hazardous building materials, the inspectors shall provide documentation of the inspection and its results to the City Building Department to confirm that no further abatement actions are required.</p> <p>If the predemolition surveys find evidence of ACMs, LBPs, or PCB-containing electrical fixtures, or other hazardous building materials, all such materials shall be removed, handled, and properly disposed of by appropriately licensed contractors according to all applicable regulations during demolition of structures (40 CFR, Subchapter R, TSCA, Parts 745, 761, and 763). Air monitoring during these predemolition surveys shall be completed, as applicable, by appropriately licensed and qualified individuals in accordance with applicable regulations both to ensure adherence to applicable regulations (e.g., South Coast Air Quality Management District [SCAQMD]) and to provide safety to workers and the adjacent community.</p> <p>The City shall provide documentation (e.g., all required waste manifests, sampling, and air monitoring analytical results) to the County of Orange (County) Environmental Health Division showing that abatement of any ACMs, LBPs, PCB-containing electrical fixtures, or other hazardous building materials identified in these structures has been completed in full compliance with all applicable regulations and approved by the appropriate regulatory agency(ies) (40 CFR, Subchapter R, TSCA, Parts 716, 745, 761, 763, and 795 and California Code of Regulations [CCR] Title 8, Article 2.6). An Operating & Maintenance (O&M) Plan shall be prepared for any ACM, LBP, PCB-containing fixtures, or other hazardous building materials to remain in place and will be reviewed and approved by the County Environmental Health Division.</p>	<p>City of Garden Grove Building Official or designee</p>	<p>Prior to issuance of demolition activities</p>

Table 4.A: Mitigation and Monitoring Reporting Program

Mitigation Measures	Responsible Party	Timing for Mitigation Measure
<p>HAZ-2: Contingency Plan. Prior to commencement of grading activities, the Director of the County Environmental Health Division, or designee, shall review and approve a contingency plan that addresses the procedures to be followed should on-site unknown hazards or hazardous substances be encountered during demolition and construction activities. The plan shall indicate that if construction workers encounter underground tanks, gases, odors, uncontained spills, or other unidentified substances, the contractor shall stop work, cordon off the affected area, and notify the Garden Grove Fire Department (GGFD). The GGFD responder shall determine the next steps regarding possible site evacuation, sampling, and disposal of the substance consistent with local, State, and federal regulations.</p>	<p>Director of the Orange County Environmental Health Division, or designee</p>	<p>Prior to the commencement of grading activities</p>
<p>3.9 Hydrology and Water Quality</p>		
<p>The proposed project would not result in significant adverse impacts related to hydrology and water quality. No mitigation would be required.</p>		
<p>3.10 Land Use/Planning</p>		
<p>The proposed project would not result in significant adverse impacts related to land use/planning. No mitigation would be required.</p>		
<p>3.11 Mineral Resources</p>		
<p>The proposed project would not result in significant adverse impacts related to mineral resources. No mitigation would be required.</p>		
<p>3.12 Noise</p>		
<p>NOISE-1: Prior to issuance of occupancy permits, the City of Garden Grove (City) Building Official, or designee, shall verify that mechanical ventilation, such as an air-conditioning system, has been installed in all frontline dwelling units along Stanford Avenue and Acacia Parkway.</p>	<p>City of Garden Grove Building Official, or designee</p>	<p>Prior to the issuance of occupancy permits</p>
<p>3.13 Population and Housing</p>		
<p>The proposed project would not result in significant adverse impacts related to population or housing. No mitigation would be required.</p>		
<p>3.14 Public Services and Utilities</p>		
<p>The proposed project would not result in significant adverse impacts related to public services or utilities. No mitigation would be required.</p>		
<p>3.15 Recreation</p>		
<p>The proposed project would not result in significant adverse impacts related to recreation. No mitigation would be required.</p>		
<p>3.16 Transportation/Traffic</p>		
<p>TRAFFIC-1: Director of the City of Garden Grove Public Works Department, or designee, prior to issuance of any demolition or grading permits.</p> <p>The Construction Staging and Traffic Management Plan would also include the name and phone number of a contact person who can be reached 24 hours a day regarding construction traffic complaints or emergency situations. In addition, the Construction Staging and Traffic Management Plan shall take into account and be coordinated with other Construction Staging and Traffic Management Plans that are in effect or have been proposed for other projects in the City of Garden Grove. The Construction Staging and Traffic Management Plan shall include, but not be limited to, the following:</p>		

Table 4.A: Mitigation and Monitoring Reporting Program

Mitigation Measures	Responsible Party	Timing for Mitigation Measure
<ul style="list-style-type: none"> • All emergency access to the project site and adjacent areas shall be kept clear and unobstructed during all phases of demolition and construction. • Flag persons shall be provided in adequate numbers to minimize impacts to traffic flow and to ensure safe access into and out of the site. • Flag persons shall be trained to assist in emergency response by restricting or controlling traffic movements that could interfere with emergency vehicle access. • Construction vehicles, including construction personnel vehicles, shall not park on public streets. • Construction vehicles shall not stage or queue where they would interfere with pedestrian and vehicular traffic or block access to nearby businesses or residential areas. • If feasible, any traffic lane closures would be limited to off-peak traffic periods, as approved by the City of Garden Grove Public Works Department 		
<p>3.17 Utilities/Service Systems The proposed project would not result in significant adverse impacts related to utilities/service systems. No mitigation would be required.</p>		

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APPENDIX A

**AIR QUALITY AND GREENHOUSE GAS EMISSIONS
DATA SHEETS**

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APPENDIX B

BIOLOGICAL RESOURCES ASSESSMENT MEMORANDUM

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APPENDIX C
GEOTECHNICAL REPORT

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APPENDIX D
NOISE DATA SHEETS

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APPENDIX E
PARKING ANALYSIS

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APPENDIX F

PHASE I ENVIRONMENTAL SITE ASSESSMENT

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APPENDIX G

WATER QUALITY MANAGEMENT PLAN

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