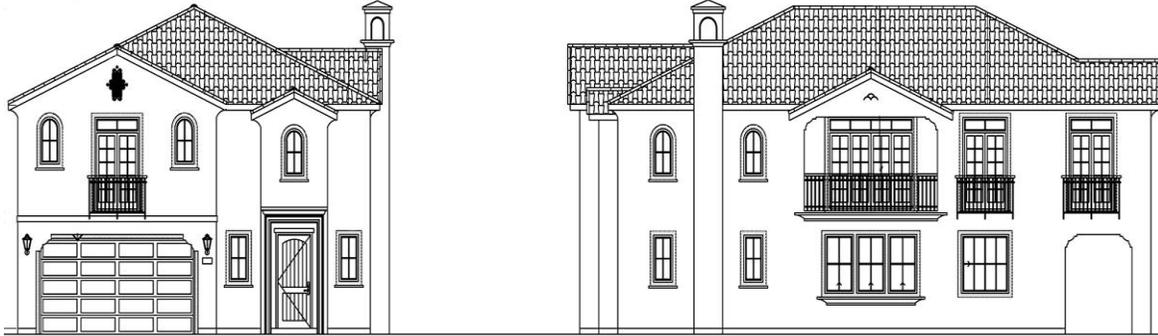


MITIGATED NEGATIVE DECLARATION

STARFISH RESIDENTIAL PROJECT



Lead Agency:

City of Fountain Valley
10200 Slater Avenue
Fountain Valley, CA 92708
(714) 593-4400

Project Proponent:

Keystone DCS, Inc.
9140 Trask Avenue, Suite 202
Garden Grove, CA 92844
(714) 791-3771

Environmental Consultant:

Phil Martin & Associates
1809 E. Dyer Road, Suite 301
Santa Ana, California 92705
(949) 454-1800

June 2, 2021

Environmental Checklist

For CEQA Compliance

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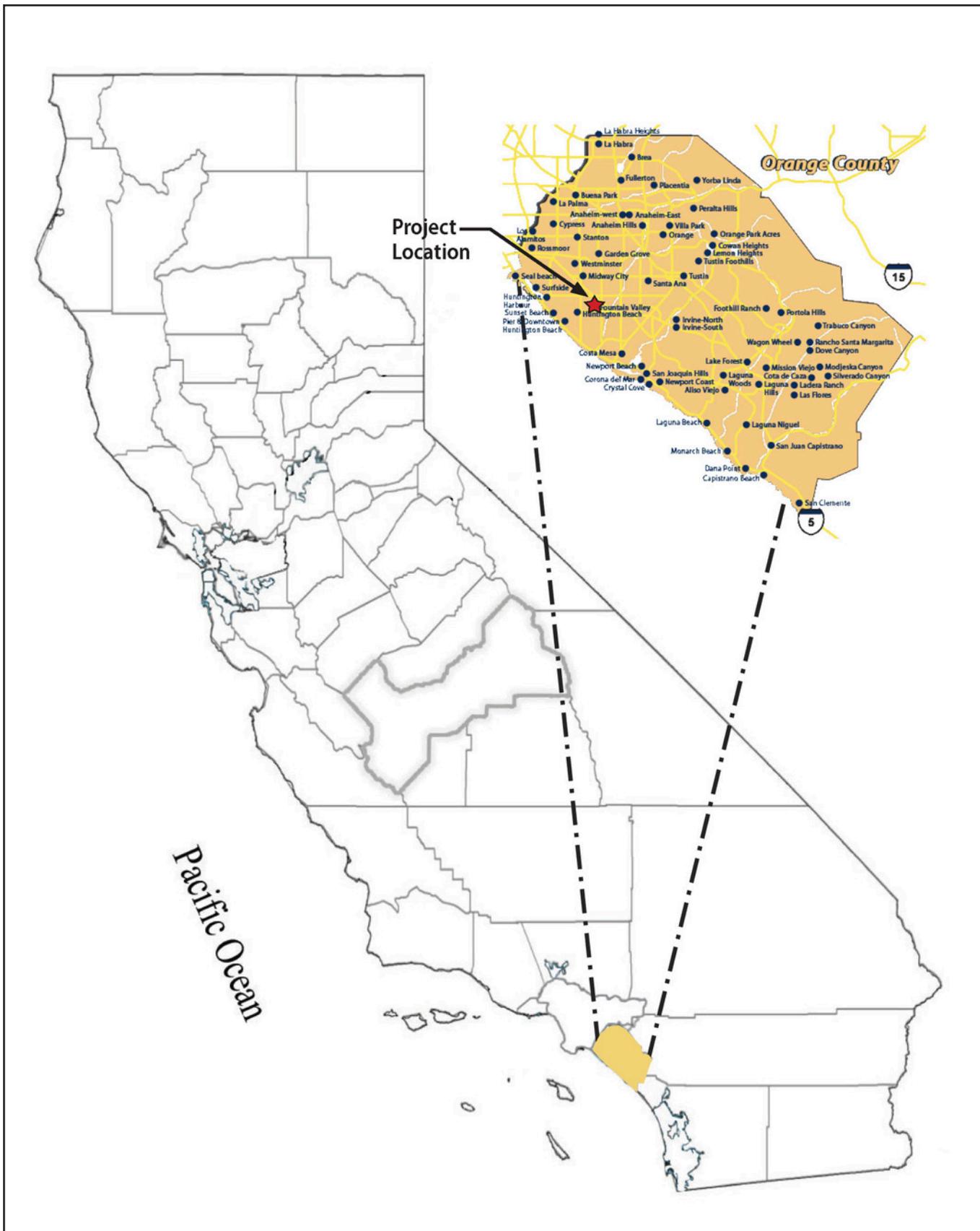
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PLANNING DEPARTMENT

1. **Project Title:** Starfish Residential Project
2. **Lead Agency Name and Address:** City of Fountain Valley
10200 Slater Avenue
Fountain Valley, CA 90201
3. **Contact Person and Phone Number:** Matt Jenkins, Senior Planner (714) 593-4427
4. **Project Location:** The project is located in the City of Fountain Valley as shown in Figure 1, Regional Map. More specifically, the project is located at 9801 Starfish Avenue as shown in Figure 2, Vicinity Map. An aerial photograph of the site and surrounding area is shown in Figure 3, Aerial Photo. Figure 4 is a topography map that shows the topography on the site and surrounding areas.
5. **Project Sponsor's Name and Address:** Keystone DCS, Inc.
2961 W. MacArthur Boulevard, Suite 210
Santa Ana, CA 92704
(714) 791-3771
6. **General Plan Designation:** The project site is designated as Low Density Residential by the Fountain Valley General Plan. The project would require a General Plan Amendment to Low Medium Density Residential (up to 10.8 dwelling units/acre).
7. **Zoning:** The site is zoned R-1 (Low Density Residential) by the Fountain Valley Zoning Map. The project would require a zone change to GH (Garden Homes) to allow the development of the proposed seven single-family detached residential units.
8. **Description of Project:** The project site totals approximately 1.02 acres and includes one parcel (APN 167-232-01). The project site is vacant and located adjacent to and east of the Huntington Valley Baptist church. The only improvement on the site is a concrete basketball court that is located in the southern portion of the site.

The project applicant proposes the development of seven (7) market rate, two-story single-family detached residential units at a density of 6.86 dwelling units per acre. The project proposes 23 parking spaces, including two spaces per unit in an enclosed garage and nine (9) guest parking spaces along the private on-site street. Access to the project site would be from Starfish Avenue that extends along the southern project boundary. The project would construct a new private street that would extend from Starfish Avenue to the north end of the site where it turns into a driveway at the residential unit at the north end of the site.

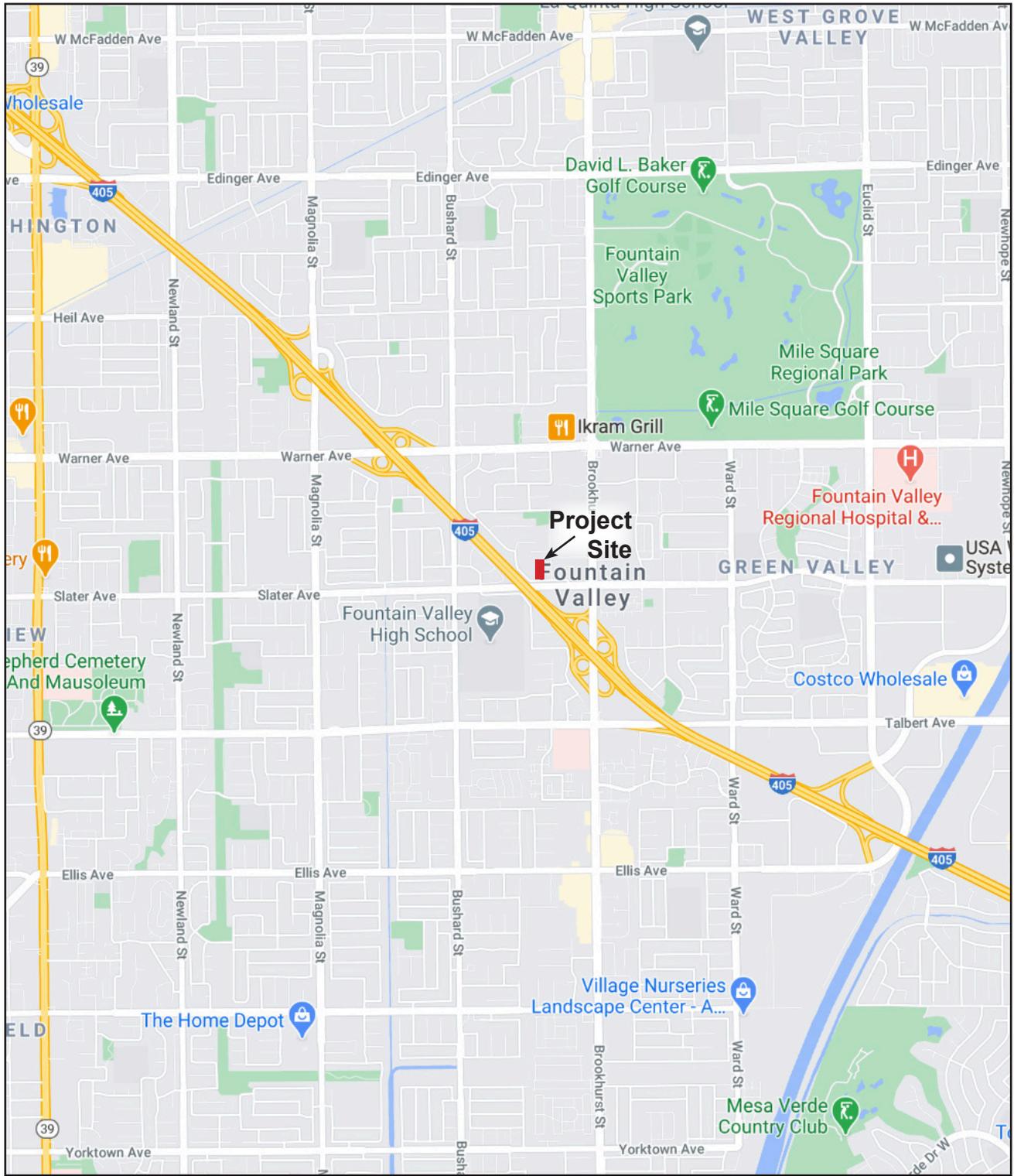
Per the Fountain Valley Municipal Code (FVMC), the maximum allowable density in the R-1 zone is 5 dwelling units per acre (DU/AC). Thus, as currently zoned, the 1.02 acre site would allow a maximum of 5 residential units. The GH zone allows a maximum density of 10.8 DU/AC. Thus, the proposed GH Zone applied to the 1.02 acre site would allow a maximum development of 11 dwelling units. The density of the project is 6.86 DU/AC (7 dwelling units ÷ 1.02 acres = 6.86 DU/AC) and is within the maximum allowable density of 10.8 DU/AC allowed in the requested GH zone for the project site. The project proposes four (4) different floor plans. All of the homes would have four bedrooms and 4.5



Source: Phil Martin & Associates, Inc.



Figure 1
Regional Map



Source: Google Maps

Figure 2
Local Vicinity Map

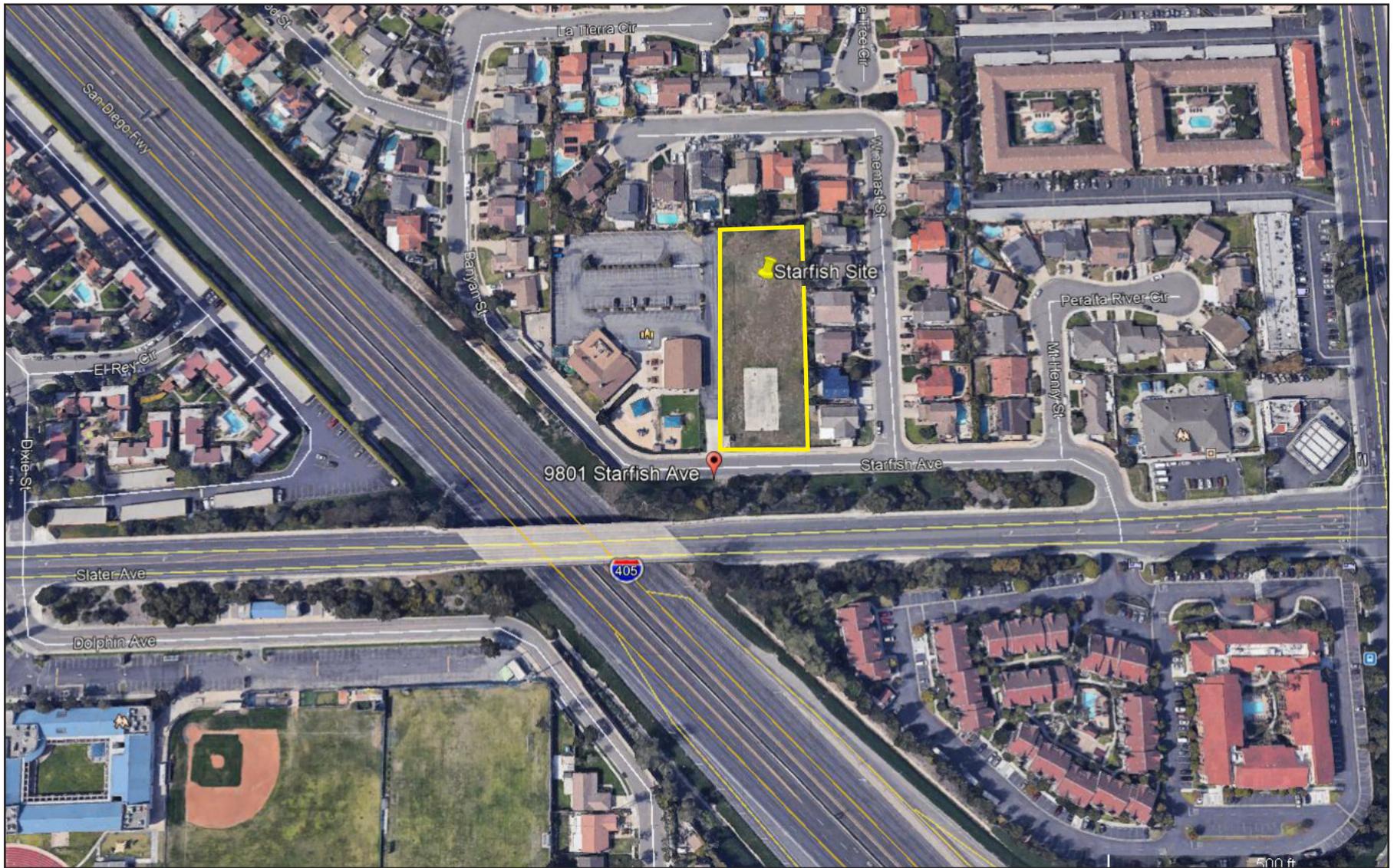
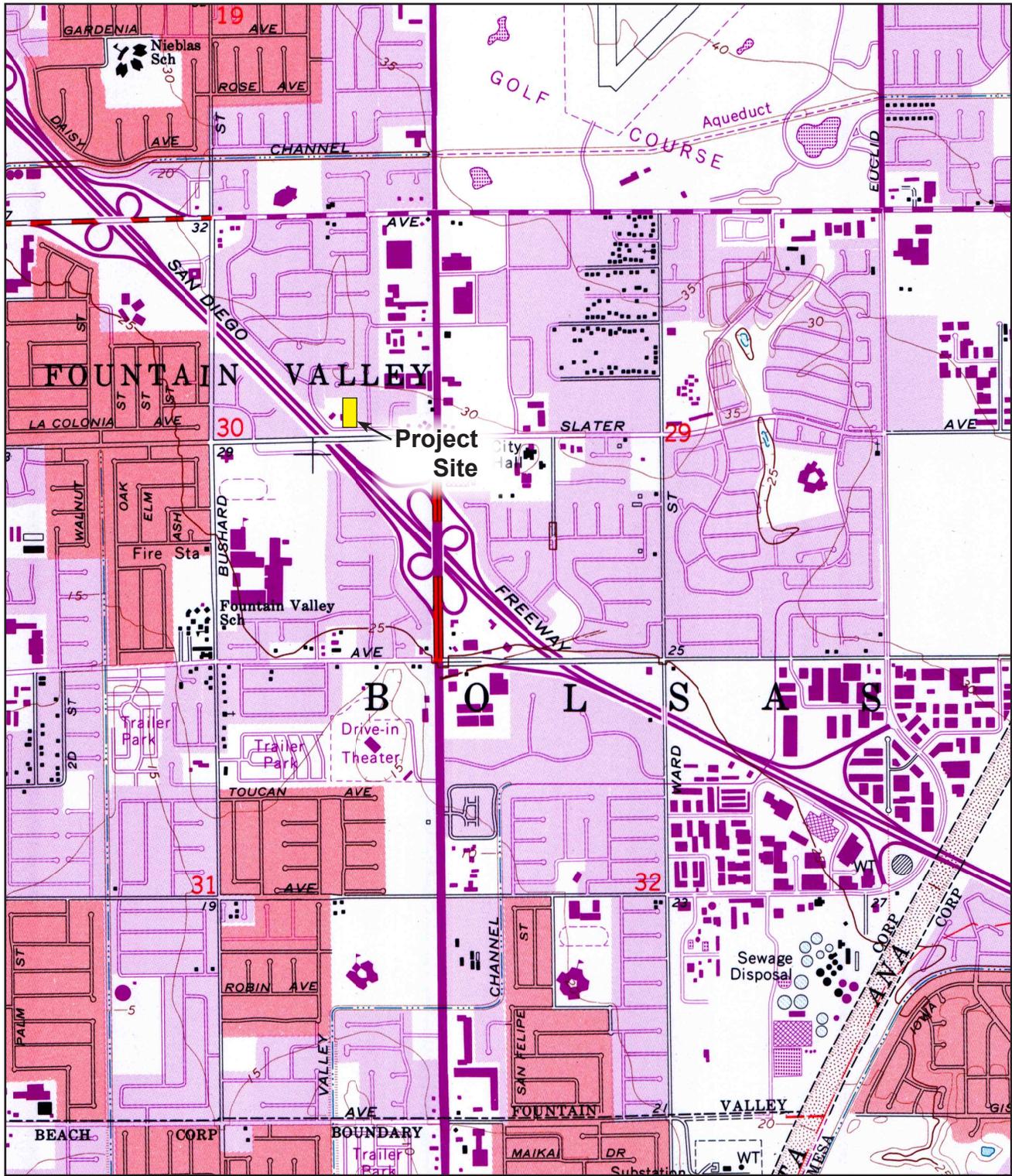


Figure 3
Aerial Photo



Source: U.S. Dept. of Interior

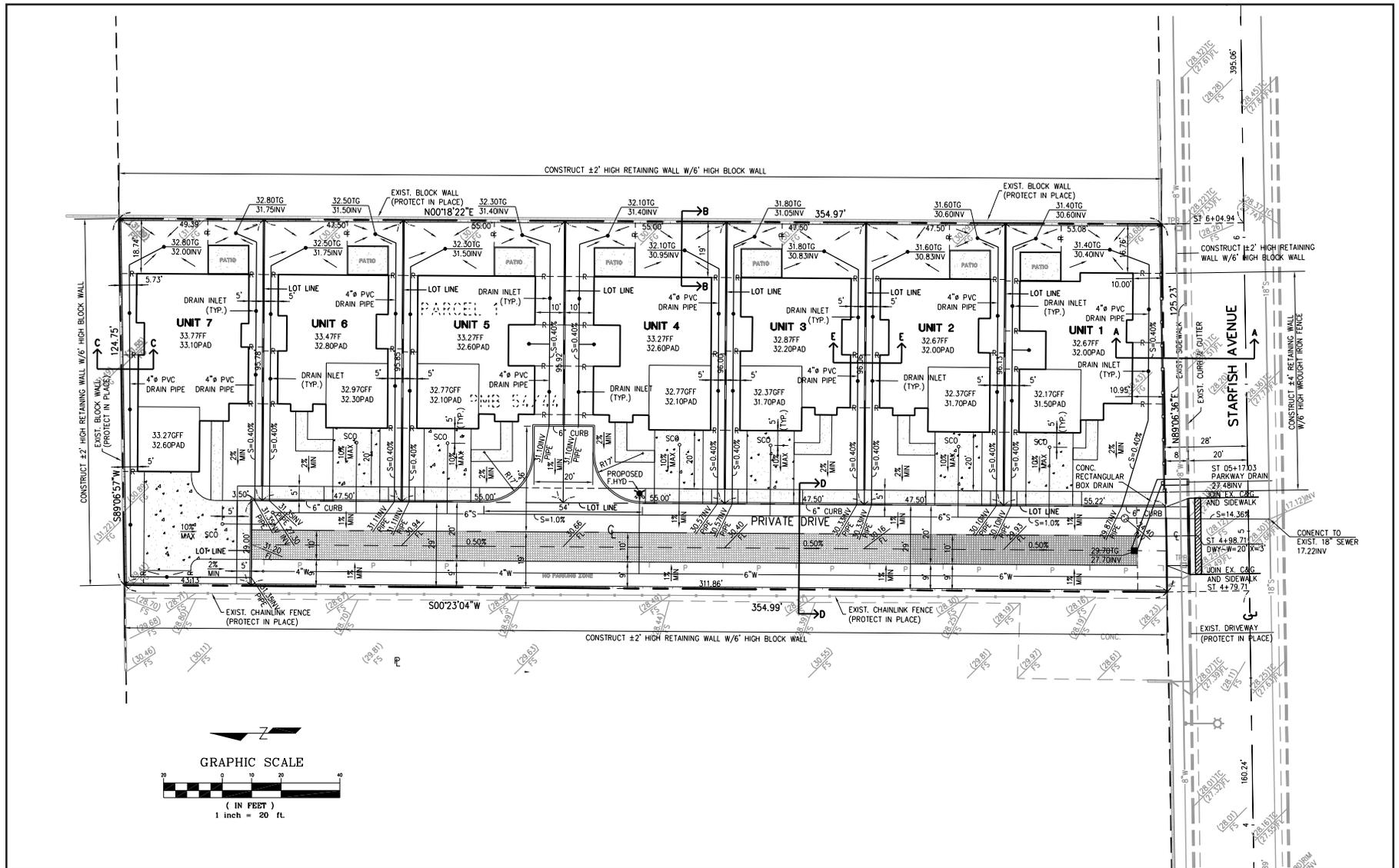
Figure 4
Topo Map

bathrooms and range in size from 2,408 square feet up to 3,180 square feet. All units would have 2-car garages and the lots would range from 4,552 square feet for the smallest lot to 5,989 square feet for the largest lot. The units would have a minimum front yard setback of twenty (20) feet, a rear yard setback that would range from approximately 16' to 19', and five (5) foot side-yard setbacks. The residential unit adjacent to Starfish Avenue would have a ten (10) foot side yard setback and the residential unit at the north end of the site would have a 5'9" side yard set from the north property line. The architectural style is American-Colonial.

A homeowner's association would maintain the common open space and private street. The project is scheduled to be constructed in one phase with construction tentatively scheduled to start in September 2021 and completed in June 2022. The proposed site plan is shown in Figure 5.

9. **Surrounding Land Uses and Setting:** The land uses surrounding the project site include single-family detached residences to the north and east. Adjacent to and west of the site is the Huntington Valley Baptist church and the Huntington Valley Preschool, west of the church is the San Diego (405) freeway. Starfish Avenue forms the southern project boundary. Figure 6 shows a photograph of the on-site land use and Figure 7 shows photographs of the surrounding land uses. Figure 8 is a photo orientation map of the surrounding land uses.
10. **Other Public Agencies whose approval is Required:** The discretionary approvals required from the City of Fountain Valley includes a General Plan Amendment from Low Density Residential to Low Medium Density Residential, a zone change from R-1 (Low Density Residential) to GH (Garden Homes), approval of Tentative Tract Map No. 18186 to divide the 1.02 acre site into seven detached units and private street and common areas and a Conditional Use Permit (CUP) to allow the development of the residential units in the GH zone. No other public agency approvals are required.
11. **Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code Section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?** Tribal letters were mailed March 31, 2021 to six tribes and formally inviting consultation with the city in compliance with 21080.3.1. The tribes that were contacted includes:
 1. Gabrieliño Ban of Mission Indians – Kizh Nation
 2. Gabrieleño/Tongva Nation
 3. Gabrieleño/Tongva Indians of California Tribal Council
 4. Juaneno Band of Mission Indians – Acjachemen Nation
 5. Gabrieliño – Tongva Tribe
 6. Gabrieleño/Tongva San Gabriel Band of Mission Indians

Note: Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process. (See Public Resources Code section 21080.3.2) Information may also be available from the California Native American Heritage Commission's Sacred Lands File per Public Resources Code section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that Public Resources Code section 21082.3 (c) contains provisions specific to confidentiality.



Source: DMS Consultants, Inc.

Figure 5
Site Plan



Figure 6
On-Site Photograph



A. Huntington Valley Baptist Church and church school west of site



B. Residential Homes North of Site



C. Residential Homes East of Site



D. Slater Avenue South of Site

Figure 7
Off-Site Photographs

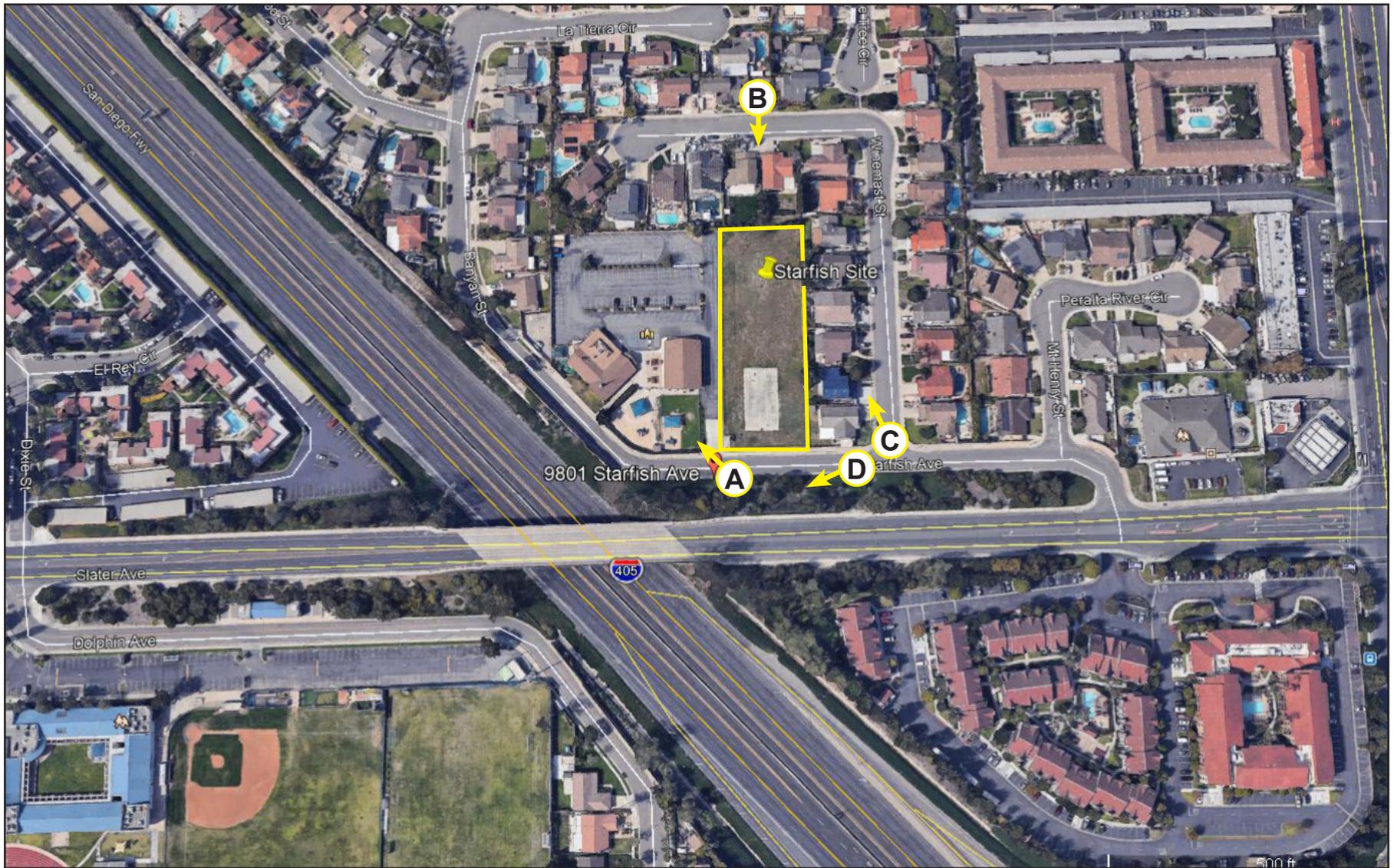


Figure 8
Photo Orientation Map

12. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

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

<input type="checkbox"/> Aesthetics	<input type="checkbox"/> Agriculture and Forestry Resources	<input checked="" type="checkbox"/> Air Quality
<input type="checkbox"/> Biological Resources	<input type="checkbox"/> Cultural Resources	<input type="checkbox"/> Energy
<input type="checkbox"/> Geology/Soils	<input type="checkbox"/> Greenhouse Gas Emissions	<input type="checkbox"/> Hazards and 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	<input checked="" type="checkbox"/> Tribal Cultural Resources
<input type="checkbox"/> Utilities/Service Systems	<input type="checkbox"/> Wildfire	<input type="checkbox"/> Mandatory Findings of Significance

13. Determination: (To be completed by the Lead Agency)

On the basis of this initial evaluation:

- I find that the proposed project COULD NOT have a significant impact on the environment, and a NEGATIVE DECLARATION will be prepared.
- I find that although the proposed project could have a significant impact on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find that the proposed project MAY have a significant effect on the environment and an ENVIRONMENTAL IMPACT REPORT is required.
- I find that the proposed project MAY have a “potentially significant impact” or “potentially significant unless mitigated” impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on an earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but must analyze only the effects that remain to be addressed.
- I find that although the proposed project could have a significant effect on the environment, because all 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.

Signature:

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 will 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,” as described in (5) below may be cross-referenced).
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 significance.

14. Issues:

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

I. AESTHETICS: Except as provided in Public Resources Code Section 21099, would the project:

- | | | | | |
|---|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| 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) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| d) Create a new source of substantial light or glare that will adversely affect day or nighttime views in the area? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

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

- | | | | | |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Convert Prime Farmland, Unique Farmland, 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?
- 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))?
- d) Result in the loss of forest land or conversion of forest land to non-forest use?
- e) Involve other changes in the existing environment, which due to their location or nature, could individually or cumulatively result in the loss of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

III. AIR QUALITY: Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:

- a) Conflict with or obstruct implementation of the applicable air quality plan?
- b) Result in a cumulatively considerable net increase of any criteria pollutants for which the project region is non-attainment under an applicable federal or state ambient air quality standard?
- c) Expose sensitive receptors to substantial pollutant concentrations?
- d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

IV. BIOLOGICAL RESOURCES: Would the project:

- a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies or regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?
- 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?
- c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?
- 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?

- e) Conflict with any local policies or ordinances protecting biological resources, such as tree preservation policy or ordinance?
- 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?

V. CULTURAL RESOURCES: Would the project:

- a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?
- b) Cause a substantial adverse change in the significance of a unique archaeological resource as defined in §15064.5?
- c) Disturb any human remains, including those interred outside of formal cemeteries?

VI. ENERGY: Would the project:

- a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?
- b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

VII. GEOLOGY AND SOILS: Would the project:

- a) Directly or indirectly cause 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.)
 - ii. Strong seismic ground shaking?
 - iii. Seismic-related ground failure, including liquefaction?
 - iv. Landslides?
- b) Result in substantial soil erosion or loss of topsoil?
- 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?

- d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?
- 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 waste water?
- f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

VIII. GREENHOUSE GAS EMISSIONS Would the project:

- a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?
- b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

IX. HAZARDS AND HAZARDOUS MATERIALS: Would the project:

- a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?
- b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?
- c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?
- 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?
- 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, will the project result in a safety hazard or excessive noise for people working or residing in the project area?
- f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?
- g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

X. HYDROLOGY AND WATER QUALITY. Would the project:

- | | | | | |
|--|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin? | <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 or through the addition of impervious surfaces in a manner, which would: | | | | |
| (i) result in substantial erosion or siltation on- or off-site; | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| (ii) 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"/> |
| (iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| (iv) impede or redirect flood flows? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

XI. LAND USE AND PLANNING: Would the project:

- | | | | | |
|---|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| a) Physically divide an established community? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Cause a significant environmental impact due to a conflict with any land use plan, policy or regulation adopted for the purpose of avoiding or mitigation an environmental effect? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

XII. MINERAL RESOURCES: Would the project:

- | | | | | |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

XIII. NOISE: Would the project result in:

- | | | | | |
|--|--------------------------|--------------------------|-------------------------------------|--------------------------|
| a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|--|--------------------------|--------------------------|-------------------------------------|--------------------------|

established in the local general plan or noise ordinance, or applicable standards of other agencies?

- | | | | | |
|--|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| b) Generation of excessive groundborne vibration or groundborne noise levels? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport, will 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"/> |

XIV. POPULATION AND HOUSING: Would the project:

- | | | | | |
|--|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| a) Induce substantial unplanned 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 people or housing, necessitating the construction of replacement housing elsewhere? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

XV. PUBLIC SERVICES:

- | | | | | |
|---|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, 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: | | | | |
| Fire protection? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Police protection? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Schools? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Parks? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Other public facilities? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

XVI. RECREATION:

- | | | | | |
|--|--------------------------|--------------------------|-------------------------------------|--------------------------|
| 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 that might have an adverse physical effect on the environment? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

XVII. TRANSPORTATION: Would the project:

- | | | | | |
|--|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| d) Result in inadequate emergency access? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

XVIII. TRIBAL CULTURAL RESOURCES:

- | | | | | |
|---|--------------------------|-------------------------------------|--------------------------|--------------------------|
| a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is: | | | | |
| i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1 (k), or | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe. | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

XIX. UTILITIES AND SERVICE SYSTEMS: Would the project:

- | | | | | |
|--|--------------------------|--------------------------|-------------------------------------|--------------------------|
| a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

- c) 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?
- d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?
- e) Comply with federal, state and local management and reduction statutes and regulations related to solid waste?

XX. WILDFIRE – If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:

- a) Substantially impair an adopted emergency response plan or emergency evacuation plan?
- b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?
- c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?
- d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

XXI. MANDATORY FINDINGS OF SIGNIFICANCE:

- a) Does the project have the potential to substantially 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, substantially 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?
- 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.)

- c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?

15. Explanation of Issues

I. AESTHETICS: Would the project:

- a) **Have a substantial adverse effect on a scenic vista? No Impact.** The project site is not part of any approved or designated scenic vista. Furthermore, the Fountain Valley General Plan does not designate any scenic vista that is either adjacent to or directly visible from the site. The San Diego freeway that is located approximately 200 feet west of the project is not an Eligible or Officially Designated state scenic highway. The project would not impact a scenic vista.
- b) **Substantially damage scenic resources, including but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway? No Impact.** There are no Officially Designated or Eligible state scenic highways and no scenic resources such as trees, rock outcroppings, or historic buildings within a state scenic highway either adjacent to or in direct view from the site that would be removed or altered by the project. The project would not impact a state scenic resource.
- c) **In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality? Less Than Significant Impact.** The project is located within an urbanized area.¹ The project would remove the existing concrete basketball court on the property to develop seven single-family detached residential homes and other supporting site improvements, including an on-site private street, block walls, guest parking, landscaping, open space, etc. The proposed residential units would reflect an Italian architectural style. New landscaping would be installed consisting of ten (10) street trees within the street set-back along the north side of Starfish Avenue and landscaping within the private yards.

The proposed two-story residential units would be a maximum height of 29 feet. The architectural design character includes building elevations that are detailed and articulated with projections and recesses to avoid long and plain surfaces. Building massing would be further minimized through the use of differentiated building materials, and colors and incorporation of architectural features such as recessed balconies and windows and decorative railings. Typical building elevations of the proposed two-story residential units are shown in Figure 9. The design and architecture of the proposed residential units along with landscaped private open space would improve the aesthetics of the site for the local residents. The project would be required by the City to comply with the development standards that are required for the requested GH (Garden Homes) zoning for the site. The project would not have any aesthetic impacts.

- d) **Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area? Less Than Significant Impact.** The church and the associated Huntington Valley Preschool would remain and any light and/or glare generated by the existing church and church preschool would continue with the project.

New sources of light generated by the project include City required street lights, interior and exterior lighting of each residential unit, landscape lighting and car headlights. These new sources of lighting

¹ CEQA Guidelines §15387.

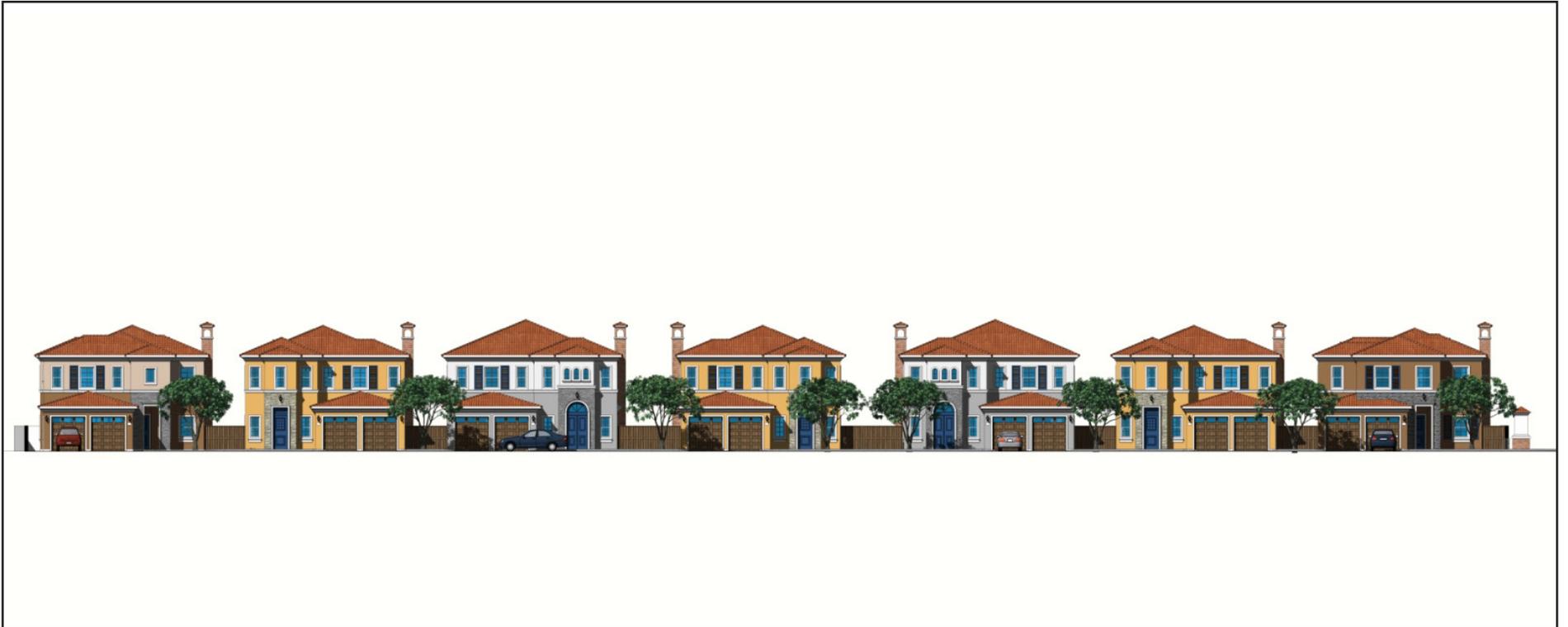


Figure 9
**Building Elevations
(Looking East)**

would increase the amount of light that is currently generated from the site. Private street lighting fixtures will be on sensors for automatic nighttime lighting. Private street lights will include shielding devices and direct or reflect light downward.

Nighttime lighting of the proposed residential units would be visible to the surrounding land uses, including the residents directly east and north of the site. The interior light of the two-story residents would be directly visible to the existing residents to the north and east. Although interior and exterior lights of the proposed residential units would be visible to the existing residents to the north and east of the project, especially lights of the second story units, the intensity of the light would not be greater than light of other existing residential development in the immediate project area.

While the headlights of the cars that would drive in and out of the site would increase the amount of light and glare on Starfish Avenue and the immediate area, the headlights of the cars currently on Starfish Avenue generate light and glare in the immediate project vicinity. While the headlights of the cars generated by the project would incrementally increase the amount of nighttime light and glare in the immediate project vicinity, the light and glare would not be new or unique to the immediate area and is not anticipated to significantly impact area residents.

There is minimal glare currently generated from the portion of the site that is proposed for development since it is mostly vacant land and a basketball court. Since glare is generated by the existing church and residences in the immediate project area, glare is not unique to the area. While glare is not new or unique to the site, the project would generate more glare from metal surfaces and glazing of the proposed residential units and other site improvements.

The project would not generate any new sources of light or glare that is significantly greater or different from the light and glare that is generated by the existing residential development and church adjacent to and surrounding the project site. The project would include outdoor lighting on the proposed residential units that is typical of the exterior lighting on the residential homes in the immediate project vicinity. The street lights of the project would also be similar to other streets lights in the residential development in the project area.

The project must comply with Fountain Valley Municipal Code Section 21.18.060 which sets the standards for the amount of light and glare the project can generate to protect both project residents and the existing residents adjacent to the site. Because the project would not generate greater levels of light or glare that currently exists in the project area and must comply with Fountain Valley Municipal Code Section 21.18.060 the project would not have any significant light or glare impacts.

II. AGRICULTURE AND FORESTRY RESOURCES: Would the project:

- 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? No Impact.*** The project site is vacant. There is no agricultural use either on or adjacent to the site. The site is designated "Urban and Built-Up Land" by the latest State of California Department of Conservation Orange County Important Farmland 2016 map². The project would not convert prime, unique, or farmland of statewide importance to non-agricultural use and impact farmland.

- b) ***Conflict with existing zoning for agricultural use, or a Williamson Act contract? No Impact.*** The project site is not in a Williamson Act contract. The existing R-1 (Low Density Residential) zoning

² <https://maps.conservation.ca.gov/DLRP/CIFF/>

designation on the site does not allow agricultural use and the requested GH zone does not allow agricultural use. The project would not conflict with any existing agricultural use or a Williamson Act contract.

- 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))?** **No Impact.** There are no timber or forests in the City of Fountain Valley. The requested zone change to GH (Garden Homes) does not allow timber or forest production. The project would not impact any forest or timber production.
- d) **Result in the loss of forest land or conversion of forest land to non-forest use?** **No Impact.** See Response to section "II.c" above.
- e) **Involve other changes in the existing environment, which due to their location or nature, could individually or cumulatively result in the loss of Farmland, to non-agricultural use?** **No Impact.** The project would not result in the loss of any farmland, either individually or cumulatively, and would have no impact to farmland.

III. AIR QUALITY: Would the project:

- a) **Conflict with or obstruct implementation of the applicable air quality plan?** **Less Than Significant Impact.** The U.S. Environmental Protection Agency (U.S. EPA) is the primary federal agency for regulating air quality. The EPA implements the provisions of the Federal Clean Air Act (FCAA). This Act establishes National Ambient Air Quality Standards (NAAQS) that are applicable nationwide. The EPA designates areas with pollutant concentrations that do not meet the NAAQS as non-attainment areas for each criteria pollutant. States are required by the FCAA to prepare State Implementation Plans (SIP) for designated non-attainment areas. The SIP is required to demonstrate how the areas would attain the NAAQS by the prescribed deadlines and what measures would be required to attain the standards. The EPA also oversees implementation of the prescribed measures. Areas that achieve the NAAQS after a non-attainment designation are redesignated as maintenance areas and must have approved Maintenance Plans to ensure continued attainment of the NAAQS.

The California Clean Air Act (CCAA) required all air pollution control districts in the state to prepare plans to reduce pollutant concentrations exceeding the California Ambient Air Quality Standards (CAAQS) and ultimately achieve the CAAQS. The districts are required to review and revise these plans every three years. The South Coast Air Quality Management District (SCAQMD), in which the project is located, satisfies this requirement through the publication of an Air Quality Management Plan (AQMP). The AQMP is developed by SCAQMD and the Southern California Association of Governments (SCAG) in coordination with local governments and the private sector. The AQMP is incorporated into the SIP by the California Air Resources Board (CARB) to satisfy FCAA requirements discussed above.

The CCAA requires plans to demonstrate attainment of the NAAQS for which an area is designated as nonattainment. Further, the CCAA requires SCAQMD to revise its plan to reduce pollutant concentrations exceeding the CAAQS every three years. In the South Coast Air Basin (SCAB), SCAQMD and SCAG, in coordination with local governments and the private sector, develop the AQMP for the air basin to satisfy these requirements. The AQMP is the most important air management document for the basin because it provides the blueprint for meeting state and federal ambient air quality standards.

On December 7, 2012, the 2012 AQMP was adopted by the SCAQMD Governing Board. The primary task of the 2012 AQMP is to bring the basin into attainment with federal health-based standards for unhealthy fine particulate matter (PM_{2.5}) by 2014. The document states that to have any reasonable expectation of meeting the 2023 ozone deadline, the scope and pace of continued air quality improvement must greatly intensify.

AQMPs are required to be updated every three years. The 2016 AQMP was adopted by the SCAQMD Board on March 3, 2017, and has been submitted to the California Air Resources Board for forwarding to the EPA. The 2016 AQMP acknowledges that motor vehicle emissions have been effectively controlled and that reductions in NO_x, the continuing ozone problem pollutant, may need to come from major stationary sources (power plants, refineries, landfill flares, etc.). The current attainment deadlines for all federal non-attainment pollutants are now as follows:

- 8-hour ozone (70 ppb) 2032
- Annual PM-2.5 (12 µg/m³) 2025
- 8-hour ozone (75 ppb) 2024 (old standard)
- 1-hour ozone (120 ppb) 2023 (rescinded standard)
- 24-hour PM-2.5 (35 µg/m³) 2019

The project does not directly relate to the AQMP in that there are no specific air quality programs or regulations governing residential projects. Conformity with adopted plans, forecasts and programs relative to population, housing, employment and land use is the primary yardstick by which impact significance of planned growth is determined. The SCAQMD, however, while acknowledging that the AQMP is a growth-accommodating document, does not favor designating regional impacts as less than significant just because a proposed development is consistent with regional growth projections. Air quality impact significance for the project has therefore been analyzed on a project-specific basis.

The proposed project would not significantly affect regional air quality plans. According to section “XVII Transportation” of this MND, the project would not generate new or additional vehicle emissions that exceed AQMD adopted thresholds based on the air quality analysis that concludes no significant air quality impact. Therefore, the project is consistent with and would not impact the AQMP.

- b) ***Result in a cumulatively considerable net increase of any criteria pollutants for which the project region is non-attainment under an applicable federal or state ambient air quality standard? Less Than Significant Impact.*** Cumulative projects include local development as well as general growth within the project area. However, as with most development, the greatest source of emissions is from mobile sources, which travel well out of the local area. Therefore, from an air quality standpoint, the cumulative analysis would extend beyond any local projects and when wind patterns are considered, would cover an even larger area.

The project is located within the SCAB and non-attainment for ozone and PM₁₀ particulate matter. Construction and operation of cumulative projects would further degrade the local air quality, as well as the air quality of the South Coast Air Basin. The greatest cumulative impact on the regional air quality is the incremental addition of pollutants mainly from increased traffic from residential, commercial, and industrial development and the use of heavy equipment and trucks associated with the construction of these projects. Air quality would be temporarily degraded during construction activities that occur separately or simultaneously. However, in accordance with the SCAQMD methodology, projects that do not exceed the SCAQMD criteria or can be mitigated to less than criteria levels are not significant and do not add to the overall cumulative impact.

As stated in section “III.c” below, the project would not generate any short- or long-term air emissions that exceed SCAQMD emission thresholds. Therefore, the project would not have any significant cumulative criteria pollutant impacts.

- c) **Expose sensitive receptors to substantial pollutant concentrations? Potentially Significant Unless Mitigation Incorporated.** An air quality and greenhouse gas report³ was prepared for the project. A copy of the air quality and greenhouse gas report is attached in Appendix A.

Criteria Pollutants, Health Effects, and Standards

Under the Federal Clean Air Act (FCAA), the U.S. EPA has established National Ambient Air Quality Standards (NAAQS) for six major pollutants; ozone (O₃), respirable particulate matter (PM₁₀), fine particulate matter (PM_{2.5}), carbon monoxide (CO), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), and lead. These six air pollutants are often referred to as the criteria pollutants. The NAAQS are two tiered: primary, to protect public health, and secondary, to prevent degradation to the environment (i.e., impairment of visibility, damage to vegetation and property).

Under the California Clean Air Act, the California Air Resources Board has established California Ambient Air Quality Standards (CAAQS) to protect the health and welfare of Californians. State standards have been established for the six criteria pollutants as well as four additional pollutants; visibility reducing particles, sulfates, hydrogen sulfide, and vinyl chloride.

Table 1 presents the state and national ambient air quality standards. A brief explanation of each pollutant and their health effects is presented in the Table 1 footnotes.

Monitored Air Quality

Long-term air quality monitoring is carried out by the SCAQMD at various monitoring stations. The SCAQMD has divided the South Coast Air Basin into 38 air-monitoring areas with a designated ambient air monitoring station representative of each area. There are no nearby stations to the project that monitor the full spectrum of pollutants. However, the Anaheim monitoring station that is the closest air monitoring station to the project, monitors measures both regional pollution levels such as smog, ozone, 10 and 2.5 micron particulate matter (PM-10, PM-2.5) and nitrogen oxides (NOx). Table 2 summarizes a six year summary of monitoring data for the major air pollutants from this air monitoring station.

Air Emission Thresholds

The SCAQMD has developed significance thresholds based on the volume of pollution emitted rather than actual ambient air quality because the direct air quality impact of a project is not quantifiable on a regional scale. The SCAQMD California Environmental Quality Act (CEQA) Handbook states that any project in the South Coast Air Basin with daily emissions that exceed any of the identified significance thresholds should be considered as having an individually and cumulatively significant air quality impact. For the purposes of this air quality impact analysis, a regional air quality impact would be considered significant if emissions exceed the SCAQMD significance thresholds identified in Table 3.

³ Air Quality and GHG Impact Analysis, Starfish Avenue Residential Project, Giroux & Associates, March 1, 2021.

**Table 1
Ambient Air Quality Standards**

Ambient Air Quality Standards							
Pollutant	Averaging Time	California Standards ¹		National Standards ²			
		Concentration ³	Method ⁴	Primary ^{3,5}	Secondary ^{3,6}	Method ⁷	
Ozone (O ₃) ⁸	1 Hour	0.09 ppm (180 µg/m ³)	Ultraviolet Photometry	—	Same as Primary Standard	Ultraviolet Photometry	
	8 Hour	0.070 ppm (137 µg/m ³)		0.070 ppm (137 µg/m ³)			
Respirable Particulate Matter (PM ₁₀) ⁹	24 Hour	50 µg/m ³	Gravimetric or Beta Attenuation	150 µg/m ³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis	
	Annual Arithmetic Mean	20 µg/m ³		—			
Fine Particulate Matter (PM _{2.5}) ⁹	24 Hour	—	—	35 µg/m ³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis	
	Annual Arithmetic Mean	12 µg/m ³	Gravimetric or Beta Attenuation	12.0 µg/m ³			15 µg/m ³
Carbon Monoxide (CO)	1 Hour	20 ppm (23 mg/m ³)	Non-Dispersive Infrared Photometry (NDIR)	35 ppm (40 mg/m ³)	—	Non-Dispersive Infrared Photometry (NDIR)	
	8 Hour	9.0 ppm (10 mg/m ³)		9 ppm (10 mg/m ³)			
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m ³)		—			
Nitrogen Dioxide (NO ₂) ¹⁰	1 Hour	0.18 ppm (339 µg/m ³)	Gas Phase Chemiluminescence	100 ppb (188 µg/m ³)	—	Gas Phase Chemiluminescence	
	Annual Arithmetic Mean	0.030 ppm (57 µg/m ³)		0.053 ppm (100 µg/m ³)			Same as Primary Standard
Sulfur Dioxide (SO ₂) ¹¹	1 Hour	0.25 ppm (655 µg/m ³)	Ultraviolet Fluorescence	75 ppb (196 µg/m ³)	—	Ultraviolet Fluorescence; Spectrophotometry (Pararosaniline Method)	
	3 Hour	—		—			0.5 ppm (1300 µg/m ³)
	24 Hour	0.04 ppm (105 µg/m ³)		0.14 ppm (for certain areas) ¹¹			—
	Annual Arithmetic Mean	—		0.030 ppm (for certain areas) ¹¹			—
Lead ^{12,13}	30 Day Average	1.5 µg/m ³	Atomic Absorption	—	—	High Volume Sampler and Atomic Absorption	
	Calendar Quarter	—		1.5 µg/m ³ (for certain areas) ¹²			Same as Primary Standard
	Rolling 3-Month Average	—		0.15 µg/m ³			
Visibility Reducing Particles ¹⁴	8 Hour	See footnote 14	Beta Attenuation and Transmittance through Filter Tape	No National Standards			
Sulfates	24 Hour	25 µg/m ³	Ion Chromatography				
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m ³)	Ultraviolet Fluorescence				
Vinyl Chloride ¹²	24 Hour	0.01 ppm (26 µg/m ³)	Gas Chromatography				

See footnotes on next page ...

For more information please call ARB-PIO at (916) 322-2990

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1. California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, and particulate matter (PM10, PM2.5, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.
2. National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM10, the 24 hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above $150 \mu\text{g}/\text{m}^3$ is equal to or less than one. For PM2.5, the 24 hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact the U.S. EPA for further clarification and current national policies.
3. Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.
4. Any equivalent measurement method which can be shown to the satisfaction of the ARB to give equivalent results at or near the level of the air quality standard may be used.
5. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.
6. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
7. Reference method as described by the U.S. EPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the U.S. EPA.
8. On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.
9. On December 14, 2012, the national annual PM2.5 primary standard was lowered from $15 \mu\text{g}/\text{m}^3$ to $12.0 \mu\text{g}/\text{m}^3$. The existing national 24-hour PM2.5 standards (primary and secondary) were retained at $35 \mu\text{g}/\text{m}^3$, as was the annual secondary standard of $15 \mu\text{g}/\text{m}^3$. The existing 24-hour PM10 standards (primary and secondary) of $150 \mu\text{g}/\text{m}^3$ also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.
10. To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national 1-hour standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national 1-hour standard to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.
11. On June 2, 2010, a new 1-hour SO_2 standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO_2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.
Note that the 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.
12. The ARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.
13. The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard ($1.5 \mu\text{g}/\text{m}^3$ as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.
14. In 1989, the ARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

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Table 2
Air Quality Monitoring Summary (2016-2019)
(Number of Days Standards Were Exceeded, and
Maximum Levels During Such Violations)

Pollutant/Standard	2016	2017	2018	2019
Ozone				
1-Hour > 0.09 ppm (S)	2	0	1	1
8-Hour > 0.07 ppm (S)	4	4	1	1
8- Hour > 0.075 ppm (F)	0	2	0	1
Max. 1-Hour Conc. (ppm)	0.103	0.090	0.112	0.096
Max. 8-Hour Conc. (ppm)	0.074	0.076	0.071	0.082
Nitrogen Dioxide				
1-Hour > 0.18 ppm (S)	0	0	0	0
Max. 1-Hour Conc. (ppm)	0.064	0.081	0.066	0.059
Inhalable Particulates (PM-10)				
24-hour > 50 µg/m ³ (S)	3/353	17/332	13/320	13/364
24-hour > 150 µg/m ³ (F)	0/353	0/332	0/320	0/364
Max. 24-Hr. Conc. (µg/m ³)	74.	128.	129.	127.
Ultra-Fine Particulates (PM-2.5)				
24-Hour > 35 µg/m ³ (F)	1/349	6/305	3/353	3/346
Max. 24-Hr. Conc. (µg/m ³)	44.4	53.9	54.1	36.1

Source: South Coast AQMD Air Monitoring Station Data Summary, Anaheim Station (3176)

Table 3
SCAQMD Daily Emissions Thresholds of Significance

Pollutant	Construction	Operations
ROG	75	55
NOx	100	55
CO	550	550
PM-10	150	150
PM-2.5	55	55
SOx	150	150
Lead	3	3

Source: SCAQMD CEQA Air Quality Handbook, November, 1993 Rev.

Additional Indicators

In its CEQA Handbook, the SCAQMD also states that additional indicators should be used as screening criteria to determine the need for further analysis with respect to air quality. The additional indicators are as follows:

- A project could interfere with the attainment of the federal or state ambient air quality standards by either violating or contributing to an existing or projected air quality violation.

- A project could result in population increases within the regional statistical area which would be in excess of that projected in the AQMP and in other than planned locations for the project's build-out year.
- A project could generate vehicle trips that cause a CO hot spot.

Short-Term Construction Impacts

Construction activities to develop the project would generate air emissions, toxic air contaminant emissions, and odors during construction. The project construction activities include the demolition of the existing parking lot and other site improvements, grading of the site, construction of the residential units, trenching for underground utilities, street paving, painting the houses, construction of block walls and other required site improvements.

CalEEMod was developed by the SCAQMD to provide a model to calculate construction emissions and operational emissions for a variety of land use projects. It calculates both the daily maximum and annual average emissions for criteria pollutants as well as total or annual greenhouse gas (GHG) emissions. Although exhaust emissions would result from the operation of on- and off-site motorized equipment, the exact types and numbers of equipment would vary among contractors such that emissions cannot be quantified with certainty. Project construction emissions were estimated by using CalEEMod2016.3.2 computer model to identify the maximum daily emissions for each pollutant during project construction based on the type and number of pieces of construction equipment necessary to develop the project and the estimated time to construct the project. The estimated construction fleet to develop the project is shown in Table 4.

**Table 4
Construction Activity Equipment Fleet**

Phase Name and Duration	Equipment
Demolition (10 days)	1 Concrete Saw
	1 Dozer
	3 Loader/Backhoes
Grading (4 days)	1 Grader
	1 Dozer
	1 Loader/Backhoe
Construction (200 days)	1 Crane
	1 Forklift
	1 Generator Set
	3 Welders
	1 Loader/Backhoes
Paving (10 days)	1 Mixer
	1 Paver
	1 Paving Equipment
	1 Roller
	1 Loader/Backhoe

Referencing the construction equipment fleet and durations shown in Table 4, the worst-case daily construction emissions were calculated by CalEEMod2016.3.2 and are shown in Table 5.

**Table 5
Construction Activity Emissions
Maximum Daily Emissions (pounds/day)**

Maximum Construction Emissions	ROG	NOx	CO	SO₂	PM-10	PM-2.5
2021						
Unmitigated	2.0	19.7	14.9	0.0	5.6	3.1
Mitigated	2.0	19.7	14.9	0.0	2.9	1.7
2022						
Unmitigated	8.4	12.7	13.0	0.0	0.7	0.6
Mitigated	8.4	12.7	13.0	0.0	0.7	0.6
SCAQMD Thresholds	75	100	550	150	150	55

As shown in Table 5, peak daily construction activity emissions are estimated to be below SCAQMD CEQA thresholds without the need for mitigation measures. The only mitigation measure that was included in the CalEEMod2016.3.2 air model program was watering exposed dirt surfaces two times a day to minimize the generation of fugitive dust during grading activities.

Construction equipment exhaust emissions contain carcinogenic compounds within the diesel exhaust particulates. The toxicity of diesel exhaust is evaluated relative to a 24-hour per day, 365 days per year, 70-year lifetime exposure. The SCAQMD does not generally require the analysis of construction-related diesel emissions relative to health risk due to the short period for which the majority of diesel exhaust would occur. Health risk analyses are typically assessed over a 9-, 30-, or 70-year timeframe and not over a brief construction period due to the lack of health risk associated with a brief exposure.

Localized Significance Thresholds

SCAQMD developed analysis parameters to evaluate ambient air quality on a local level in addition to the more regional emissions-based thresholds of significance. These analysis elements are called Localized Significance Thresholds (LSTs). LSTs were developed in response to Governing Board's Environmental Justice Enhancement Initiative 1-4 and the LST methodology was provisionally adopted in October 2003 and formally approved by SCAQMD's Mobile Source Committee in February 2005.

For the project, the primary source of a possible LST impact would be during project construction and not the operation of the project. LSTs are applicable for a sensitive receptor where it is possible that an individual could remain for 24 hours such as a residence, hospital or convalescent facility, which in this case the existing residents adjacent to the project are considered sensitive receptors

LSTs are only applicable to the following criteria pollutants: oxides of nitrogen (NOx), carbon monoxide (CO), and particulate matter (PM-10 and PM-2.5). LSTs represent the maximum emissions from a project that are not expected to cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard, and are developed based on the ambient concentrations of that pollutant for each source receptor area and distance to the nearest sensitive receptor.

LST screening tables are available for 25, 50, 100, 200 and 500-meter source-receptor distances. For the proposed project the nearest sensitive receptors are the residences adjacent to and north and east of the project and therefore, the most conservative 25-meter distance was modeled.

The SCAQMD has issued guidance on applying CalEEMod to LSTs. LST pollutant screening level concentration data is currently published for various size sites and varying distances. For this project, the most stringent thresholds for a 1-acre site were applied. Table 6 shows the estimated LST emissions and thresholds.

**Table 6
LST and Project Emissions (pounds/day)**

LST 1 acre/25 meters N. Coastal Orange County	CO	NOx	PM-10	PM-2.5
LST Threshold	647	92	4	3
Max On-Site Emissions				
Unmitigated	15	20	6	3
Mitigated	15	20	3	2

The project LSTs were compared to the maximum daily construction activities. As shown in Table 6, project construction emissions are less than significant and would meet the LST construction thresholds. Although project construction activities are not calculated to generate dust emissions that would exceed SCAQMD thresholds, minimizing construction emissions through enhanced dust control measures is recommended because the project is located in the SCAB and non-attainment for PM-2.5. The following measure is recommended to minimize PM-2.5 dust emissions during project grading and construction:

- Mitigation Measure No. 1** The project contractor shall implement the following dust control measures throughout project demolition, grading and construction:
- Apply soil stabilizers or moisten inactive areas.
 - Water exposed surfaces as needed to avoid visible dust leaving the construction site (typically 2-3 times/day).
 - Cover all stock piles with tarps at the end of each day or as needed.
 - Provide water spray during loading and unloading of earthen materials.
 - Minimize in-out traffic from construction zone
 - Cover all trucks hauling dirt, sand, or loose material and require all trucks to maintain at least two feet of freeboard
 - Sweep streets daily if visible soil material is carried out from the construction site

Similarly, construction ozone precursor emissions (ROG and NOx) are calculated to be below SCAQMD thresholds as shown in Table 5. However, because of the regional non-attainment for photochemical smog, the use of reasonably available control measures for diesel exhaust is recommended. The following measure is recommended to minimize ROG and NOx emissions during project construction:

Mitigation Measure No. 2 The project contractor shall implement the following measures throughout project demolition, grading and construction:

- Utilize well-tuned off-road construction equipment.
- Establish a preference for contractors using Tier 3 (engines rated 75 to 174 brake horsepower) or better rated heavy equipment.
- Enforce 5-minute idling limits for both on-road trucks and off-road equipment.

Long-Term Operational Emissions

Operational emissions were calculated using CalEEMod2016.3.2. In addition to mobile source emissions from motor vehicles, residential development generates smaller amounts of “area source” air emissions that are generated from on-site energy consumption and off-site electrical generation. These energy emission sources represent a minimal percentage of the total project NOx and CO emissions along with a few percent of other emissions. The inclusion of such emissions adds negligibly to the total project emissions as shown in Table 7.

**Table 7
Daily Operational Impacts**

Source	Operational Emissions (lbs./day)					
	ROG	NOx	CO	SO ₂	PM-10	PM-2.5
Area*	0.3	0.1	0.6	0.0	0.0	0.0
Energy	0.0	0.0	0.0	0.0	0.0	0.0
Mobile	0.1	0.4	1.3	0.0	0.5	0.1
Total	0.4	0.5	1.9	0.0	0.5	0.1
SCAQMD Threshold	55	55	550	150	150	55
Exceeds Threshold?	No	No	No	No	No	No

*Assumes the use of gas hearths, if any (no wood burning)
Source: CalEEMod Output in Appendix A.

As shown in Table 7, the project would not generate any operational air emissions that exceed their respective SCAQMD significance thresholds. Therefore, the operational emissions of the project are less than significant.

The residences north and east of the project and the Huntington Valley Baptist church are considered sensitive land uses. Because the project would not generate any air emissions that exceed adopted emission thresholds, the adjacent residents and the Huntington Valley Baptist church would not be exposed to substantial pollutant concentrations. Therefore, the project would not significantly impact any sensitive receptors.

- d) **Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people? No Impact.** The proposed residential project, like other similar single-family detached residential projects in the City of Fountain Valley, would not generate any odors and impact existing adjacent residents or the Huntington Valley Baptist church adjacent to and west of the project. The project would not generate any objectionable odors that would impact any area sensitive receptors.

IV. BIOLOGICAL RESOURCES: Would the project:

- a) ***Have substantial adverse effects, 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 the U.S. Fish and Wildlife Service? No Impact.*** The project site is a vacant area and associated with the Huntington Valley Baptist church that is adjacent to and west of the site. The site is used by the church for outdoor recreational activities, including soccer with a concrete basketball court near the southern portion of the site. The only habitat on the site is introduced turf. There are no wildlife species on the site. The existing turf on the site is not a candidate for a sensitive or special status species. The project would not impact wildlife or wildlife habitat.
- b) ***Have substantial adverse impact on any riparian habitat or other natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service? No Impact.*** The site was disturbed and graded level for outdoor recreational purposes in the past in conjunction with the development of the adjacent church and adjacent private school. There is no riparian habitat or other natural communities either on or adjacent to the site. The project would not impact any riparian or other natural communities.
- c) ***Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? No Impact.*** Please see section “IV.b” above.
- 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? No Impact.*** The project is located in an urbanized area with six foot block walls along the east and north project boundary, a three-foot block wall along the south project boundary and a four-foot chain link fence along the west project boundary. The project site is essentially enclosed with block walls and a chain link fence and not connected with any adjacent wildlife corridors. There is no habitat on the site that serves or could serve as a migratory wildlife corridor. The project would not impact or impede any wildlife corridors or migratory wildlife species.
- e) ***Conflict with any local policies or ordinances protecting biological resources, such as tree preservation policy or ordinance? No Impact.*** There are no trees on the site. Therefore, no trees would be removed by the project. The project would not impact any local policies that protect biological resources, including trees.
- 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? No Impact.*** The City of Fountain Valley is not located within an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. The project would not conflict with or impact a conservations plan.

V. CULTURAL RESOURCES: Would the project:

- a) ***Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5? No Impact.*** There are no buildings on the site. The Fountain Valley General Plan does not identify the presence of any historical resources in Fountain Valley. The site was disturbed and graded in the past during the construction of the adjacent church to provide an area for outdoor church activities. Because the site has been disturbed and no historical resources are known to exist in

Fountain Valley, it is unlikely that any archaeological resources would be uncovered during project construction. The project would not impact any historical resources.

- b) ***Cause a substantial adverse change in the significance of a unique archaeological resource as defined in §15064.5? No Impact.*** Please see section “V.a” above.
- c) ***Disturb any human remains, including those interred outside of formal cemeteries? No Impact.*** The project site has not been used as a cemetery in the past. In addition, the site is not known to have been used for any activities that have resulted in human remains being present on the property. In the unlikely event that human remains are found during construction, those remains would require proper treatment, in accordance with applicable laws. State of California Health and Safety Code Section 7050.5-7055 describe the general provisions for human remains. Specifically, Health and Safety Code Section 7050.5 describes the requirements if any human remains are accidentally discovered during excavation of a site. As required by State law, the requirements and procedures set forth in Section 5097.98 of the California Public Resources Code would be implemented, including notification of the County Coroner, notification of the Native American Heritage Commission, and consultation with the individual identified by the Native American Heritage Commission to be the “most likely descendant.” If human remains are found during excavation, the excavation must stop in the vicinity of the find and in any area that is reasonably suspected to contain remains adjacent to the find, until the County Coroner has been called, the remains have been investigated, and appropriate recommendations have been made for the treatment and disposition of the remains. Following compliance with State regulations, which detail the appropriate actions necessary in the event human remains are encountered, impacts in this regard would be considered less than significant.

Compliance with Health and Safety Code Sections 7050.5-7055 and Public Resources Code Section 5097.98, related to protection of human remains would reduce potential impacts associated with future development project proposals to a less than significant level.

VI. ENERGY: Would the project:

- a) ***Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation? Less Than Significant Impact.*** Information found in this section, as well as other aspects of the project’s energy implications, are discussed in greater detail elsewhere in this MND, including section VIII (Greenhouse Gas Emissions) and section XVII (Transportation) of this MND.

Construction-Related Energy Consumption

Heavy-duty construction equipment associated with grading, the construction of utilities, paving, and construction of the proposed residential units would include the operation of excavators, graders, tractors/loaders/backhoes, dozers, scrapers, air compressors, cranes, forklifts, generators, pumps, welders, rollers, trenchers and pavers. The majority of the equipment would likely be diesel-fueled; however, smaller equipment, such as air compressors and forklifts may be electric, gas, or natural gas-fueled. For the purposes of this assessment, it is assumed that the construction equipment would be diesel-fueled, due to the speculative nature of specifying the amounts and types of non-diesel equipment that might be used, and the difficulties in calculating the energy, which would be consumed by this non-diesel equipment.

The number of construction workers required to construct the project would vary based on the phase of construction and the activity taking place. The transportation fuel required by construction workers to

travel to and from the site would depend on the total number of worker trips estimated for the duration of construction activity. Based on the latest information, a 2007 study by the California Department of Transportation (Caltrans) estimates the statewide average fuel economy for all vehicle types (automobiles, trucks, and motorcycles) in the year 2020 is 18.78 miles per gallon.⁴ Assuming construction worker vehicles have an average fuel economy consistent with the Caltrans study and each construction worker commutes an average of 20 miles a day to and from the site, the maximum 20 workers on-site during each phase of the project is estimated to consume approximately 22 gallons of gasoline a day. Assuming all 20 construction workers are employed at the site for a year (52 weeks), the fuel used by construction workers commuting to the site is approximately 143 barrels (5,720 gallons) of gasoline and represents less than 0.00004 percent of the statewide transportation gasoline consumption in 2016, which is the latest year that data is available.⁵

Construction equipment fuels (e.g., diesel, gasoline, natural gas) would be provided by local or regional suppliers and vendors. Electricity would be supplied by the local utility provider (e.g., Southern California Edison) via existing connections. A temporary water supply, primarily for fugitive dust suppression and street sweeping, would also be supplied by the local provider (e.g., City of Fountain Valley).

Electricity used during construction to provide temporary power for lighting and electronic equipment (e.g., computers, etc.) inside temporary construction trailers and for outdoor lighting when necessary for general construction activity would generally not result in a substantial increase in on-site electricity use. Electricity use during construction would be variable depending on lighting needs and the use of electric-powered equipment and would be temporary for the duration of construction activities. Thus, electricity use during construction would generally be considered negligible.

Energy Conservation: Regulatory Compliance

The project would utilize construction contractors who demonstrate compliance with applicable CARB regulations governing the accelerated retrofitting, repowering, or replacement of heavy-duty diesel on- and off-road equipment. CARB has adopted an Airborne Toxic Control Measure to limit heavy-duty diesel motor vehicle idling in order to reduce public exposure to diesel particulate matter and other Toxic Air Contaminants (TACs). Compliance with the above anti-idling and emissions regulations would result in a more efficient use of construction-related energy and minimize or eliminate wasteful and unnecessary consumption of energy.

With respect to solid waste, CALGreen requires 65% of most construction and demolition waste be diverted from a landfill.⁶ The project would generate various types of debris during project construction that would be recycled in compliance with CALGreen.

Republic Services is the current contract solid waste hauler for the City of Fountain Valley and would serve the project. The solid waste that is collected in Fountain Valley is taken to a Materials Recovery Facility (MRF) in Huntington Beach. All recyclables are recovered and the remaining solid waste is taken to the Frank R. Bowerman Landfill. The City of Fountain Valley adopted a Source Reduction and Recycling Element (SRRE) in 1992 that outlines the City's commitment to a 25% solid waste reduction by 1995 and a 50% reduction by 2000. The solid waste generated by the project would be recycled and the materials that cannot be recycled would be hauled to the Frank R. Bowerman Landfill. The

⁴ 2007 California Motor Vehicle Stock, Travel and Fuel Forecast, California Department of Transportation, Table 1, (2008).

⁵ California 2015 Transportation gasoline consumption – 348,830 thousand barrels; https://www.eia.gov/state/seds/sep_fuel/html/pdf/fuel_mg.pdf

⁶ CALGreen, 2019, Section 4.408.1.

city's waste hauler would actively recycle the solid waste generated by the project to reduce the amount of material that is hauled to the Frank R. Bowerman Landfill. The project would not have a significant solid waste impact on the capacity of the Frank R. Bowerman Landfill.

Anticipated Energy Consumption

The daily operation of the project would generate a demand for electricity, natural gas, and water supply, as well as generating wastewater requiring conveyance, treatment and disposal off-site, and solid waste requiring off-site disposal. Southern California Edison is the electrical purveyor in the City of Fountain Valley and would provide electricity to the project. The Southern California Gas Company is the natural gas purveyor in the City of Fountain Valley would provide natural gas to the project.

Energy Conservation: Regulatory Compliance

The California Energy Commission (CEC) first adopted the Energy Efficiency Standards for Residential and Nonresidential Buildings (CCR, Title 24, Part 6) in 1978 in response to a legislative mandate to reduce energy consumption in the state. Part 11 of the Title 24 Building Standards Code is referred to as CALGreen. The purpose of CALGreen is to "improve public health, safety and general welfare by enhancing the design and construction of buildings through the use of building concepts having a positive environmental impact and encouraging sustainable construction practices in the following categories: (1) Planning and design; (2) Energy efficiency; (3) Water efficiency and conservation; (4) Material conservation and resource efficiency; and (5) Environmental quality."⁷ As of January 1, 2011, CALGreen is mandatory for the construction of all new buildings in the state. CALGreen establishes mandatory measures for new residential and non-residential buildings. Such mandatory measures include energy efficiency, water conservation, material conservation, planning and design and overall environmental quality.⁸ CALGreen was most recently updated in 2019 to include new mandatory measures for residential as well as nonresidential uses; the new measures took effect on January 1, 2020.⁹ The project would be required by the City to comply with the applicable provisions of Title 24 and CALGreen.

With respect to solid waste, the project is required to comply with applicable regulations, including those pertaining to waste reduction and recycling as required by the City of Fountain Valley Source Reduction and Recycling Element and the State of California. Waste haulers serving the project would divert project-generated municipal waste in accordance with applicable city ordinances.

Energy Conservation: Project Design Features

The project would be designed to include green building, energy saving, and water saving measures and other sustainability features. Consistent with the CALGreen, the project would be required to meet and comply with the residential mandatory measures that include water efficiency and conservation, material conservation and resource efficiency, environmental quality, etc. As such, the project would be designed to reduce wasteful, inefficient, and unnecessary consumption of energy.

Estimated Energy Consumption

The long-term operation of the project would result in transportation energy use primarily for residents that commute to and from their place of employment. Transportation fuels, primarily gasoline, would be provided by local or regional suppliers and vendors. As discussed previously, in 2019, California

⁷ California Building Standards Commission, 2019 California Green Building Standards Code, (2019).

⁸ Ibid.

⁹ Ibid.

consumed a total of 360,237 thousand barrels of gasoline for transportation, which is part of the total annual consumption nationwide of 3,397,909 thousand barrels by the transportation sector.¹⁰ Project-related vehicles would require a fraction of a percent of the total state's transportation fuel consumption. A 2008 study by Caltrans determined that the statewide average fuel economy for all vehicle types (automobiles, trucks, and motorcycles) in 2020 would be 18.78 miles per gallon.¹¹

The project's estimated passenger vehicle miles traveled (VMT) is estimated to be 536,550 miles per year.¹² With an average fuel economy of 18.78 miles per gallon, the project residents would consume approximately 28,570 gallons (680 barrels¹³) of fuel a year associated with passenger cars. The project would consume less than 0.0002% of the statewide annual gasoline consumption.

Alternative-Fueled Vehicles

Alternative-fueled, electric, and hybrid vehicles could be used by some project residents. The use of these types of alternative fueled vehicles would reduce the overall consumption of gasoline by the project. The effect is anticipated to be minimal in today's current vehicle market due to the relatively few alternative vehicles that are in use. According to the Los Angeles Times, alternative-fueled vehicles make up approximately 2.3% of all vehicles registered in California.¹⁴ The above transportation fuel estimates for the project do not account for alternative-fueled, electric, and hybrid vehicles, which are more energy efficient vehicles. Thus, the assessment is a conservative estimate of transportation fuel consumption. The project would not have any wasteful, inefficient or unnecessary consumption of energy resources during either project construction or the life of the project because the project would be required to comply with all applicable state energy conservation measures.

- b) ***Conflict with or obstruct a state or local plan for renewable energy or energy efficiency? Less Than Significant Impact.*** The project would be required by the City to comply with all applicable CALGreen and Title 24 state energy requirements to minimize energy consumption. Therefore, the project would not conflict with or obstruct a state or local energy plan. The project would not significantly impact an energy plan.

VII. GEOLOGY AND SOILS: Would the project:

- a) ***Director or indirectly cause 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.) Less Than Significant Impact.*** A geotechnical report¹⁵ was prepared for the project. A copy of the report is included in Appendix B.

¹⁰ U.S. Energy Information Administration, Table F3: Motor Gasoline Consumption, Price, and Expenditure Estimates, 2019, https://www.eia.gov/state/seds/sep_fuel/html/pdf/fuel_mg.pdf.

¹¹ California Department of Transportation, 2008 California Motor Vehicle Stock, Travel and Fuel Forecast (June 2009).

¹² 100 VMT/day times 365 days times 2.1 drivers/dwelling unit times 7 dwelling units = 536,550 miles/year.

¹³ 42 gallons/barrel

¹⁴ Los Angeles Times, Electric, hybrid car sales up, California auto emissions down, May 22, 2014, <http://www.latimes.com/business/autos/la-fi-hy-electric-vehicle-sales-up-auto-emissions-down-20140521-story.html>. Accessed August 2014.

¹⁵ Geotechnical Investigation Report Proposed Residential Development, 9779 Starfish Avenue, Fountain Valley, CA, Geoboden Inc., April 10, 2020.

The project site is not located within a state-designated Alquist-Priolo Earthquake Fault Zone for surface fault rupture hazards.¹⁶ No active or potentially active faults are known to pass directly beneath the site. The potential for surface rupture due to faulting occurring beneath the site during the design life of the proposed development is considered low.

The site is located in the seismically active Southern California region, and could be subject to moderate to strong ground shaking in the event of an earthquake on one of the many active faults in Southern California. The closest active fault to the site is the San Joaquin Hills fault and located approximately 2.0 miles southwest of the site. The Newport-Inglewood fault zone is located approximately 2.6 miles southwest of the site and the second closest known fault to the site. Ground shaking may occur along other active faults in the region. However, due to their distance from the project and smaller anticipated earthquakes they would generate lower horizontal acceleration rates than either the San Joaquin Hills or Newport-Inglewood fault. While there are faults in the region that could generate moderate to significant ground shaking at the site, the incorporation of the recommendations in the soils report regarding design and the construction of the proposed residential dwelling units in compliance with the 2019 California Building Codes (CBC) and other site improvements would reduce potential fault impacts to less than significant.

- ii. ***Strong seismic ground shaking? Less Than Significant Impact.*** Because the project site is located in Southern California and a seismically active area, there is the potential for strong ground motion at the site. As with all projects in the City of Fountain Valley, the design and construction of the proposed residential dwelling units and all site improvement must comply with the current California Building Code (2019 CBC) and would reduce potential strong ground shaking impacts to less than significant.
- iii. ***Seismic-related ground failure, including liquefaction? Less Than Significant Impact.*** Liquefaction is a phenomenon when loose, saturated, relatively cohesionless soil deposits lose their shear strength during strong ground motions. The primary factors controlling liquefaction include intensity and duration of ground motion, gradation characteristics of the subsurface soils, in-situ stress conditions, and the depth to groundwater. Liquefaction is typified by a loss of shear strength in the liquefied layers due to rapid increases in pore water pressure generated by earthquake accelerations.

The project site is located in an area that is mapped as potentially liquefiable on the State of California Seismic Hazards Zones Map (CDMG, 1997). As discussed in Section 4.2 *Groundwater Conditions* of the geotechnical report¹⁷ groundwater was encountered during an exploratory boring at a depth of approximately 10 feet below ground surface (bgs). The historic high ground water level in the site vicinity is at a depth of approximately 5 feet bgs. A liquefaction analysis was conducted for the site to determine if the site is subject to liquefaction. Based on the results of the liquefaction analysis, the project site is not subject to potential liquefaction that would adversely impact the project.¹⁸ Therefore, the potential for the project to be impacted by liquefaction is less than significant.

- iv. ***Landslides? No Impact.*** The project site and the developed land adjacent to and surrounding the site are flat. There are no hills, slopes or other topographic relief features either on or adjacent to

¹⁶ Ibid, page 3.

¹⁷ Geotechnical Investigation Report Proposed Residential Development, 9779 Starfish Avenue, Fountain Valley, CA, Geoboden Inc., April 10, 2020, page 3.

¹⁸ Ibid, Section 6.0, page 5.

the site that would impact the project by a landslide. The project would not generate or be impacted by a landslide.

- b) ***Result in substantial soil erosion or loss of topsoil? Less Than Significant Impact.*** The City would require the grading and construction contractor to install and maintain all applicable City required short-term construction soil erosion control measures to reduce and minimize soil erosion impacts throughout project grading and construction. The contractor would be required to submit a Storm Water Pollution Prevention Plan (SWPPP) to identify all Best Management Practices (BMPs) that would be incorporated into the project prior to the start of grading and maintained to completion of all construction activities to reduce and minimize soil erosion. The City has standard soil erosion protection measures that the contractor would be required to install and maintain throughout grading and construction to minimize off-site soil erosion. The requirement by the City for the contractor to incorporate all applicable mandated soil erosion control measures into project construction would minimize and reduce potential soil erosion impacts to less than significant.
- 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? Less Than Significant Impact.*** There are no known unstable geologic or soil conditions either on or adjacent to the site that would impact the project. There are no geologic or soil constraints in addition to liquefaction that would become unstable due to the development of the project as proposed. As stated in section “VII.a.iii” above, the project is located in an area that has been mapped by the state as a liquefaction area. However, as discussed, the site would not be significantly impacted by liquefaction due to the absence of groundwater close enough to the ground surface to impact the project by liquefaction. Based on the soils report, there are no other existing soil or geotechnical conditions at the site that could significantly impact the project with the incorporation of the recommendations in the geotechnical report.¹⁹
- d) ***Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property? Less Than Significant Impact.*** The geotechnical report did not identify any expansive soil on the site. Therefore, given 2019 CBC requirements for construction on expansive soil the project would not be significantly impacted by expansive soil.
- 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 waste water? No Impact.*** The project proposes to connect to the existing sewer line in Starfish Avenue as required by the City. The City would not allow the project to use individual septic tanks for wastewater disposal. The project would not have any septic tank or alternative wastewater disposal impacts.
- f) ***Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? Less Than Significant Impact.*** The Fountain Valley General Plan does not identify the presence of any paleontological resources in Fountain Valley. The area of the site that is proposed for development was disturbed in the past during the grading of the site and the construction of the existing church, church parking lot and other site improvements adjacent to and west of the project site. Because the site has been disturbed and paleontological resources are not known to exist in Fountain Valley, it is unlikely that paleontological resources would be uncovered during project construction. The project would not impact paleontological resources.

¹⁹ Geotechnical Investigation Report Proposed Residential Development, 9779 Starfish Avenue, Fountain Valley, CA, Geoboden Inc., April 10, 2020, page 5.

VIII. GREENHOUSE GAS EMISSIONS: Would the project:

- a) **Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? Less Than Significant Impact.** “Greenhouse gases” (so called because of their role in trapping heat near the surface of the earth) emitted by human activity are implicated in global climate change, commonly referred to as “global warming.” Greenhouse gases contribute to an increase in the temperature of the earth’s atmosphere by transparency to short wavelength visible sunlight, but near opacity to outgoing terrestrial long wavelength heat radiation in some parts of the infrared spectrum. The principal greenhouse gases (GHGs) are carbon dioxide, methane, nitrous oxide, ozone, and water vapor. For purposes of planning and regulation, Section 15364.5 of the California Code of Regulations defines GHGs to include carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons and sulfur hexafluoride. Fossil fuel consumption in the transportation sector (on-road motor vehicles, off-highway mobile sources, and aircraft) is the single largest source of GHG emissions, accounting for approximately half of GHG emissions globally. Industrial and commercial sources are the second largest contributors of GHG emissions with about one-fourth of total emissions.

In response to the requirements of SB 97, the State Resources Agency developed guidelines for the treatment of GHG emissions under the California Environmental Quality Act (CEQA) Guidelines (Guidelines). These new guidelines became state laws as part of Title 14 of the California Code of Regulations in March, 2010. Based on the Guidelines, a project would have a potentially significant impact if it:

- Generates GHG emissions, directly or indirectly, that may have a significant impact on the environment, or;
- Conflicts with an applicable plan, policy or regulation adopted to reduce GHG emissions.

Section 15064.4 of the Guidelines specifies how significance of GHG emissions is to be evaluated. Emissions may be quantitative, qualitative or based on performance standards. The Guidelines allow the lead agency to “select the model or methodology it considers most appropriate.” The most common practice for transportation/combustion GHG emissions quantification is to use a computer model such as CalEEMod, which was used for this project.

In September 2010, the SCAQMD CEQA Significance Thresholds GHG Working Group released revisions that recommended a threshold of 3,000 MT CO₂e for all land use projects. This 3,000 MT/year recommendation has been used as a guideline for the GHG analysis for this project. In the absence of an adopted numerical threshold of significance, project related GHG emissions in excess of the guideline level are presumed to trigger a requirement for enhanced GHG reduction at the project level.

Construction Activity GHG Emissions

For the GHG analysis, the project is assumed to be constructed within one year. During project construction, the CalEEMod2016.2.2 computer model predicts that the construction activities would generate the annual CO₂e emissions shown in Table 8.

**Table 8
Construction Emissions (Metric Tons CO₂e)**

	CO₂e
Year 2019	212.5
Amortized	7.1

The SCAQMD policy is to amortize construction GHG emissions over a 30-year lifetime. As shown in Table 9, the amortized construction emission level is 7.1 metric tons CO₂e. The GHG impacts from project construction are less than significant.

Project Operational GHG Emissions

The total operational and annualized construction emissions for the proposed project are shown in Table 9. As shown, the total project GHG emissions are below the SCAQMD recommended significance threshold of 3,000 MT. The operations of the project would not result in the generation of a significant level of greenhouse gases.

**Table 9
Proposed Operational Emissions**

Consumption Source	
Area Sources	4.1
Energy Utilization	47.4
Mobile Source	208.0
Solid Waste Generation	7.0
Water Consumption	6.1
Construction	7.1
Total	297.7
Guideline Threshold	3,000
Exceeds Threshold?	No

Consistency with GHG Plans, Programs and Policies

The City of Fountain Valley does not have an adopted Greenhouse Gas Reduction Plan. Therefore, the applicable GHG planning document is AB-32. As discussed above and shown in Table 9 above, the project is estimated to generate approximately 297.7 MTCO₂e per year, which is below the SCAQMD threshold of 3,000 MTCO₂e per year for all land use types. The project complies with the reduction goals of AB-32. The project would not have any significant GHG impact.

- b) **Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases? No Impact.** As discussed in section “VIII.a” above, the project would not have a significant increase in either construction or operational GHG emissions. As a result, the project generated GHG emissions are below the recommended SCAQMD threshold of 3,000 MT/year. The project would not impact and conflict with any applicable plan, policy, or regulations to reduce GHG emissions.

IX. HAZARDS AND HAZARDOUS MATERIALS: Would the project:

- a) ***Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? Potentially Significant Unless Mitigation Incorporated.*** A Phase I Environmental Site Assessment (ESA)²⁰ was prepared for the site. The Phase I ESA is included in Appendix C.

Property History Summary:

Based on historical data the project site was utilized for agricultural purposes (i.e. row crops) until the late 1960s.²¹ Because the site was used for agricultural activities it is possible that pesticides or heavy metals were used on the site during the time the site was in agricultural use. Unlike chemicals today that are applied in diluted concentrations and degrade relatively quickly, the pesticides that were applied prior to 1980 can linger in the soil for many years. It is not known if environmentally persistent pesticides were applied on the site in the past.

The Phase I ESA did not identify any hazardous materials on or adjacent to the site. Based on the results of the site reconnaissance and records search and because there are no buildings on the site, the project would not have any significant hazardous impacts associated with lead based paint, asbestos contain materials, PCBs or other hazardous materials.

The following measure is recommended to reduce potential impacts associated with the presence of pesticides in the on-site soils, if present.

Mitigation Measure No. 3 Prior to the issuance of a grading permit the developer shall submit proof to the City's satisfaction that one of the following two options to reduce pesticide levels to meet accepted Environmental Protection Agency (EPA) and County of Orange Health Care Agency (COHCA) requirements have been completed.

- The on-site soils shall be tested for the presence of pesticides.
- Through a corrective grading process, which consists of digging out soil containing pesticides along with a large quantity of underlying soil that does not contain pesticide concentrations, followed by further testing to confirm whether the resulting concentrations of pesticides in soil require further management as either a California hazardous waste or concern based on levels above the EPA Regional Screening Levels (RSLs).

The implementation of the above mitigation measure would reduce potential pesticide impacts to the public or the environment through the routine transport, use or disposal of hazardous materials to less than significant.

²⁰ Phase I Environmental Site Assessment, APN 167-232-01, Fountain Valley, CA, September 26, 2019, Stantec Consulting Services, Inc.

²¹ Phase I Environmental Site Assessment, APN 167-232-01, Fountain Valley, CA, September 26, 2019, Stantec Consulting Services, Inc., page 1.1.

- b) **Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? Less Than Significant Impact.** There are no uses or activities associated with the proposed residential project, other than the potential for pesticides in the on-site soils as discussed above in section "IX.a" that would create or release hazardous materials into the environment. The project would not have any significant hazard impacts to the public or environment involving the release of a hazardous material.
- c) **Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? Less Than Significant Impact.** The closest school to the project is the Huntington Valley Preschool and Kindergarten that is located at 9779 Starfish Avenue and adjacent to and west of the project. The next closest school to the project is the Kinder Care that is located at 9945 Slater Avenue and approximately 500 feet east of the project. The third closest school is Valley Vista High School located at 9600 Slater Avenue and approximately 1,000 feet west of the project site. There are no activities associated with the construction of the project or throughout the life-time of the project that would impact either the Huntington Valley Preschool and Kindergarten, Kinder Care or Valley Vista High School.

Hazardous materials such as diesel fuel, lubricants, and paint would be stored and used at the site during project construction. The hazardous materials that would be used and stored during project construction are required by law to be stored and locked in a safe area. The project contractor is responsible for the safe use and storage of all hazardous materials during project construction. The use and storage of hazardous materials in compliance with all applicable state and local laws and regulations during project construction would reduce potential hazardous emission impacts to Kinder Care and Valley Vista High School to less than significant.

Once constructed, project residents would use typical household cleaning materials to clean and maintain their residence. The use and storage of standard household cleaning and janitorial materials would not have any significant hazardous impacts to any schools.

- 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 environment? No Impact.** Based on the Phase I ESA the project site is not listed as a hazardous material site on the "Cortese" list pursuant to Government Code Section 65962.5. The project would not have a hazardous impact to the public or environment per Government Code Section 65962.5.
- 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, would the project result in a safety hazard or excessive noise for people working or residing in the project area? No Impact.** The closest airport to the project is John Wayne Airport, which is a public use, general aviation airport and located approximately 5.5 miles southeast of the project. There are not activities associated with the project that would result in any safety hazards to the ongoing operations of the airport. The project would also not expose future project residents to any safety impacts or noise impacts associated with the operation of John Wayne Airport. The project would not have any airport safety hazard impacts.
- f) **Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? Less Than Significant Impact.** All of the proposed project improvements are located on private property. Starfish Avenue, adjacent to the site, is used as an emergency evacuation route for the project site and the immediate community to Slater Avenue, which

provides emergency access within Fountain Valley. The project would not significantly interfere with or impact the ability of Starfish Avenue and Slater Avenue to continue to serve as emergency evacuation route for the City. The project would not significantly impact any emergency evacuation routes in the City.

- g) **Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires? No Impact.** There are no designated wildland fire areas in Fountain Valley. See section XX Wildfire for further wildland fire analysis. The project would not be exposed to or be impacted by a wildland fire.

X. HYDROLOGY AND WATER QUALITY: Would the project:

- a) **Violate any water quality standards or waste discharge requirements? Less Than Significant Impact.** A hydrology and hydraulics study²² was prepared and is included in Appendix D. A Preliminary Water Quality Management Plan²³ was prepared for the project and is included in Appendix E.

During grading and project construction, silt could be generated from the site, especially if construction occurs during the winter months when rainfall typically occurs. The City would require the project contractor to prepare a Storm Water Pollution Prevention Plan (SWPPP) in accordance with California State Water Resources Control Board (State Water Board), Construction General Permit Order R8-2010-0062, National Pollutant Discharge Elimination System (NPDES) General Permit No. CAS618030 (Permit). The SWPPP would require the contractor to implement Best Available Technology Economically Achievable measures to reduce and eliminate storm water pollution from all construction activity through the implementation of Best Management Practices (BMPs).

The purpose of the SWPPP is to identify pollutant sources that may affect the quality of the storm water that would be discharged from the site during all construction activity. The SWPPP would require the contractor to identify, construct, and implement the storm water pollution prevention measures and BMPs that are necessary to reduce pollutants that are present in the storm water that is discharged from the site during construction. The SWPPP would include specific BMPs that must be installed and implemented prior to the start and throughout project construction. The installation and maintenance of all required BMPs by the contractor during construction would reduce potential water quality impacts to less than significant.

The project developer would be required to have a Water Quality Management Plan (WQMP) approved by the City prior to the start of grading. The project applicant has prepared a preliminary WQMP that identifies the BMPs that would be used on-site to control the pollutants during the life of the project that are predictable by the project from entering the storm water runoff from the site. The types of pollutants that are anticipated to be generated during the life of the project include suspended solids/sediment, nutrients, heavy metals, pathogens, pesticides, oil and grease, toxic organic compounds and trash and debris. The State required WQMP identifies the measures that would be included in the project including use of a retention/detention basin, storm water clarifier, and catch basins with BMPs.

The preliminary WQMP states that on-site surface water flows for each residence would be directed to landscaped areas with BMP's for water percolation. Surface water from the individual residences that does not percolate would be directed to yard drain inlets that would be installed throughout the yards of

²² Hydrology & Hydraulics Study, Starfish Lots 1 to 7 and Lot A – Tract 19115, 9779 Starfish Avenue, Fountain Valley, California, DMS Consults, Inc., February 22, 2021.

²³ Preliminary Water Quality Management Plan, Starfish Lots 1 to 7 and Lot A – Tract 19115, 9779 Starfish Avenue, Fountain Valley 92708, APN 167-232-01, California, DMS Consults, Inc., July 21, 2020.

each residential unit. Surface water runoff from each residence would be directed by 4-inch underground drains to Ecostone pervious concrete pavers totaling approximately 3,005 square feet that are proposed for a strip that would extend for the entire length of the proposed private street to allow surface water to percolate into the on-site soil. Underlying the pervious concrete pavers would be a bottomless trench drain that would allow stormwater to percolate into the on-site soil. Excess surface water from the private street and concrete paver strip would be discharged to a proposed grate inlet near the project entrance at Starfish Avenue. Surface water collected in the grate inlet would drain into a 4'x2" rectangular drain box and ultimately into an existing parkway drain in Starfish Avenue adjacent to and south of the project site.

The City must review and approve the WQMP for compliance with State law prior to the issuance of a building permit for the residential units. The installation of and the regular maintenance of a required SWPPP and WQMP would reduce storm water runoff pollutants generated from the project site during both project construction and the life of the project to less than significant.

- b) ***Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin. Less Than Significant Impact.*** The project would be required by the city to use water for dust suppression during project grading and construction. The amount of water that would be required to control dust during grading and construction would be minimal due to the small size of the project site (1.02-acres) and would not significantly impact existing groundwater supplies.

Currently, approximately 79% (0.80-acres) of the site is pervious and 21% (0.22-acres) is impervious associated with the concrete basketball court. With project construction, approximately 57% (0.58-acres) of the site would be pervious and 43% (0.44-acres) would be impervious. The infiltration study that was conducted for the project site indicates the site has an infiltration rate of 1.40 inches/hour and more than the minimum permissible rate of 0.30 inches/hour. Although the project would increase the amount of impervious area on the site compared to the existing condition, the remaining pervious area of approximately 0.58-acres would continue to allow rainfall percolation into the local groundwater.

Based on the hydrology report, the surface water runoff from the project site for a 10-year storm event is calculated to be 2.22 cubic feet per second (cfs) compared to 2.04 cfs for the existing condition, an increase of 0.18 cfs. For a 25-year storm event the project would increase the surface water runoff from 2.47 cfs to 2.68 cfs, an increase of 0.21 cfs. For a 100-year storm event the increase in runoff would be 3.19 cfs for the current condition to 3.44 cfs with the project, an increase of 0.25 cfs. The proposed Ecostone pervious concrete pavers in the private street would allow surface water runoff to percolate into the soil and the local groundwater and minimize the amount of runoff discharged from the site to the local storm drain system in Starfish Avenue. The City receives its water supply from local wells and has stated that it has adequate capacity to meet the water supply needs of the project, including potable water for drinking, landscape irrigation and fire flow. The project would not significantly deplete groundwater supplies or cause a drop in production rates of wells. The project would have a less than significant impact on groundwater supplies.

- c) ***Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner, which would:***
- i. ***Result in substantial erosion or siltation on or off site? Less Than Significant Impact.*** The site is relatively flat and the elevations on the site range from 28 to 32 feet above mean sea level

(msl).²⁴ Runoff from the project site generally sheet flows to the south into the curb and gutter in Starfish Avenue. The existing drainage patterns on the site would be retained and all developed flows would drain to the south into Starfish Avenue. An Ecostone permeable paver strip is proposed to extend through the center of the proposed on-site private drive aisle. Excess runoff from each proposed residential lot would flow onto the Ecostone permeable paver strip in the private street for runoff to percolate into the soil. Excess runoff would drain in a southerly direction to a grate inlet in the private drive aisle at the south end of the site. Surface water runoff that enters the grate inlet would drain into a 2' wide by 4' deep by 32' long rectangular box drain and connect to an existing underground storm drain in Starfish Avenue. The project would generate more runoff than the current condition as shown in Table 10.

**Table 10
Estimated Project Runoff**

Storm Event	Existing Condition	Proposed Condition
10-Year	2.04 cfs*	2.22 cfs
25- Year	2.47 cfs	2.68 cfs
100-Year	3.19 cfs	3.44 cfs

*cubic feet/second

Although the project would generate more runoff compared to the existing condition, the existing storm drain collection system in Starfish Avenue has capacity to accommodate the incremental increase in runoff without impacting the existing storm drain collection system or requiring improvements to increase its capacity. As a result, the project runoff would not alter the course of any downstream streams or rivers or cause substantial erosion or siltation downstream of the site.

- ii. **Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off site? Less Than Significant Impact.** As discussed in section “X.b” and shown in Table 10 above, the project would not significantly increase the amount of runoff generated from the site. Furthermore, the project proposes to construct an Ecostone permeable paver strip in the proposed private drive aisle to capture surface runoff flow and allow the flow to percolate into the soil. All low flow runoff would percolate into the on-site soil with no discharge to the local storm drain system. The excess runoff from a 25-year storm event of 2.68 cfs and 3.44 cfs for a 100-year event would discharge to the existing underground storm drain system in Starfish Avenue. The existing storm drain system in Starfish Avenue has capacity to handle the increase stormwater flows from the project without any flooding either on- or off the site. As a result, the project would not have any significant on- or off-site flooding impacts.
- iii. **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? Less Than Significant Impact.** Based on Table 10, the storm water runoff by the project compared to the existing condition for a 10-year storm event would increase by 0.18 cfs, 21 cfs for a 25-year storm event 0.25 cfs for a 100-year event. The project proposes to collect and direct all surface water flows to an Ecostone permeable paver strip and that would be constructed in the middle of the proposed on-site private drive aisle. Stormwater that does not percolate into the soil through the Ecostone permeable paver strip would drain into a grate drain in the private drive aisle at the project entrance, flow into a concrete rectangular drain box and ultimately discharged into an underground storm drain in Starfish Avenue adjacent to and south of the site. The existing

²⁴ Preliminary Water Quality Management Plan, Starfish Lots 1 to 7 and Lot A – Tract 19115, 9779 Starfish Avenue, Fountain Valley 92708, APN 167-232-01, California, DMS Consults, Inc., July 21, 2020, page 4.

storm drain system in Starfish Avenue has capacity to handle the increased runoff from the project without exceeding the existing capacity of the underground storm drain.

The project would be required to treat surface water runoff prior to its discharge to meet Regional Water Quality Control Board water quality requirements and provide safeguards that surface water runoff would not provide sources of polluted runoff. As discussed in section “X.a” above, a Preliminary WQMP was prepared and states that the proposed Ecostone permeable paver strip in the private on-site road and the installation of other on-site BMPs would remove and prevent most project generated pollutants from being discharge from the site into the existing off-site storm drain system in Starfish Avenue. The installation and required routine maintenance of the Ecostone permeable paver strip and underground stormdrain system in compliance with the WQMP would reduce and filter most project runoff pollutants. As a result, the project would not significantly impact surface water quality.

iv. ***Impede or redirect flood flows? Less Than Significant Impact.*** Please see section “X.c.ii.” above.

- d) ***In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation. No Impact.*** The project is not in a 100-year flood hazard area. The site is located in flood zone X, which is outside the 100-year flood plain of the Santa Ana River that is approximately 9,950’ (1.88 miles) east of the project. The project is approximately 4.5 five miles from the Pacific Ocean and approximately 28 feet above mean sea level at the lowest elevation on the site. The Fountain Valley General Plan does not identify any portion of the city at risk due to a tsunami. The project site and the area immediately surrounding the site are generally flat and there are no water bodies adjacent to or in close proximity to the site that would impact the project due to a seiche. Therefore, the project would not be exposed to a flood hazard due to a tsunami or seiche and release pollutants due to inundation by a flood hazard.
- e) ***Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. Less Than Significant Impact.*** The project developer has prepared a Preliminary WQMP and would be required by the City to install and implement all proposed water quality collection and surface water runoff treatment measures listed in the WQMP. As a result, the project would not conflict with or obstruct water quality control measures mandated by the state.

The City of Fountain Valley has an adopted Urban Water Management Plan (UWMP)²⁵. The UWMP provides a detailed summary of present and future water resources and demands and provides an assessment of the City of Fountain Valley’s water resource needs. The UWMP provides water supply planning for a 25-year planning period in five-year increments and identifies water supplies needs to meet existing and future demands. The City gets its water from three main sources, recycled water from Orange County Water District’s Green Acres Project, local well water from the Lower Santa Ana River Groundwater basin, and imported water from the Municipal Water District of Orange County.²⁶

The UWMP analyzed the future water demand for the city based on land use type, including single-family, multi-family, commercial, institutional, industrial, etc. The UWMP also analyzed its future water supply based on the reliability of its existing sources of water including groundwater, MWD, recycling, etc. Based on the UWMP the available supply of water would meet the projected demand due to diversified supply and conservation measures. The project would continue to allow rainfall to percolate

²⁵ Fountain Valley 2015 Urban Water Management Plan, Final Draft, May 2016.

²⁶ Ibid, page 1-4.

into the on-site soils and recharge the local groundwater. Therefore, the project would not significantly impact the UWMP and the City's future sources of water supply.

XI. LAND USE AND PLANNING: Would the project:

- a) **Physically divide an established community? No Impact.** The 1.02 acre site is an infill site and surrounded by single-family detached residential homes to the north and east, a church to the west and Starfish Avenue to the south. The project proposes to divide the 1.02 acre site into seven lots for the development of seven single-family detached residential units. The project would construct seven new residential units in an existing residential area and would not physically divide the existing residential community adjacent to and surrounding the site.

- b) **Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect? Less Than Significant Impact.** The project site is designated Low Density Residential by the Fountain Valley General Plan and zoned R-1 (Low Density Residential). The project proposes seven, two-story dwelling units on 1.02-acres at a density of 6.86 dwelling units/acre. The project would require a General Plan Amendment to Low Medium Density Residential (up to 10.8 dwelling units/acre) and a zone change to GH (Garden Homes) to allow the development of seven homes on the 1.02-acre site as proposed.

General Plan Consistency

Land Use Compliance

The project proposes seven residential units on 1.02 acres with a density of 6.86 units per acre. Therefore, the project requires a General Plan Amendment from the current Low Density Residential land use that allows up to five dwelling units per net acre to Low Medium Density Residential that allows up to 10.8 dwelling units per net acre.

The Fountain Valley General Plan Land Use Element states that for Low Medium Density Residential “allows for the development of smaller lot single family residences, two-family dwellings, multi-family dwellings, and apartments. The maximum density within this land use category is up to 10.8 dwelling units per net unit acre”.

The applicable Goal and Policies of the General Plan Land Use Element that relate to residential development include:

Goal

2.1 Maintain and enhance high quality development throughout the City.

The applicable policy to obtain Goal 2.1 states:

Policy 2.1.2 Encourage variety, quality, consistency and innovation in land use practice.

The project meets the intent of Policy 2.1.2 of the Fountain Valley General Plan by proposing a residential project that is compatible with adjacent residential use and the Coastal church and private school adjacent to the site. The project proposes a distinctive architectural style and character creating a project identity for its residents who can take pride in the development.

Zoning Compliance

Density

The existing R-1 zone allows a maximum density of up to 5 dwelling units per acre. The project proposes 7 units on 1.02 acres with a density of 6.86 units/acre. Therefore, the project requires approval by the City of a zone change from R-1 to GH. The GH zone allows a density of up to 10.8 units/acre based on Table 2-3 of the Fountain Valley Municipal Code (FVMC).

The FVMC establishes the following development standards for a project in the GH zone.

GH development standards.

Lot Area: Minimum lot area = 1,800 square feet.

Lot width: 23 feet

Lot depth: As approved by the commission

Maximum number of dwelling units per parcel: 1 unit per parcel

Setbacks:

Front, As determined by the commission

Sides (each): As determined by the commission

Rear: As determined by the commission

Height Limit: 30 feet/2 stories

Ratio of 2nd story building area to 1st story building: As determined by the planning commission

Balconies and decks: As determined by the planning commission

Site coverage: 30% project building coverage. Maximum 11 units per structure

Floor area ratio: 0.5 + 0.10 (subject to Section 21.08.045)

Minimum floor area: As required by Table 2-4

Landscaping: As required by Section 21.20.040(B) (Landscape area requirements)

Parking: As required by Chapter 21.22 (Parking and Loading)

The project meets all of the GH zoning regulations and development standards. The project requires a Floor Area Ratio (FAR) bonus to increase the maximum FAR from 0.50 to 0.54 to comply with Fountain Valley Municipal Code 21.08.045. Therefore, the project would not have any significant land use impacts.

XII. MINERAL RESOURCES: Would the project:

- a) ***Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state? No Impact.*** The Fountain Valley General Plan does not identify any locally important minerals either on or adjacent to the site. Furthermore, there are no mining activities either on or adjacent to the project site. The project would not result in the loss of a locally important mineral resource or impact mineral resources.
- 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? No Impact.*** See Response to section "XII.a" above.

XIII. NOISE: Would the project result in:

- a) **Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance or applicable standards of other agencies? Less Than Significant Impact.** A noise report²⁷ was prepared for the project and is included in Appendix F. The project site is currently vacant and occasionally used for recreational activities including soccer and basketball associated with the adjacent Huntington Valley Baptist church. Any noise that is generated from the site is infrequent and limited to the occasional recreational use by the adjacent church. Noise sources in the immediate project area impacting the project site includes traffic on Starfish Avenue adjacent to and south of the site, Slater Avenue that is approximately 100 south of the site and I-405 (San Diego Freeway) that is approximately 300 feet to the west.

Noise Standards

The Noise Element of the City of Fountain Valley General Plan establishes noise quality standards for land use categories based on the State of California Office of Noise Control land use compatibility recommendations. Community noise exposures are recommended as normally acceptable, conditionally acceptable, normally unacceptable, and clearly unacceptable for various classes of land use sensitivity. As shown in Table 11, the City guidelines an exterior noise exposure standard of 60 dB CNEL is the most desirable level for single-family residential uses while levels of 70 dB CNEL are acceptable for usable outdoor space (patios, decks, pools, etc.). A level of 70 dB CNEL is considered “conditionally acceptable”. In a “conditionally acceptable” noise category, new construction should be undertaken only after a noise analysis has been made and needed noise insulation features have been incorporated in the project design. These standards apply to exterior recreational noise.

**Table 11
Fountain Valley Noise Ordinance Standards
Fountain Valley Municipal Code Section 6.28.050**

Noise Zone 1	Time Period	Exterior Noise Standard
All properties located in residential zone districts	7 a.m.- 10 p.m.	55 dB
	10 p.m.-7 a.m.	50 dB

It is unlawful for any person at any location within the city to create any noise, or to allow the creation of any noise on property owned, leased, occupied or otherwise controlled by such person, when the foregoing causes the noise level, when measured on any other residential property, either incorporated or unincorporated, to exceed:

- 1) The noise standard for a cumulative period of more than thirty (30) minutes in any hour; or
- 2) The noise standard plus five (5) dB(A) for a cumulative period of more than fifteen (15) minutes in any hour; or
- 3) The noise standard plus ten (10) dB(A) for a cumulative period of more than five (5) minutes in any hour; or
- 4) The noise standard plus fifteen (15) dB(A) for a cumulative period of more than one (1) minute in any hour; or
- 5) The noise standard plus twenty (20) dB(A) for any period of time.

²⁷ Noise Impact Analysis, Starfish Avenue Residential Project, Giroux & Associates, March 1, 2021.

An interior CNEL of 45 dB is mandated by the State of California Noise Insulation Standards (CCR, Title 24, Part 6, section T25-28) for multiple-family dwellings and hotel and motel rooms. In 1988, the State Building Standards Commission expanded that standard to include all habitable rooms in residential use, including single-family dwelling units. For this project an exterior noise level of 70 dB CNEL in any usable outdoor recreational area and interior noise level of 45 dB in any habitable residential indoor space are considered to be the appropriate compatibility standards for residential use.

Baseline Noise Levels

Baseline noise measurements were taken to document the existing noise levels on the site due to activities on the site and the immediate project vicinity. The existing noise levels are shown in Table 12. The measured noise levels provide a basis to calculate the noise levels that project residents would be exposed to with the existing noise generating activities in the area. Short term (15-minute) noise measurements were conducted early afternoon on Thursday, February 25, 2021 at two locations as shown in Figure 10.

**Table 12
Measured Noise Levels (dBA)**

Site No.	Location	Leq	Lmax	Lmin
1	Adjacent to Starfish Avenue	65.9	78.0	44.2
2	Back of Site, near adjacent homes (off Winemast Street)	59.4	63.5	37.9

Monitoring experience shows that 24-hour weighted CNELs can be reasonably well estimated from mid-afternoon noise readings. CNELs are approximately equal to mid-afternoon hour Leq plus 2-3 dB (Caltrans Technical Noise Supplement, 2009).

Meter location 1 is representative of noise levels at homes on the project site that would be closest to Starfish Avenue. The 65.9 dBA Leq would translate to a CNEL of 68-69 dBA. Meter 2 was located towards the back of the project site and lower noise levels. The existing observed 59.4 dBA Leq would translate to a CNEL of 61-62 dBA.

The City of Fountain Valley considers a noise level up to 70 dB CNEL “conditionally acceptable” for residential use. In a “conditionally acceptable” noise category, new construction should be undertaken only after a noise analysis has been made and needed noise insulation features have been incorporated in the project design.

Noise impacts are considered significant if they result in:

- a. Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.
- b. Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels.
- c. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.
- d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.

Figure 10
Noise Monitor Locations



"Substantially" is not defined in any noise guidelines. The accuracy of sound level meters and of sound propagation computer models is no better than ± 1 dB. This is also the human loudness difference discrimination level under ideal laboratory conditions. Most people cannot distinguish a change in the noise environment that differs by less than 3 dB between the pre- and post-project exposure if the change occurs under ambient conditions. For the purposes of this analysis, a traffic noise increase of more than +3 dB that worsens an area of noise/land use incompatibility would be considered a significant noise impact.

Sensitive Receptors

The closest noise sensitive receptors to the project are the residents adjacent to and north and east of the site. There is an existing 6-foot block wall along both the north and east property lines that separate the project site from the adjacent residents. The existing residences north of the project site are approximately 60 feet from closest proposed project residential unit. The existing residents east of the site would be approximately 35 feet from the proposed residential units. The closest church building to the project is approximately 95 feet to the west. A proposed 8-foot block wall (2-foot retaining wall with 6-foot block wall) is proposed along the west project boundary between the proposed residential units and the church and church school. The proposed residential units would be setback approximately 90 feet from the existing church school, which includes the existing drive aisle on the church site, a proposed 29-foot wide private drive on the project site and a 25-foot front yard setback from the project street.

Temporary Noise Impacts

The existing noise levels on the site and the noise levels in the immediate vicinity of the site would increase temporarily during project construction. Short-term construction noise would be generated during grading and the construction of the residential units and other proposed site improvements. Noise would also be generated by construction workers commuting to the site, the delivery of materials and supplies to the site and the operation of on-site electrical construction equipment, etc.

Temporary construction noise impacts vary markedly due to the noise level range of the various types of construction equipment, its activity level and the distance from the equipment to the closest noise sensitive land use. Short-term construction noise impacts typically occur in discrete phases dominated by large, earth-moving equipment that is used during for grading operations. The construction equipment that would be used to construct the residential units and pave the private street typically generates less noise than the grading equipment.

In 2006, the Federal Highway Administration (FHWA) published the Roadway Construction Noise Model that includes a national database of construction equipment reference noise emissions levels. In addition, the database provides an acoustical usage factor to estimate the fraction of time each piece of construction equipment is operating at full power during a construction phase. The usage factor is a key input variable that is used to calculate the average Leq (Equivalent Continuous Sound Pressure Level) noise levels.

Table 13 identifies the highest (Lmax) noise levels that is typically associated with each type of construction equipment that would be used by the project and then adjusts the noise level for distance to the closest sensitive receptor to the project and the extent of the use of the equipment (usage factor), which is represented as Leq. The table is organized by construction activity and lists the equipment that is associated with each activity. Table 13 also shows the noise level for each individual piece of equipment at a reference 50-foot distance.

The closest noise sensitive land use to the project site are the residences that are adjacent to and north and east of the site. There is an existing 6-foot block wall along both the northern and eastern project boundary that separate the residences from the project site.

Exterior noise levels were calculated to residences closest to the site with the operation of on-site construction equipment. The existing block walls along the southern and western boundary would reduce noise levels to the residences beyond the wall by approximately 5 dBA. The exterior noise levels to the residences closest to the project, after taking the 5 dBA credit, are shown in Table 14.

Older homes with single pane windows can reduce exterior noise levels to interior noise levels by 25 dB with the windows closed²⁸. However, modern homes are constructed with dual pane windows, which can result in up to a 30-dB exterior to interior noise level reduction with closed windows. Thus, the homes north of the project would have an interior noise level of 52-57 dBA and the homes east of the site would have an interior noise level of 51-56 dBA. The church classrooms west of the site could have an interior noise level of 42-47. This noise level reduction could be maintained on a temporary basis since it requires windows to remain closed at all times, assuming the structures have air conditioning and windows do not have to be open for cooling.

²⁸ U.S. Environmental Protection Agency, Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety, 1974.

**Table 13
Construction Equipment Noise Levels**

Phase Name and Duration	Equipment	Usage Factor ¹	Noise @ 50 feet (dB) ²	Hourly Noise Level @ 50 feet (dB))
Demolition	Concrete Saw	20%	90	83
	Dozer	40%	85	82
	Loader/Backhoe	37%	78	74
Grading	Grader	40%	85	81
	Dozer	40%	85	82
	Loader/Backhoe	37%	78	74
Construction	Crane	16%	81	73
	Loader/Backhoe	37%	78	74
	Welders	46%	74	71
	Generator Set	50%	81	78
	Forklift	20%	75	69
Paving	Paver	50%	77	74
	Mixer	40%	79	75
	Paving Equipment	40%	76	72
	Loader/Backhoe	37%	78	74
	Roller	20%	80	74

Source: FHWA's Roadway Construction Noise Model, 2006

**Table 14
Construction Noise Equipment Levels at Off-Site Noise Sensitive Uses (dBA Leq)**

Phase Name	Equipment	Noise @ Northern Perimeter Homes	Noise @ Eastern Perimeter Homes	Noise @ Closest Church Structure
Demolition	Concrete Saw	76	81	72
	Dozer	75	80	71
	Loader/Backhoe	67	72	63
Grading	Grader	74	79	70
	Dozer	75	80	71
	Loader/Backhoe	67	72	63
Construction	Crane	66	71	62
	Loader/Backhoe	67	72	63
	Welders	64	69	60
	Generator Set	71	76	67
	Forklift	62	67	58
Paving	Paver	67	72	63
	Mixer	68	73	64
	Paving Equipment	65	70	61
	Loader/Backhoe	67	72	63
	Roller	67	72	63

Indoor speech interference can be expressed as a percentage of sentence intelligibility between two average adults with normal hearing and speaking fluently in relaxed conversation approximately one meter apart in a typical living room or bedroom (EPA 1974). Indoor sound levels of up to 45 dBA Leq allow 100% intelligibility of sentences. At 52-dBA, intelligibility is reduced slightly, but still approximately

97%. Church classrooms, with an interior noise level of 42-47 dBA would be capable to maintain an acceptable interior noise environment with closed windows.

The potential for construction-related noise to adversely affect nearby residential receptors would depend on the location and proximity of the on-site construction activities in relation to the location of the off-site receptors. Most of the project construction equipment would be operating at a greater setback from the adjacent noise sensitive land uses than the worst-case examples shown in Table 14. Therefore, the exterior and interior noise levels to the adjacent noise sensitive land uses would be less than shown in Table 14.

The FVMC, Section 6.28.080 Schools, hospitals and churches – Special provisions states that, “It is unlawful for any person to create any noise which causes the noise level at any school, hospital or church while the same is in use to exceed the noise limits as specified in Section 6.28.050 prescribed for the assigned noise zone in which the school, which the school, hospital or church is located, or which noise level unreasonably interferes with the use of such institutions or which unreasonably disturbs or annoys patients in the hospital, provided conspicuous signs are displayed in three separate locations within one-tenth of a mile of the institution indicating the presence of a school, church or hospital. (Ord. 806 § 2, 1976).”

Although construction noise levels at the residences south of the site would exceed the Fountain Valley Noise Ordinance, the Noise Ordinance excludes construction noise level restrictions during the hours of 7:00 a.m. and 8:00 p.m. Monday through Friday and 9:00 a.m. and 8:00 p.m. on Saturdays. The Noise Ordinance prohibits construction on Sunday or legal holidays. The project proposes to restrict the hours of construction to those hours allowed by the Noise Ordinance, which would prevent construction on Sunday and not impact the adjacent church.

The project would not have a significant or adverse construction noise impact to any noise sensitive land use in the vicinity of the project, including the residents to the north and east with compliance to the Noise Ordinance.

In addition to adhering to the City of Fountain Valley allowable hours of construction (7 a.m. to 8 p.m. Monday through Friday and 9 a.m. through 8 p.m. on Saturdays with no construction allowed on Sundays and any legal holiday) the following measure is recommended to ensure construction noise impacts are reduced to the lowest level possible.

Mitigation Measure No. 4 The following measures shall be implemented at the start of construction and continued through project completion:

- Locate stationary construction equipment away from the occupied residential residences and church classroom buildings;
- Shut off construction equipment that is not in use; and
- Use electrical power to run air compressors and similar power tools.

Vehicular Noise Impacts

As discussed in section “XVII.a)” of this MND, the project is calculated to generate 66 daily vehicle trips, which translates to a CNEL of 41 dBA and lower than the City of Fountain Valley noise compatibility guidelines and lower than the background traffic noise levels that were measured at the site. As a result, the traffic noise levels generated by the project would be screened by the existing noise levels and would not have any significant traffic noise level impacts.

Mechanical Equipment

If air conditioning units are proposed for the residential units, it is anticipated the condenser units would be located at the rear of each residence. The condensers have a 16-foot setback to the east property line of the project site where there is a 6-foot block wall at the shared property line.

Variable speed air compressors have a sound power noise level of approximately 58 dBA. When taking into account the distance from the air conditioning unit to the 6-foot block wall and the distance to the existing residences east of the project site, the exterior noise level at the residence east of the project would be in the low 30 dBA. The exterior noise standard for the City of Fountain Valley is 55 dBA daytime and 50 dBA at night. Therefore, the noise at the residential units east of the project from the operation of the air conditioning unit would not exceed the city daytime or nighttime exterior noise threshold at the closest sensitive uses east of the site.

Based on the noise analysis above, the project would not have any significant temporary (construction) or permanent (operational) noise level impacts.

- b) ***Generation of excessive ground borne vibration or ground borne noise levels? Less Than Significant Impact.*** There are residential homes north and east of the project and the Huntington Valley Baptist church to the west. Starfish Avenue is adjacent to and south of the site and approximately 100 feet further south of the site is Slater Avenue. The site is subject to occasional ground borne vibration with heavy trucks occasionally traveling on Starfish Avenue adjacent to and south of the site. However, the vibration levels on the site from the occasional passing of heavy trucks on Starfish Avenue is not significant and very short-term in duration.

Construction Activity Vibration

Construction activities generate ground-borne vibration when heavy equipment travels over unpaved surfaces or when it is engaged in soil movement, such as grading. The effects of ground-borne vibration include discernable 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. Groundborne vibration is almost never annoying to people who are outdoors (FTA 2006).

Groundborne vibrations from construction activities rarely reach levels that can damage structures. Vibration thresholds have been adopted for major public works construction projects, but these relate mostly to structural protection (cracking foundations or stucco) rather than for human annoyance.

The vibration descriptor commonly used to determine structural damage is the peak particle velocity (ppv) and defined as the maximum instantaneous positive or negative peak of the vibration signal, usually measured in in/sec. The range of vibration levels is shown in Table 15.

Over the years, numerous vibration criteria and standards have been suggested by researchers, organizations, and governmental agencies. However, there are no California Department of Transportation (Caltrans) or Federal Highway Administration standards for vibration.

**Table 15
Human Response to Transient Vibration**

Average Human Response	ppv (in/sec)
Severe	2.00
Strongly perceptible	0.90
Distinctly perceptible	0.24
Barely perceptible	0.03

Source: Caltrans Transportation and Construction Vibration Guidance Manual, 2013.

According to Caltrans, the threshold for structural vibration damage for modern structures is 0.5 in/sec for intermittent sources, which include impact pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers and vibratory compaction equipment. The American Association of State Highway and Transportation Officials (AASHTO) (1990) identifies maximum vibration levels for preventing damage to structures from intermittent construction or maintenance activities for residential buildings in good repair with gypsum board walls to be 0.4–0.5 in/sec. The damage threshold criterion of 0.2 in/sec is appropriate for fragile buildings. For the purpose of this analysis because some of the area residential units adjacent to the site can be older, therefore the 0.2 in/sec damage threshold for older fragile buildings is used as the evaluation criteria. Below the level of 0.2 in./sec. there is virtually no risk of building damage. Table 16 below shows the predicted vibration levels at varying distances that are typically generated by various types of construction equipment that could be operational on the project site during construction.

**Table 16
Estimated Vibration Levels During Project Construction**

Equipment	PPV at 25 ft (in/sec)	PPV at 35 ft (in/sec)	PPV at 60 ft (in/sec)	PPV at 90 ft (in/sec)
Large Bulldozer	0.089	0.053	0.024	0.013
Loaded trucks	0.076	0.046	0.021	0.011
Jackhammer	0.035	0.021	0.009	0.005
Small Bulldozer	0.003	0.002	0.001	<0.001

Source: FHWA Transit Noise and Vibration Impact Assessment

The closest homes to the project site where grading would occur is approximately 35-feet to the east. As shown in Table 17, at 25-feet the maximum vibration levels (0.089 in/sec) are well below levels that could create structural damage in fragile buildings (i.e., 0.2 in/sec). The operation of jackhammers on the site that are a typical source of construction vibration would generate vibration levels below the threshold for cosmetic damage to the closest existing residences to the site. Based on the types of construction equipment that would be used on the site and the estimated vibration levels to the closest residences to the site from the operation of the construction equipment, the project would generate vibration levels less than the recommended acceptability threshold of 0.2 inches per second.

The project would not have any significant ground borne or vibration impacts and vibration impacts would be less than significant.

- c) ***For a project located within the vicinity of a private air strip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport, would the project expose people residing or working in the project area to excessive noise levels? No Impact.*** There are no private air strips or public airports in the City of Fountain Valley or the immediate project vicinity. John Wayne Airport is the closest public airport to the site and is located approximately five miles southeast of the project. The project site is not located within the land use plan of John Wayne Airport. Because the project is more than five miles from John Wayne Airport and outside of the airport plan for John Wayne Airport, the project would not be impacted by noise levels at John Wayne Airport.

XIV. POPULATION AND HOUSING: Would the project:

- a) ***Induce substantial unplanned 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)? Less Than Significant Impact.*** The project proposes seven (7) market rate for-sale single-family detached residential units. Currently there is an average of 3.01 persons per household in Fountain Valley.²⁹ Assuming the average persons per unit for the project is the same as the average household in Fountain Valley, the project is estimated to generate approximately 21 residents, which represents less than 0.04% increase of the City's current population of 55,357³⁰. This population increase assumes that all of the project residents live outside the city and would relocate to Fountain Valley. This percentage could be less when taking into account any existing city residents that would move to the project, once developed and their vacated units are occupied by city residents. If the vacated units are not reoccupied by city residents the city's population would increase accordingly. While the city's population is expected to increase due to the project, the increase would not significantly increase the population of Fountain Valley.

California State Housing Element Law enacted in 1980 requires the Southern California Association of Governments (SCAG) and other regional councils of government in California to determine the existing and projected regional housing needs for persons at all income levels. SCAG is also required by law to determine each jurisdiction's share of the regional housing need in the six-county (Imperial, Los Angeles, Orange, Riverside, San Bernardino and Ventura) Southern California region. State legislation and the Regional Housing Needs Assessment (RHNA) process are intended to address housing needs for projected state population and household growth, to create a better balance of jobs and housing in communities, and to ensure the availability of decent affordable housing for all income groups.

As the regional Council of Governments (COG) for Southern California, State law requires SCAG to "determine the existing and projected housing need for its region". SCAG takes the lead in overseeing the assessment by identifying measures to gauge housing demand and comparing those numbers against socioeconomic factors throughout the region.

The RHNA consists of two measurements: 1) existing need for housing, and 2) future need for housing. The existing need assessment examines key variables from census data, to measure ways in which the housing market is not meeting the needs of current residents. The future need assessment is determined by SCAG's growth forecast and public participation process.

The State's Housing Element law requires local governments to make plans to adequately address their share of existing and projected population growth, taking into consideration affordability of available and future housing. Recognizing that the most critical decisions regarding housing development, occur at the local level, through a City's General Plan, the Housing law seeks to

²⁹ U.S. Census Bureau, persons per household, July 1, 2019.

³⁰ U.S. Census Bureau, population estimate, July 1, 2019.

adequately address housing needs and demands. The California Department of Housing and Community Development (HCD) enforces State Housing Element Law by requiring certified Housing Elements as part of every city's General Plan.

In the City's Housing Element, the RHNA for 2014-2021 for Fountain Valley totals 358 units, which includes Extremely Low, Very Low, Low, Moderate and Above Moderate affordability levels. Of these housing income groups, the RHNA allocation for Above Moderate income group is 151 units. The City is required to ensure that the General Plan and Zoning Ordinance provide for the development of the 151 Above Moderate income residential units that are needed in Fountain Valley by 2021. As of 2020 the City has approved a total of 202 Above Moderate income residential units and exceeds the RHNA allocation of 151 Above Moderate units. However, as of 2020, the City has approved a total of 282 residential units towards the RHNA allocation of 358 units, which is a difference of 75 residential units. The project's proposed seven single-family detached residential units would contribute toward the City's 2014-2021 RHNA housing need of 76 total RHNA residential units.

Fountain Valley Housing Element

The Fountain Valley Housing Element provides policy themes, goals and policies to achieve the city's desired policy themes. The policy themes, goals and policies of the Housing Element that are applicable to the project are provided below:

Policy Theme: Housing Production

Goal #2: Promote and encourage the development of a variety of housing opportunities suitable to the needs of and sufficient in number to accommodate current and projected households.

Policy 2.a: Promote the construction of additional dwelling units to accommodate Fountain Valley's share of regional housing needs in accordance with adopted land use policies.

Policy 2.b: Promote infill housing development on vacant land within existing neighborhoods and recycling of underutilized non-residential parcels.

Policy 2.c: Promote and encourage the use of innovative construction methods, design standards, lot configurations and energy conservation techniques which would facilitate the production of quality, affordable and attractive new housing which varies in type, design, form of ownership and size and is compatible with abutting development.

Policy 2.d: Encourage new housing construction for home ownership in a mixture of price ranges.

Policy Theme: Equal Opportunity Housing

Goal #4: To promote housing opportunities for all persons regardless of race, age, religion, sex, marital status, ancestry, national origin or color.

Policy 4.a: Promote fair housing practices throughout the City.

The proposed seven unit residential project meets Goal #2 by providing for the development of new medium density single-family detached homes in a variety of floor plans on an infill property in the City. The vacant 1.02 acre parcel is designated by the General Plan for residential development and is currently underutilized. The proposed development of seven (7) market rate single-family detached

homes at a density of 6.86 dwelling units per acre would provide a housing type that is compatible with the existing single-family detached residences adjacent to and north and east of the site. The seven residential units would assist the city towards meeting its RHNA allocation of 358 total number of residential units by 2021. There are adequate public facilities and services available to serve the residents without any significant impacts. The project also meets Goal #4 by providing a residential project with housing for all persons, regardless of race, age, religion, sex, marital status, ancestry, national origin or color for Fountain Valley residents. The project would comply with all Federal and State equal opportunity housing mandates.

It is anticipated that many of the project buyers would be existing residents of Fountain Valley. Therefore, the project is not anticipated to substantially increase the City's population.

- b) ***Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere? No Impact.*** The project site is vacant and there are no residential units on the project site. Therefore, the project would not displace any existing housing and require the construction of replacement housing.

XV. PUBLIC SERVICES:

- a) ***Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, 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? Less Than Significant Impact.*** The Fountain Valley Fire Department provides fire protection services to the site. The closest fire station to the site is Fire Station 1 and located at 17737 Bushard Street. Fire Station 1 is located approximately 1 mile west of the site. The other responding fire station is Fire Station 2 that is located at 16767 Newhope Street and approximately 2.42 miles northeast of the site. Both fire stations have an estimated emergency response time of 5 minutes or less. Once constructed, the project would require fire protection services that are typically required for residential development. While the project would require fire protection services during both construction and the life of the project, the Fountain Valley Fire Department has stated that it has sufficient personnel and equipment to serve the project without any significant impact to the fire department's ability to continue to provide an adequate level of fire protection service to Fountain Valley.³¹ The impact by the project to fire protection services would be less than significant.
- ii. ***Police protection? Less Than Significant Impact.*** The Fountain Valley Police Department provides police protection services to the site from the police department located at 10200 Slater Avenue, which is approximately one half mile east of the site. The project could require police protection services during project construction to respond to theft, vandalism, accidents and other construction related police emergencies. Once constructed, the project would require typical operational police services such as routine police patrols, vandalism, break-ins, and other service calls associated with residential development. While the project would require police protection services during project construction and the life of the project, the project would not impact the Police Department's ability to continue to provide an adequate level of service to the community.³²

³¹ Fire Chief Ron Cookston, Fountain Valley Fire Department.

³² Chief Matt Sheppard, Fountain Valley Police Department, email February 24, 2021.

- iii. **Schools? Less Than Significant Impact.** The project is served by the Fountain Valley School District and the Huntington Beach Union High School District. Students grades K-8 that are generated by the project would attend Cox Elementary School and Masuda Middle School. Student's grades 9-12 would attend Fountain Valley High School. The project is estimated to generate approximately 3 students.³³ The elementary and middle schools that would serve the project currently have the capacity to accommodate the additional students without impacting the schools. Fountain Valley High School has a capacity of 2,789 students with a current enrollment of 3,366. Thus, Fountain Valley High School is currently over capacity.

As required by Government Code Section 65995, the project would be required to pay a developer fee towards the cost to offset impacts from the students that would be generated by the project. Currently the developer fee for residential units in the Fountain Valley School District is \$1.95 per square foot and \$1.48 for the Huntington Beach Union High School District for a total of \$4.08 a square foot. The project developer would be required to pay the fee in place at the time the developer acquires building permits for the construction of the proposed residential units. Payment of the required developer fee would reduce the impact of the project to both the Fountain Valley School District and the Huntington Beach Union High School District to less than significant.

- iv. **Parks? Less Than Significant Impact.** The closest public park to the project is La Capilla Park that is located at 9720 La Capilla Avenue and approximately 0.16 mile north of the site. La Capilla park is 0.68 acres and includes a climbing unit with two slides, a drinking fountain, sandpit, swings and benches. Because the project does not propose any on-site recreational facilities, project residents would incrementally increase the demand and use of existing park and recreational facilities in Fountain Valley, which could include La Capilla Park. Mile Square Regional Park, which is an Orange County regional park, is located at 16801 Euclid Street and approximately 1.25 miles north of the project. Mile Square Park includes soccer, basketball, baseball, softball, cross country track meets, fishing and archery, golf and other active and passive recreational facilities. Due to the small scale of the project it is anticipated the increased demand for both city and county park and recreational facilities would not have a significant impact to the existing park and recreational facilities in Fountain Valley.

Based on the City's park requirement formula the project would be required to pay a parkland fee of approximately \$72,639. The developer's park fee would be used by Fountain Valley to provide new or upgrade existing park and recreational facilities throughout the city. The payment of the required parkland fee would reduce the park and recreational impact of the project to less than significant. The project would not have a significant impact on park and recreational facilities in Fountain Valley with payment of the required park fee. The residents of the project are not anticipated to increase the use of city parks and significantly impact parks in Fountain Valley.

- v. **Other public facilities? No Impact.** There are no public facilities or services that would be impacted by the project.

XVI. RECREATION

- 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? Less Than Significant Impact.** The project would not significantly impact recreation facilities. Please see Public Services section "XV.a.iv" above.

³³ Fountain Valley School District student generation rate: 0.33 students/unit for grades K-5; 0.09 students/unit for grades 6-8 and Huntington Beach Union High School District student generation rate is 0.2 students for grades 9-12.

- b) **Does the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment? Less Than Significant Impact.** As discussed in Public Services section “XV.a.iv” above, the project does not propose the construction of any on-site recreational facilities and would not require the construction or the expansion of other recreational facilities that would impact the environment.

XVII. TRANSPORTATION: Would the project:

- a) **Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities? Less Than Significant Impact.** A Vehicles Miles Traveled (VMT) screening analysis³⁴ was prepared for the project and is included in Appendix G.

The project is estimated to generate 66 daily vehicle trips, including 5 AM and 7 PM trips as shown in Table 17.

**Table 17
Project Trip Generation Rates**

			AM Peak Hour			PM Peak Hour			
Land Use	Source ¹	Unit	%In	%Out	Rate	%In	%Out	Rate	Daily
Single Family Detached	ITE 210	DU	25	75	0.74	63	37	0.99	9.44
Trips Generated									
			AM Peak Hour			PM Peak Hour			
Land Use	Quantity	Unit ²	In	Out	Total	In	Out	Total	Daily
Single Family	7	DU	1	4	5	4	3	7	66

¹ Source: ITE = Institute of Transportation Engineers, Trip Generation Manual (10th Edition, 2017); ### = Land Use Code(s).

² DU- Dwelling Units.

Screening For Level of Service Analysis

The City of Fountain Valley has guidelines for Level of Service (LOS) impact for General Plan operational compliance. As specified in the City of Fountain Valley Transportation Assessment Guidelines, the requirement to prepare a transportation impact study (with Level of Service analysis) should be based on the following criteria:

- When either the AM or PM peak hour project trip generation exceeds 100 vehicle trips.
- Projects that generate 1600 or more average daily trips (ADT) on the Arterial Highway System.
- Projects that generate 51 or more vehicle trips during either the AM or PM peak hour to any intersection.

The project is calculated to generate 5 AM peak hour trips and 7 PM peak hour trips, which is less than 50 trips during the weekday AM and PM peak hours per the City of Fountain Valley Transportation Assessment Guidelines. Therefore, a Level of Service analysis is not warranted.

³⁴ Starfish Avenue Residential Project Trip Generation and Vehicle Miles Traveled Screening Analysis, Ganddini Group, February 20, 2021.

Screening For Vehicles Miles Traveled Analysis

The City of Fountain Valley has guidelines for Vehicle Miles Traveled (VMT) impact for CEQA compliance. The VMT assessment has been prepared in accordance with methodology established in the City of Fountain Valley Transportation Assessment Guidelines, which identify screening criteria for certain types of projects that typically reduce VMT and may be presumed to result in a less than significant VMT impact. The screening criteria includes:

- Projects Transit Priority Area (TPA) Screening
- Projects Low VMT Area Screening
- Project Type Screening
 - Local-serving retail less than 50,000 square feet
 - Local-serving K-12 schools
 - Local parks
 - Day care centers
 - Local-serving retail less than 50,000 square feet including:
 - Gas stations
 - Banks
 - Restaurants, bars, cocktail lounges
 - Shopping center
 - Service uses such as hair salon, barbers, gyms, equipment sales and rental, home electronics and small appliance repair, laundromats, tailors and other uses listed as permitted in Section 21.10.030 of the Fountain Valley Municipal Code
 - Local-serving hotels (e.g. non-destination hotels)
 - Student housing projects
 - Local-serving assembly uses (places of worship, community organizations)
 - Community Institutions (Public libraries, fire stations, local government)
 - Local serving community colleges that are consistent with the assumptions noted in the Regional
 - Transportation Plan/Sustainable Communities Strategy (RTP/SCS)
 - Affordable or supportive housing
 - Assisted living facilities
 - Senior housing
 - Re-tenanting of existing non-residential space
 - Interior expansions
 - Minor Exterior expansions
 - Projects generating less than 110 net new daily vehicle trips:
 - 11 single family housing units
 - 16 multi-family, condominiums, or townhouse housing units
 - 10,000 square feet of office
 - 15,000 square feet of light industrial
 - 63,000 square feet of warehousing
 - 79,000 square feet of high-cube transload and short-term storage warehouse

To qualify for screening, a project needs to fulfill only one of the screening types listed above.

Project VMT Screening Analysis

The City of Fountain Valley Transportation Assessment Guidelines include screening criteria for certain types of projects that are local serving in nature, or generate a low number of vehicle trips and may be presumed to have a less than significant impact. Small low trip generating projects do not have a significant impact because of their small demand on local infrastructure, and may be presumed to result in a less than significant VMT impact per the Office of Planning and Research's (OPR) Technical Advisory on Evaluating Transportation Impacts in CEQA (State of California, December 2018) ["Technical Advisory"].

The project is calculated to generate 66 daily vehicle trips and less than 110 vehicle daily trips as listed above. Therefore, a Vehicle Miles Traveled analysis is not required based on the City of Fountain Valley Transportation Assessment Guidelines.

The existing traffic circulation system can accommodate the project traffic without significantly impacting any local intersections, city policies regarding transportation or CMP roadways or cause roadway congestion. The project would not have any significant transportation impacts.

- b) **Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)? No Impact.** As stated in section "XVII.a)" above, in compliance with CEQA Guidelines section 15064.3, subdivision (b) a VMT screening analysis was prepared. Therefore, the project would not be in conflict or inconsistent with CEQA Guidelines section 15064.3, subdivision (b).
- c) **Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? Less Than Significant Impact.** Currently there is no vehicular access to the site. The only access to the site is pedestrian access from the parking lot of the church located adjacent to and west of the site.

The project proposes to construct a 29 foot wide drive aisle along the west side of the project site that would extend from Starfish Avenue approximately 300 feet north and terminate at the start of the driveway of residential unit no. 7. The 29 foot wide drive aisle includes a 9 foot wide parking area along the frontage of units 1-6. No parking is allowed along the east side of the drive aisle for its entire length. A new driveway consistent with Fountain Valley driveway design standard is proposed at Starfish Avenue to provide vehicular access to the site. The city would review the improvement plans prior to the issuance of a building permit to ensure the design of the driveway meets and complies with city driveway standards. The project does not propose any roadway or site access design that would have any significant traffic or circulation hazards or impacts.

- d) **Result in inadequate emergency access? Less Than Significant Impact.** The existing public streets and circulation system would continue to provide adequate site access for emergency vehicle access. Police, fire, paramedic/ambulance and other emergency vehicles would have adequate site access to respond to on-site emergencies to the site with a proposed driveway for the proposed residential development. The project driveway has been reviewed by the City, including the police and fire departments to ensure the site access driveway has adequate widths and turning radius for emergency vehicles to enter and exit the site. The project would not impact emergency access to the site.

XVIII. TRIBAL CULTURAL RESOURCES: Would the project:

- a) **Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place,**

cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

- i. **Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1 (k). Potential Impact Unless Mitigation Incorporated.** As required by AB 52, the City mailed letters to six area Native American Indians on March 31, 2021 that are on record with the City that may have cultural resources associated with the site. The Gabrieliño Band of Mission Indians – Kizh Nation requested consultation because the project site lies within the ancestral tribal territory of the Kizh Nation. Thus, tribal cultural resources could exist on the site. After consultation with Kizh Nation in compliance with AB 52, the following mitigation measures are recommended to reduce potential impacts to Tribal resources, if present.

Mitigation Measure No. 5 Prior to the commencement of any ground disturbing activity at the project site, the project applicant shall retain a Native American Monitor approved by the Gabrieleno Band of Mission Indians-Kizh Nation. A copy of the executed contract shall be submitted to the City of Rosemead Planning and Building Department prior to the issuance of any permit necessary to commence a ground-disturbing activity. The Tribal monitor shall only be present on-site during the construction phases that involve ground-disturbing activities. Ground disturbing activities are defined by the Tribe as activities that may include, but are not limited to, pavement removal, potholing or auguring, grubbing, tree removals, boring, grading, excavation, drilling, and trenching, within the project area. The Tribal Monitor shall complete daily monitoring logs that shall provide descriptions of the day's activities, including construction activities, locations, soil, and any cultural materials identified. The on-site monitoring shall end when all ground-disturbing activities on the project site are completed, or when the Tribal Representatives and Tribal Monitor have indicated that all upcoming ground-disturbing activities at the project site have little to no potential to impact Tribal Cultural Resources.

Mitigation Measure No. 6 Upon discovery of any Tribal Cultural Resources, construction activities shall cease in the immediate vicinity of the find (not less than the surrounding 100 feet) until the find can be assessed. All Tribal Cultural Resources unearthed by project activities shall be evaluated by the qualified archaeologist and Tribal monitor approved by the Consulting Tribe. If the resources are Native American in origin, the Consulting Tribe shall retain it/them in the form and/or manner the Tribe deems appropriate, for educational, cultural and/or historic purposes. If human remains and/or grave goods are discovered or recognized at the project site, all ground disturbance shall immediately cease, and the county coroner shall be notified per Public Resources Code Section 5097.98, and Health & Safety Code Section 7050.5. Human remains and grave/burial goods shall be treated alike per California Public Resources Code section 5097.98(d)(1) and (2). Work may continue on other parts of the project site while evaluation

and, if necessary, mitigation takes place (CEQA Guidelines Section 15064.5[f]). If a non-Native American resource is determined by the qualified archaeologist to constitute a “historical resource” or “unique archaeological resource,” time allotment and funding sufficient to allow for implementation of avoidance measures, or appropriate mitigation, must be available. The treatment plan established for the resources shall be in accordance with CEQA Guidelines Section 15064.5(f) for historical resources and PRC Sections 21083.2(b) for unique archaeological resources. Preservation in place (i.e., avoidance) is the preferred manner of treatment. If preservation in place is not feasible, treatment may include implementation of archaeological data recovery excavations to remove the resource along with subsequent laboratory processing and analysis. Any historic archaeological material that is not Native American in origin shall be curated at a public, non-profit institution with a research interest in the materials, such as the Natural History Museum of Los Angeles County or the Fowler Museum, if such an institution agrees to accept the material. If no institution accepts the archaeological material, it shall be offered to a local school or historical society in the area for educational purposes.

Implementation of the recommended mitigation measures would reduce potential tribal cultural resource impacts to less than significant.

- ii) **A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe. Potentially Significant Unless Mitigation Incorporated.** As discussed in section “XVIII.a.i.” above, the project could significantly impact tribal resources if present. The implementation of the recommended mitigation measures would reduce potential impacts to tribal resources to less than significant.

XIX. UTILITIES AND SERVICE SYSTEMS: Would the project:

- a) ***Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunication facilities, the construction or relocation of which could cause significant environmental effects? Less Than Significant Impact.*** The existing water main in Starfish Avenue adjacent to the site has capacity to provide the required water supply for both fire flow and the potable water demand of the project without the need to construct new water supply facilities or expand existing facilities. The existing sewer line in Starfish Avenue has capacity to serve the project without a need to upgrade or increase the size of the sewer line. All other utilities required to serve the project, including drainage, electricity, natural gas and telecommunications are in Starfish Avenue and would not have to be expanded or relocated. The project developer would have to extend to the existing facilities to the site, but none of the existing facilities would have to be improved that could cause significant environmental impacts. The project would not have any significant public utility impacts.
- b) ***Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years? Less Than Significant Impact.*** The

project is estimated to consume approximately 2,121 gallons of water per day³⁵. Based on the City's Urban Water Management Plan the City has an adequate water supply to meet the demand of the project into the future. The project would have a less than significant impact on water supply.

- c) **Result in a determination by the wastewater treatment provider that 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? Less Than Significant Impact.** Please see section "XIX.b" above.
- d) **Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs? Less Than Significant Impact.** The construction of the project would generate various types of construction debris, including asphalt, metal, wood, etc. that cannot be recycled would be hauled to a landfill. Once operational, the project is estimated to generate approximately 28 pounds of solid waste per day.³⁶

Republic Services is the current contract solid waste hauler for the City of Fountain Valley and would serve the project. The solid waste that is collected in Fountain Valley is taken to a Materials Recovery Facility (MRF) in Huntington Beach. All recyclables are recovered and the remaining solid waste is taken to the Frank R. Bowerman Landfill. The City of Fountain Valley adopted a Source Reduction and Recycling Element (SRRE) in 1992 that outlines the City's commitment to a 25% solid waste reduction by 1995 and a 50% reduction by 2000. The solid waste generated by the project would be recycled and the materials that cannot be recycled would be hauled to the Frank R. Bowerman Landfill. The city's waste hauler would actively recycle the solid waste generated by the project to reduce the amount of material that is hauled to the landfill. The solid waste generated by the project would have a less than significant impact on the life expectancy of any of the landfills that serve the project.

- e) **Comply with federal, state, and local statutes and regulations related to solid waste? Less Than Significant Impact.** The City of Fountain Valley complies with all federal, state, and local statutes and regulations related to solid waste. The project would not have any solid waste impacts because the residents would be required to comply would all applicable solid waste statues and regulations and large quantities of solid waste would not be generated.

XX. WILDFIRE: If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:

- a) **Substantially impair an adopted emergency response plan or emergency evacuation plan? No Impact.** Based on review of the Very High Fire Hazard Severity Zones in Local Responsibility Areas and State and Federal Responsibility Areas map, the City of Fountain Valley is not located within a Very High Fire Hazard Severity Zone.³⁷ Furthermore, a review of the Fire Hazard Severity Zones in State Responsibility Areas map, the City of Fountain Valley is not located in a Moderate, High or Very High fire hazard zone.³⁸ The closest Moderate, High or Very High fire hazard zone to the project site is the open space that extends along the south side of University Drive from Culver Drive east to Ridgeline Drive in the City of Irvine and approximately eight miles southeast of the project. The project would not impair or impact any emergency response or emergency evacuation plan associated with an

³⁵ 100 gallons/person/day and 3.03 people/household.

³⁶ <http://www.calrecycle.ca.gov/>. Residential - 4 pounds/day/unit.

³⁷ http://frap.fire.ca.gov/webdata/maps/orange/fhszl_map.30.pdf

³⁸ http://frap.fire.ca.gov/webdata/maps/orange/fhszs_map.30.pdf

emergency response to a fire in this specific Very High fire hazard zone or any other designated local, state or Federal fire hazard zone in Orange County.

- b) ***Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire? No Impact.*** As discussed in section “XX. a.” above, the project is not in a Moderate, High or Very High fire hazard zone and the closest designated fire hazard zone is approximately eight miles southeast of the project. The project site and surrounding properties are generally flat with no significant topographic relief and expose project occupants to wildfire risks. Santa Ana winds could expose project occupants to smoke and other pollutants associated with wildfires located east of the city. However, that exposure would not be site specific because much of the city and general geographic area would be exposed and not the project specifically. The project would not expose project occupants to pollutant concentrations from a wildfire due to slope, prevailing winds or other factors.
- c) ***Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment? No Impact.*** The project would be required to install fire sprinklers as required by the City of Fountain Valley Fire Department standards. However, the project would not be required to install and maintain any roads, fuel breaks, emergency water sources, power lines or other utilities to protect the project and the immediate area from a wildfire because the project is not located in a Moderate, High or Very High fire hazard zone as discussed in section “XX. a.” above.
- d) ***Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes? No Impact.*** As discussed in Section “XX. a.” above, the project is not located within a Moderate, High or Very High fire hazard zone. As discussed in section “XX. b.” above, the project site and surrounding properties are generally flat with no significant topographic relief that would expose structures or project occupants to significant risks due to downslope or downstream flooding or landslides. Because the project is not located in a fire hazard zone or downstream of any hillsides or areas of topographic relief the project would not expose either project residents or proposed structures to significant risks due to downstream or downstream flooding or landslides due to post-fire slope instabilities.

XXI. MANDATORY FINDINGS OF SIGNIFICANCE:

- a) ***Does the project have the potential to substantially 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, substantially 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? Less Than Significant Impact.*** The 1.02-acre site is vacant, except for an existing concrete basketball court near the southern portion of the site. The only vegetation on the site is turf grass. There are no important plants or wildlife on the site that would be impacted by the project. Because there are no buildings on the site no examples of buildings representing California history or prehistory would be impacted. The project would not significantly impact biological or historical resources.
- 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.) Less Than Significant Impact. The City of Fountain Valley has identified two cumulative projects that, along with the proposed project, could have cumulative impacts. The cumulative projects are shown in Table 18 and their locations are shown in Figure 11.

**Table 18
Cumulative Projects**

Project	Address	Project Type	Units/Sq. Ft.	Status
Villa Serena	10460 Slater Avenue	Single-family	12 residential units	Approved Construction Pending
Brookfield Residential Project	9790 Finch Avenue	Single-family	74 residential units	Approved Construction Pending

Based on the air quality report, the short-term construction emissions and the long-term operational emissions of the project would not exceed any adopted air emission thresholds. The project would not have any individual or cumulative noise or traffic impacts. In addition, the project would not have any significant individual or cumulative impacts associated with aesthetics, hydrology, soils and geology, land use, public services or utilities that along with the cumulative projects listed in Table 18 would result in any significant cumulative impacts.

- c) **Does the project have environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly? Less Than Significant Impact.** There are no significant impacts associated with the proposed project that would cause substantial adverse effects and significantly impact human beings either directly or indirectly.

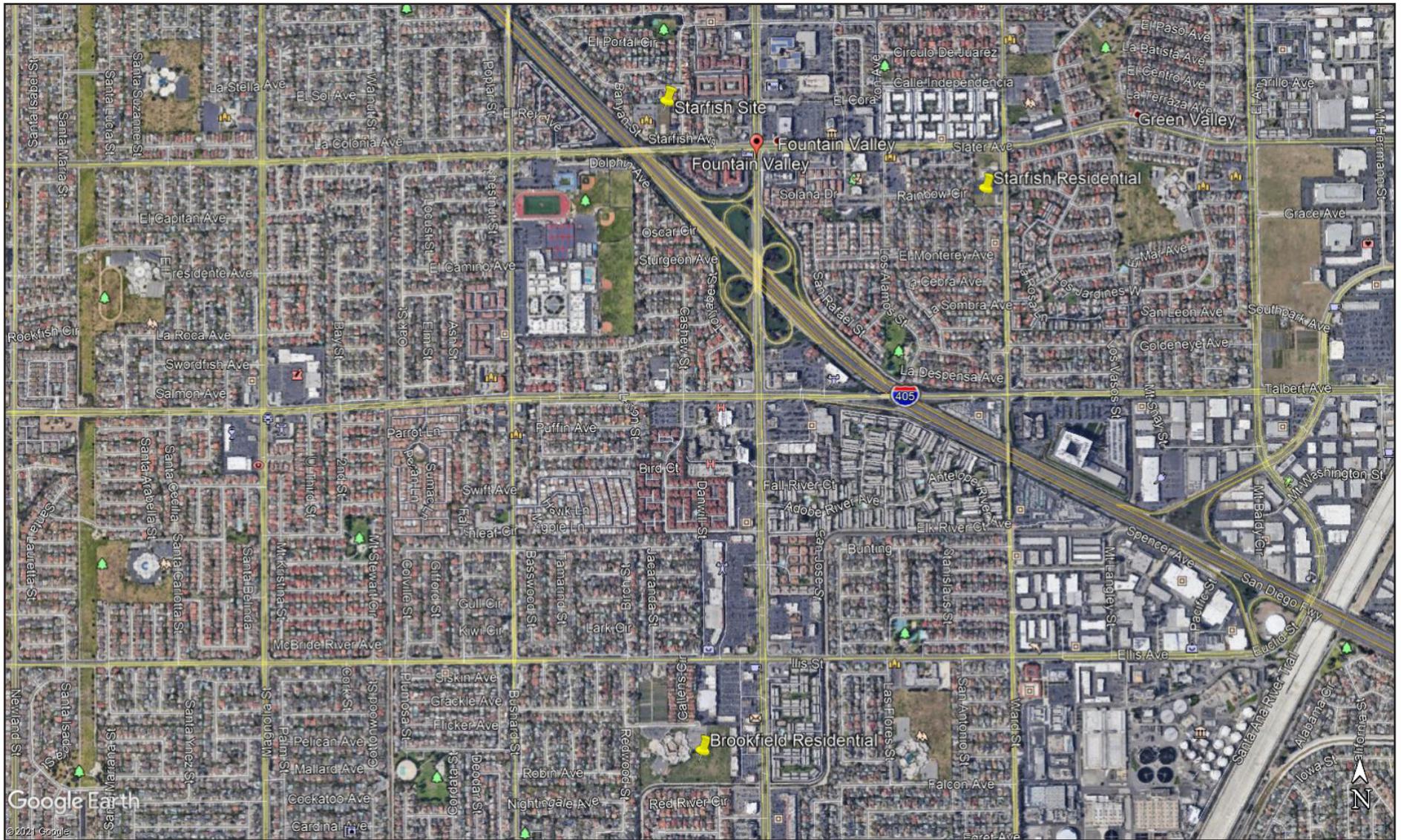


Figure 11
Cumulative Project Location Map