CITY OF VISTA
CALIFORNIA

DRAFT INITIAL STUDY AND MITIGATED NEGATIVE DECLARATION P22-0218

Project Name:	Vista Melrose Residential Project
Project Location:	560 S. Melrose Drive, 622 S. Melrose Drive and APN#166-280-61-00 Vista, California 92084
APNs:	166-280-60-00, 166-280-61-00, and 166-280-18-00
Project Applicant:	TTLC Vista Melrose, LLC 4350 Von Karman Ave, Suite 200 Newport Beach, California 92660 925.331.7006
Lead Agency:	City of Vista Community Development Department, Planning Division 200 Civic Center Drive Vista, California 92084 Raffi Mangassarian, Associate Planner (760) 643-5424
Public Review Period:	April 12, 2023 to May 1, 2023

This Draft Initial Study/Mitigated Negative Declaration has been prepared pursuant to the California Environmental Quality Act (CEQA) (Public Resources Code Section 21000, et seq.) and the State CEQA Guidelines (California Code of Regulations Section 15000, et seq.). It is available for a 20--day public review period as shown above.

Comments regarding this document should focus on the sufficiency of the document in identifying and analyzing the potential impacts on the environment that may result from the proposed project, and the ways in which any significant effects are avoided or mitigated. **All comments must be made in writing** and addressed to Mr. Raffi Mangassarian, Associate Planner, City of Vista Planning Division, 200 Civic Center Drive, Vista, California 92084. Comments may be sent by e-mail to: rmangassarian@cityofvista.com. Comments must be received in the Planning Division office no later than 5:00 P.M. on the last day of the public review period noted above.

Draft Mitigated Negative Declaration

Vista Melrose Residential Project

APRIL 2023

Prepared for:

CITY OF VISTA
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Vista, California 92084
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Acronyms and Abbreviations

Acronym/Abbreviation	Definition
BMP	best management practice
BVSD	Buena Vista Sanitation District
C	commercial
CalEEMod	California Emissions Estimator Model
CAP	Climate Action Plan
CEQA	California Environmental Quality Act
CH_4	methane
CHRIS	California Historical Resources Information System
City	City of Vista
CO	Commercial Office
CO	carbon monoxide
CO_2e	CO_2 equivalent
CRHR	California Register of Historical Resources
DPM	diesel particulate matter
GHG	greenhouse gas
GWP	global warming potential
HFHSZ	high fire hazard severity zone
I-5	Interstate 5
IWMP	Integrated Waste Management Plan
kWh	kilowatt-hours
LOS	level of service
MD	Medium Low Density Residential
MG	million gallons
MND	Mitigated Negative Declaration
MT	metric tons
N_2O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NO_2	nitrogen dioxide
NO_x	oxides of nitrogen
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
O_3	ozone
O-P	Office Professional
PM_{10}	particulate matter with an aerodynamic diameter less than or equal to 10 microns
$PM_{2.5}$	particulate matter with an aerodynamic diameter less than or equal to 2.5 microns
project	Vista Melrose Residential Project
R-1	residential
RAQS	Regional Air Quality Strategy
RCNM	Federal Highway Administration Roadway Construction Noise Model

Acronym/Abbreviation	Definition
RWQCB	Regional Water Quality Control Board
SANDAG	San Diego Association of Governments
SCIC	South Coastal Information Center
SDAB	San Diego Air Basin
SDAPCD	San Diego Air Pollution Control District
SDG&E	San Diego Gas & Electric
SIP	State Implementation Plan
SLF	Sacred Lands File
SO_x	sulfur oxides
SR-78	State Route 78
STC	sound transmission class
SWPPP	Stormwater Pollution Prevention Plan
TAC	toxic air contaminant
UWMP	Urban Water Management Plan
VDC	Vista Development Code
VID	Vista Irrigation District
VOC	volatile organic compound
WEAP	worker environmental awareness program

1 Introduction

1.1 Project Overview

The proposed Vista Melrose Residential Project (Project) consists of a residential development within the City of Vista (City) at 560 S. Melrose Drive, 622 S. Melrose Drive and APN#166-280-61-00. The approximately 5.55-acre site includes Assessor's Parcel Numbers [APNs] 166-280-60-00, 166-280-61-00, and 166-280-18-00. The properties at 560 S. Melrose Drive and APN 166-280-61-00 are both currently zoned O-P (Office Professional) and a corresponding General Plan designation of Commercial Office (CO). The property at 622 S. Melrose Drive is currently zoned R-1 (Residential) and has a corresponding General Plan designation of Medium Low Density Residential (MLD). The applicant, TTLC Vista Melrose, LLC, proposes to rezone all three properties to R-1-B (Residential) with a corresponding General Plan change to Medium Density Residential (MD). Furthermore, the applicant proposes a thirty-seven (37) lot Tentative Subdivision Map to redevelop the site to include thirty-four (34) single-family residences, which would result in a proposed density of 6.1 dwelling units per acre, a private street, private park with a tot lot and a dog park. The project will utilize the City of Vista Small Lot Subdivision standards per Vista Development Code Section 18.33 to achieve their project design. The proposed project would also include landscaping and offsite street and utility improvements.

1.2 California Environmental Quality Act Compliance

The California Environmental Quality Act (CEQA) requires that any project in the state of California determined to have the potential to result in adverse impacts to the environment be analyzed under the CEQA Guidelines and the results disclosed to the general public (14 CCR 15000 et seq.; California Public Resources Code Section 21000 et seq.). A lead agency is determined under CEQA as the agency with greatest authority over the resources or land the proposed project is likely to impact, often a city, county, school district, or public resource agency. The proposed project would be required to complete environmental review under CEQA, led by the City of Vista (City), to identify and disclose potential environmental impacts associated with the proposed project.

The City has prepared this Mitigated Negative Declaration (MND) in conformance with Section 15070(a) of the CEQA Guidelines. The purpose of the MND environmental evaluation is to describe the proposed project, determine any potentially significant impacts associated with the proposed project, and incorporate mitigation measures into the project design as necessary to reduce or eliminate the potentially significant effects of the project.

1.3 Project Planning Setting

The project site is located within the center of the City within San Diego County. The Vista General Plan 2030 and Vista Municipal Code guide and govern planning within the city. The Project site is located within the San Diego Air Basin (SDAB), which includes San Diego County, and is within the jurisdictional boundaries of San Diego Air Pollution Control District (SDAPCD).

1.4 Public Review Process

Pursuant to CEQA Guidelines Section 15105(b), the MND will be available for a public comment period of not less than 30 days from April 12, 2023 to May 1, 2023..

In reviewing the MND, affected public agencies and the interested public should focus on the sufficiency and adequacy of the document in identifying and analyzing the possible impacts on the environment, as well as ways in which the significant effects of the project are proposed to be avoided or mitigated.

Please provide comments on the MND in writing before the end of the comment period. Following the close of the public comment period, the City will consider this MND and comments received in determining whether to approve the proposed project. Written comments on the MND should be sent to the following address by May 1, 2023.

City of Vista
Attn: Raffi Mangassarian, Associate Planner
200 Civic Center Drive
Vista, California 92081

2 Project Description

2.1 Project Location

The project site is located in the central portion of the City of Vista in the northern portion of San Diego County, CA at APN 166-280-61-00, 560 S. Melrose Drive and 622 S. Melrose Drive (Figure 1). The approximately 5.55-acre site includes Assessor's Parcel Number's [APNs]166-280-60-00, 166-280-61-00, and 166-280-18-00. The project site is bound by Matagual Drive to the north, S Melrose Drive to the West, commercial and residential development to the south and single-family residential development to the east.

2.2 Environmental Setting

A portion of the project site is occupied by the Thriving Life Church and its' associated parking lot on the western portion of the site, which is no longer in operation, vacant land to the west, and a single-family residence in the southeastern portion of the site. The current zoning designation of the subject properties, 560 S. Melrose Drive (APN#166-280-60-00) and APN#166-280-61-00, is O-P (Office Professional), and R-1 (Residential) for the single-family residential property located at 622 S. Melrose Drive (APN#166-280-18-00). In the City's General Plan, address 560 S. Melrose Drive (APN#166-280-60-00) and APN#166-280-61-00 have a General Plan designation of Commercial Office (CO), and the property at 622 S. Melrose Drive (APN#166-280-18-00) has a General Plan designation of Medium Low Density Residential (MLD). The project site is surrounded by commercial uses to the west and south, residential uses to the south and east, and institutional uses to the north.

Regional access to the project site is provided by State Route 78 (SR-78), which runs east-west 0.5 miles north of the project site, and Interstate 5 (I-5) which runs north–south approximately 5 miles west of the project site, allowing for vehicular access to the larger San Diego region The project site is directly accessible via S Melrose Drive and Matagual Drive.

2.3 Project Characteristics

The project would include a single-family residential development, the construction of a private road, a dog park, and a tot lot (Figure 2). The project would include the demolition of the existing church and single-family residence onsite. The project proposes to redevelop the site to include 34 single-family residences, which would result in a proposed density of 6.1 dwelling units per acre. Each residence would be two stories, contain 4 bedrooms with 5th optional bedroom or loft and would have a 2- car garage. Landscaping would be included throughout the project site and along the project boundary. A total of 106,921 square feet of open space will be provided onsite, of which 12,526 square feet is common open space. Additionally, the project would include offsite improvements that are detailed below.

Off-site improvements for the project include the following:

- Street Improvements – Existing removals and/or grind/overlay, installation of curb & gutter, sidewalk, green street requirements and striping
- Water Connection – connect project water system to existing water line in Matagual Drive, near project entrance
- Fire Hydrant – relocate existing fire hydrant on Matagual Drive

- **Sewer Connection -** connect project sewer system to existing sewer main in Matagual Drive
- **Storm Drain Connection –** connect project storm drain system to existing storm drain main in intersection of Melrose and Matagual, install new storm drain catch basin on Matagual Drive
- **Dry Utilities –** Underground overhead power and communication lines on Matagual (termination of undergrounding currently assumed at project boundary, however, it may require continuing further up Matagual 100'-200')
- Relocate signal poles at SE corner of intersection of Melrose and Matagual
- **Potential VID Work in Las Palmas –** abandonment of existing water line and reconnection of 3 water services for residences along Las Palmas

2.4 Project Construction and Phasing

Project construction would include demolition, site preparation, building construction, paving, and architectural coating. The entirety of the project construction process is expected to last 21 months. The project would be broken up into 6 construction phases including model and buildout.

2.5 Project Approvals

The project requires the following approvals:

- General Plan Amendment (to change the land use designation from Commercial Office (CO) and Medium Low Density (MLD) to Medium Density (MD). See Figures 3-A and 4-A.
- Rezone (from Office Professional (O-P) and Single Family (R-1) to Single Family Residential (R-1-B)). See Figures 3-B and 4-B).
- Tentative Subdivision Map
- Site Development Plan

3 Initial Study Checklist

1. **Project title:**

   Vista Melrose Residential Project

2. **Lead agency name and address:**

   City of Vista
   200 Civic Center Drive
   Vista, California 92084

3. **Contact person and phone number:**

   Raffi Mangassarian, Associate Planner
   760.639.6100
   200 Civic Center Drive
   Vista, California 92084

4. **Project location:**

   560 S. Melrose Drive, 622 S. Melrose Drive and APN#166-280-61-00
   Vista, California 92084

5. **Project sponsor's name and address:**

   TTLC Vista – Melrose, LLC
   4350 Von Karman Ave, Suite 200
   Newport Beach, California 92660
   Contact: Michael Torres 925.331.7006

6. **General plan designation:**

   Commercial Office & Medium Low Density Residential

7. **Zoning:**

   Single-Family Residential (R-1) & Office Professional (O-P)

8. **Description of project. (Describe the whole action involved, including but not limited to later phases of the project, and any secondary, support, or off-site features necessary for its implementation. Attach additional sheets if necessary):**

   The proposed Vista Melrose Residential Project (Project) consists of a residential development within the City of Vista (City) at 560 S. Melrose Drive, 622 S. Melrose Drive and APN#166-280-61-00. The approximately 5.55-acre site includes Assessor's Parcel Numbers [APNs] 166-280-60-00, 166-280-61-00, and 166-280-18-00. The properties at 560 S. Melrose Drive and APN 166-280-61-00 are both currently zoned O-P (Office Professional) and a corresponding General Plan designation of Commercial Office (CO). The property at 622 S. Melrose Drive is currently zoned R-1 (Residential) and has a corresponding General Plan designation of Medium Low Density Residential (MLD). The applicant, TTLC Vista Melrose, LLC, proposes to rezone all three properties to R-1-B (Residential) with a corresponding General Plan change to Medium Density Residential (MD). Furthermore, the applicant proposes a thirty-seven (37) lot Tentative

Subdivision Map to redevelop the site to include thirty-four (34) single-family residences, which would result in a proposed density of 6.1 dwelling units per acre, a private street, private park with a tot lot and a dog park. The project will utilize the City of Vista Small Lot Subdivision standards per Vista Development Code Section 18.33 to achieve their project design. The proposed project would also include recreational amenities such as a tot lot and dog park and landscaping and offsite street and utility improvements.

The project would include a single-family residential development, the construction of a private road, a dog park, and a tot lot. The project would include the demolition of the existing church and single-family residence onsite. As previously noted, the project applicant proposes to redevelop the site to include 34 single- family residences, which would result in a proposed density of 6.1 dwelling units per acre. Each residence would be two stories, contain 4 bedrooms with 5th optional bedroom or loft and would have a 2-car garage. Landscaping would be included throughout the project site and along the project boundary. A total of 106,921quare feet of open space will be provided onsite, of which 12,526 square feet is common open space. The project would include street improvements along the project frontage on Matagual Drive and Melrose Drive.

9. **Surrounding land uses and setting (Briefly describe the project's surroundings):**

The project site is surrounded by commercial uses to the west and south, residential uses to the south and east, and institutional uses to the north.

10. **Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement):**

None

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.?**

Yes, three tribes have requested consultation, Barona Group of the Capitan Grande, Rincon Band of Luiseno Indians, and San Luis Rey Band of Mission Indians.

Environmental Factors Potentially Affected

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

☐ Aesthetics	☐ Agriculture and Forestry Resources	☐ Air Quality
☐ Biological Resources	☐ Cultural Resources	☐ Energy
☐ Geology and Soils	☐ Greenhouse Gas Emissions	☐ Hazards and Hazardous Materials
☐ Hydrology and Water Quality	☐ Land Use and Planning	☐ Mineral Resources
☐ Noise	☐ Population and Housing	☐ Public Services
☐ Recreation	☐ Transportation	☐ Tribal Cultural Resources
☐ Utilities and Service Systems	☐ Wildfire	☐ Mandatory Findings of Significance

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 effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature

4-11-23

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 Environmental Impact Report (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

3.1 Aesthetics

		Potentially Significant Impact	Less Than Significant Impact With 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?	☐	☐	☒	☐
b)	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☒	☐
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?	☐	☐	☒	☐
d)	Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

a) Would the project have a substantial adverse effect on a scenic vista?

The project involves the redevelopment of an existing church and single-family residence into 34 single family homes. The City of Vista General Plan EIR identified two main viewsheds within the city, the San Marcos Mountains and canyons within the southwestern portions of the City. Due to distance from the project site, the project would not alter views of the San Marcos Mountains nor the canyons in the southwestern portions of the City. Therefore, impacts related to adverse effects on a scenic vista would be less than significant.

b) Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

The General Plan EIR identifies the following as scenic resources: the San Marcos Mountains, ridgelines; hills and valleys; creeks and streams; distant mountains to the north; views of native vegetation; public parks, and recreational facilities (City of Vista 2011a). The closest scenic resource to the project site is Breeze Hill Park, located approximately 0.05 miles southwest of the project site on the other side of South Melrose Drive. The project site is in a developed area, surrounded by existing and commercial development. The project would not impact views of Breeze Hill Park from public viewpoints because the park and project are separated from South Melrose Drive.

The project site is located approximately 0.5 miles from State Route 78 (SR-78), 4.4 miles from SR-76, and. 5.5 miles from Interstate 5 (I-5). Theses sections of SR-78, SR-76, and I-5 proximate to the project site are not identified as a Scenic Highway per the Caltrans State Scenic Highways Program. A portion of SR-78 is identified as an Eligible State Scenic Highway; however, this eligible segment begins 47 miles east of the project site in Santa Ysabel. The nearest eligible state scenic highway is SR-78, however, the project site is not visible due to distance (Caltrans 2019). The project site is not located within a viewshed of a state scenic highway and therefore impacts would be less than significant.

c) In non-urbanized areas, would the project 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?

The project site is located within the Mar Vista/Sunset/Carriage Hill neighborhood within the City. This neighborhood is characterized by semi-rural character with single-family suburban development (City of Vista 2011a). The project site is surrounded by existing development with residential uses to the east, commercial and residential uses to the south, and institutional uses to the north. Regulations governing scenic quality in the City include the Land Use and Community Identity Element of the General Plan and the Vista Development Code (VDC) (Chapter 19.24 of the regulation of street trees). The City has also set forth design guidelines for the City to enhance the level of design of the City (City of Vista 2011b&c, City of Vista 2012).

The project site is in a developed area surrounded by commercial, institutional, and residential uses. While the project site would have a higher density than that of the residences to the east, the project would act as a transition from lower density single family residential uses to the east and larger commercial uses to the west of the project site. As shown in Figures 5-A, 5-B, and 5-C, the project would have similar bulk and scale to the surrounding development and would blend in with the existing character of the area. Additionally, the project includes landscaping throughout the project site and along the project boundary. The project would comply with VDC and the applicant would obtain a tree removal permit for street trees on the project site.

In conclusion, the project site is surrounded by existing development and the project applicant proposes residential uses adjacent to other residential uses. The project would be consistent and would comply with all development code standards and therefore would not conflict with applicable regulations governing scenic quality and impacts would be less than significant.

d) Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

The project site currently consists of an existing church and single-family residence. The project applicant proposes the demolition of existing structures and would develop the site to include 34 single-family residences. The residences would not use reflective material and therefore would not create a new source of glare. Lighting sources would be limited to street, landscape, and residential light sources, which already exist in the surrounding area. Therefore, while the project site would introduce new residences and associated lighting, the project would be consistent with the surrounding uses and the introduction of new lighting sources would be less than significant.

3.2 Agriculture and Forestry Resources

		Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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 Dept. Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
a)	Convert Prime Farmland, Unique Farmland, 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?	☐	☐	☐	☒
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 result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

a) ***Would the project 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?***

According to the Department of Conservation's Farmland Mapping and Monitoring Program, the project site is not designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. The project site is designated as "Urban and Built- Up Land" and is surrounded by parcels designated as "Urban and Built-Up Land" on all sides (DOC 2016). Thus, there would be no impact to Farmland, Unique Farmland, or Farmland of Statewide Importance or to conversion of agricultural land to non-agricultural uses as a result of project implementation.

b) Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?

The project site is zoned Residential (R-1) and Office Professional (O-P) and is not zoned for agriculture. The project applicant would redevelop a site that currently consists of a church and associated parking lot, and a single-family residence. The project would introduce single-family residences to the site. The project site is not zoned for agriculture and therefore would not conflict with existing agricultural zoning and the project site is not under a Williamson Act contract. Therefore, no impact would occur due to conflicts within existing zoning for agricultural or Williamson Act contracts.

c) Would the project 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))?

As described above, the project site is zoned for Residential (R-1) and Office Professional (O-P), and is not zoned as forest land, timberland or timberland zoned Timberland Production. While the project would rezone a portion of the site, the project would not conflict with the rezoning of forest land timberland or timberland zoned Timberland Production and therefore no impact would occur.

d) Would the project result in the loss of forest land or conversion of forest land to non-forest use?

The project site consists of a church and associated parking lot, and a single residence and would introduce residential uses to the site. The project site does not contain any forest land and there is no forest land in proximity to the project site. Therefore, there would be no impact to forest land resulting from project implementation.

e) Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

As described above, the project site does not contain agricultural uses or forest land. The project proposes 34 single-family homes on the project site. Additionally, agricultural and forest land are not located in proximity to the project site, therefore the addition of residential uses to the site would have no impact on the conversion of land to non-agricultural use or non-forest use.

3.3 Air Quality

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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 pollutant 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?	☐	☐	☒	☐

a) Would the project conflict with or obstruct implementation of the applicable air quality plan?

The project site is located within the San Diego Air Basin (SDAB), which includes San Diego County, and is within the jurisdictional boundaries of San Diego Air Pollution Control District (SDAPCD). Locally, the SDAPCD is responsible for developing and implementing the clean air plans for attainment and maintenance of the National Ambient Air Quality Standards (NAAQS) and the California Ambient Air Quality Standards (CAAQS) in the SDAB; specifically, the State Implementation Plan (SIP) and the Regional Air Quality Strategy (RAQS).[1] The San Diego Association of Governments (SANDAG) is responsible for developing forecasts and data that are used by the SDAPCD in preparing the SIP and RAQS. The federal O_3 attainment plan, which is part of the SIP, was adopted in 2020. The SIP includes a demonstration that current strategies and tactics will attain acceptable air quality in the SDAB based on the NAAQS. The RAQS was initially adopted in 1991 and is updated every three years (most recently in 2016). The RAQS outlines SDAPCD's plans and control measures designed to attain the CAAQS for O_3. The SIP and RAQS rely on information from CARB and SANDAG, including mobile and area source emissions, as well as information regarding projected growth in San Diego County and the cities in the County, to project future emissions and then determine from that the strategies necessary for the reduction of emissions through regulatory controls. CARB mobile source emission projections and SANDAG growth projections are based on population, vehicle trends, and land use plans developed by San Diego County and the cities in the County as part of the development of their general plans.

[1] For the purpose of this discussion, the relevant federal air quality plan is the O_3 attainment plan (SDAPCD 2020). The RAQS is the applicable plan for purposes of state air quality planning. Both plans reflect growth Projections in the SDAB.

As mentioned above, the SIP and RAQS rely on SANDAG growth projections based on population, vehicle trends, and land use plans developed by the cities and by the County as part of development of their general plans. As such, projects that involve development that is consistent with the growth anticipated by local plans would be consistent with the SIP and RAQS. However, if a Project involves development that is greater than that anticipated in the local plan and/or SANDAG's growth projections, that Project might conflict with the SIP and RAQS and may contribute to a potentially significant cumulative impact on air quality.

Although the SDAPCD and City of Vista (City) do not provide guidance regarding the analysis of impacts associated with air quality plan conformance, the County's Guidelines for Determining Significance and Report and Format and Content Requirements – Air Quality does discuss conformance with the RAQS (County of San Diego, 2007). The guidance indicates that, if a project, in conjunction with other projects, contributes to growth projections that would not exceed SANDAG's growth projections for the City, that project would not be in conflict with the RAQS (Appendix A). If a project includes development that is greater than that anticipated in the local plan and SANDAG's growth projections, that project might be in conflict with the SIP and RAQS and may contribute to a potentially significant cumulative impact on air quality.

The Project would involve demolition of existing structures and would redevelop the site with 34 single-family residences. The parcels marked for development in the Project are currently designated in the General Plan as Commercial Office (CO) and Medium Low Density Residential (MD) and zoned Office Professional (O-P) and Single Family Residential (R-1) (Linscott, Law & Greenspan 2022). The Project will require a General Plan Amendment to Medium Density Residential (MD) and a rezone to Single Family Residential (R-1-B) (Linscott, Law & Greenspan 2022). The City of Vista projects that by 2030, 38,779 residents will live in Medium Density Residential dwellings, assuming 3.26 persons per household (City of Vista 2012). Using this assumption, the Project would cause a population increase of approximately 111 residents. SANDAG projects that the population of the City of Vista would grow by 4,860 residents between 2020 and 2030; the addition of 111 residents within a year would be within the projected addition of 486 residents a year between 2020 and 2030 (SANDAG 2011). The Project would not be considered regionally significant because it would not have the potential to substantially affect housing, employment, or population projections within the San Diego region, which are the basis of the RAQS projections. As such, the Project would not conflict with or obstruct implementation of the RAQS. Furthermore, the Project would not result in substantial construction or operational emissions that would conflict with the local air quality plan.

Therefore, implementation of the Project would not conflict with the RAQS or SIP, and proposed development would be consistent with growth projections in the region. Impacts would be less than significant.

b) Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

Past, present, and future development projects may contribute to adverse air quality impacts in the SDAB on a cumulative basis. By its nature, air pollution is largely a cumulative impact. The nonattainment status of regional pollutants is a result of past and present development, and the SDAPCD develops and implements plans for future attainment of ambient air quality standards. Based on these considerations, project-level thresholds of significance for criteria pollutants are used in the determination of whether a project's individual emissions would have a cumulatively considerable contribution on air quality. If a project's emissions would exceed the applied significance thresholds, it would have a cumulatively considerable contribution. Conversely, projects that do not exceed the project-specific thresholds are generally not considered to be cumulatively significant.

As neither the City nor the SDAPCD have established numeric thresholds for determining project-level significance of criteria air pollutant emissions for CEQA analyses, the thresholds identified in the County's Guidelines for Determining Significance and Report and Format and Content Requirements – Air Quality are applied for the construction and operational emissions analysis (County of San Diego, 2007).

A quantitative analysis was conducted to determine whether the Project could result in emissions of criteria air pollutants that may result in a cumulatively considerable net increase in emissions of criteria air pollutants for which the SDAB is designated as nonattainment under the NAAQS or CAAQS. The SDAB has been designated as a federal nonattainment area for ozone (O_3) and a state nonattainment area for O_3, particulate matter with an aerodynamic diameter less than or equal to 10 microns (PM_{10}), and particulate matter with an aerodynamic diameter less than or equal to 2.5 microns ($PM_{2.5}$). The following discussion quantitatively evaluates potential short-term construction and long-term operational impacts that would result from implementation of the Project. Pollutants that are evaluated herein include volatile organic compounds (VOCs) and oxides of nitrogen (NO_x), which are important because they are precursors to O_3, as well as carbon monoxide (CO), sulfur oxides (SO_x), PM_{10}, and $PM_{2.5}$. The California Emissions Estimator Model (CalEEMod) Version 2020.4.0 was used to estimate emissions from construction and operation of the Project.[2]

Construction Emissions

Construction of the Project would include demolition, site preparation, grading, trenching, installation of utilities, modular building installation, landscaping, paving, and application of architectural coatings. These construction activities would result in the temporary addition of pollutants to the local airshed caused by on-site sources (e.g., off-road construction equipment, soil disturbance, and VOC off-gassing from architectural coatings and asphalt pavement application) and off-site sources (e.g., vendor trucks, haul trucks, and worker vehicle trips). Specifically, entrained dust results from the exposure of earth surfaces to wind from the direct disturbance and movement of soil, resulting in PM_{10} and $PM_{2.5}$ emissions. Internal combustion engines used by construction equipment, haul trucks, vendor trucks (i.e., delivery trucks), and worker vehicles would result in emissions of VOC, NO_x, CO, PM_{10}, and $PM_{2.5}$. Application of architectural coatings, such as exterior paint and other finishes, and application of asphalt pavement would also produce VOC emissions. Construction emissions can vary substantially from day to day depending on the level of activity; the specific type of operation; and, for dust, the prevailing weather conditions.

Project construction emissions were estimated using a combination of CalEEMod default assumptions, and information provided by the applicant where available. The applicant confirmed that 9,900 square feet of existing buildings and 70,000 square feet of existing pavement and concrete would be demolished, generating approximately 6,000 cubic yards of material that would be hauled offsite. It was confirmed by the applicant that construction of the Project would commence in February 2024 and would be completed in October 2025, with operation commencing in 2025. Default values for equipment mix, horsepower, and load factor provided in CalEEMod were used for all construction equipment. For the analysis, it was generally assumed that heavy-duty construction equipment would be operating at the site five days per week, up to a maximum of 8 hours per day, in accordance with the City's municipal code. Detailed construction equipment modeling assumptions are provided in Appendix A. Table 3.3-1 provides

[2] CalEEMod is a statewide land use emissions computer model designed to provide a uniform platform to calculate construction and operational emissions from land use development Projects. The model was developed for the California Air Pollution Control Officers Association in collaboration with multiple air districts across the State. Numerous lead agencies in the State, including the SDAPCD, utilize CalEEMod to estimate GHG emissions in accordance with CEQA Guidelines section 15064.4(a)(1).

the construction phasing, timeline, construction equipment mix, and vehicle trips assumed for estimating Project-generated construction emissions.

Table 3.3-1. Project Construction Phasing, Vehicle Trips, and Equipment

Construction Phase	Duration	One-Way Vehicle Trips			Equipment		
		Average Daily Workers	Average Daily Vendor Trucks	Total Haul Trucks	Type	Quantity	Usage Hours
Demolition	February 2024	16	4	200	Concrete/Industrial Saws	1	8
					Rubber Tired Dozers	2	8
					Excavators	3	8
Site Preparation	February 2024	18	4	0	Rubber Tired Dozers	3	8
					Tractors/Loaders/ Backhoes	4	8
Grading	March 2024-May 2024	16	4	750	Excavators	1	8
					Graders & Scrapers	3	8
					Track Dozers	1	8
					Tractors/Loaders/ Backhoes	3	8
Utilities	June 2024-August 2024	6	4	0	Excavator	2	8
Paving	September 2024	16	4	0	Grader	1	8
					Paving Equipment	2	8
					Rollers	2	8
					Paver	3	8
Building Construction	October 2024-October 2025	36	14	0	Cranes	1	7
					Forklifts	3	8
					Generator Sets	1	8
					Tractors/Loaders/ Backhoes	3	7
					Welders	1	8
Architectural Coating	October-November 2025	8	4	0	Air Compressors	1	6

Note: See Appendix A for additional details.

Emissions generated during construction and operation of the Project are subject to the rules and regulations of the SDAPCD. Construction of Project components would be subject to SDAPCD Rule 55 – Fugitive Dust Control. Compliance with Rule 55 would limit fugitive dust (PM_{10} and $PM_{2.5}$) that may be generated during grading and construction activities by utilizing methods such as wetting soils that would be disturbed. It was assumed that the active sites would be watered at least two times daily, resulting in an approximately 55% reduction of fugitive dust (CalEEMod default value), to represent compliance with SPAPCD standard dust

control measures in Rule 55 (SDAPCD 2009). The application of architectural coatings, such as exterior/interior paint and other finishes, and the application of asphalt pavement would produce VOC emissions; however, the contractor is required to procure architectural coatings from a supplier in compliance with the requirements of SDAPCD Rule 67.0.1 for Architectural Coatings (SDAPCD 2015).

Table 3.3-2 presents the estimated maximum daily construction emissions generated during construction of the Project. Details of the emissions calculations are provided in Appendix A.

As shown in Table 3.3-2, maximum daily construction emissions would not exceed the significance thresholds for VOC, NO_x, CO, SO_x, PM_{10}, or $PM_{2.5}$ during construction in all construction years.

Table 3.3-2. Estimated Maximum Daily Construction Criteria Air Pollutant Emissions

Year	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
	Pounds per Day					
2024	5.03	49.75	39.27	0.09	24.44	12.59
2025	27.07	13.14	17.05	0.03	0.92	0.61
Maximum Daily Emissions	**27.07**	**49.75**	**39.27**	**0.09**	**24.44**	**12.59**
Emission Threshold	75	250	550	250	100	55
Threshold Exceeded?	**No**	**No**	**No**	**No**	**No**	**No**

Notes: VOC = volatile organic compound; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM_{10} = particulate matter with an aerodynamic diameter equal to or less than 10 microns; $PM_{2.5}$ = particulate matter with an aerodynamic diameter equal to or less than 2.5 microns.
See Appendix A for complete results.
The values shown are the maximum summer or winter daily emissions results from CalEEMod and provided in Appendix A. Emissions presented represent the "mitigated" output in CalEEMod which assumes compliance with SDAPCD Rule 67.0.1, Architectural Coatings, and SDAPCD Rule 55, Fugitive Dust Control.
Thresholds are based on the County of San Diego's Guidelines for Determining Significance and Report and Format and Content Requirements – Air Quality.

Operational Emissions

Operation of the Project would generate VOC, NO_x, CO, SO_x, PM_{10}, and $PM_{2.5}$ emissions from mobile sources, including vehicular traffic generated by the Project; energy sources from natural gas usage; area sources, including the use of landscaping equipment and consumer products; and architectural coatings. Pollutant emissions associated with long-term operations were quantified using CalEEMod using a combination of Project-specific information and CalEEMod default values. The Project is assumed to begin operation in the year 2025.

Area Sources

Area sources include emissions from consumer products, landscape equipment, hearths, and architectural coatings. The area source emissions for consumer products, landscape equipment, and architectural coatings were estimated based on CalEEMod default assumptions for on-going operations of the Project. (This source category does not include the emissions associated with natural gas usage in space heating and water heating as these are calculated in the building energy use module of CalEEMod.) It was confirmed by the applicant that each residence will feature one gas-powered fireplace.

Energy Sources

Energy sources include emissions associated with building electricity and natural gas usage (non-hearth). The energy source emissions were estimated based on CalEEMod default assumptions for on-going operations of the proposed residential development.

Mobile Sources

Operation of the Project would generate criteria air pollutant emissions from mobile sources (vehicular traffic) as a result of new vehicle trips to and from the Project. The maximum weekday (Monday–Friday) trip rates were assumed to be 10 average daily trips per dwelling unit (Linscott, Law & Greenspan 2022). To account for the maximum intensity scenario, the weekday trip rate was also assumed for weekend trips (Saturdays and Sundays). CalEEMod default emission factors representing the vehicle mix and emissions were used to estimate emissions associated with vehicular sources.

Table 3.3-3 presents the maximum daily area, energy, and mobile-source emissions associated with Project operation (year 2025). Details of the emissions calculations are provided in Appendix A.

Table 3.3-3. Estimated Operational Criteria Air Pollutant Emissions

Emission Source	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
	Pounds per Day					
Area	2.95	0.72	10.72	0.03	1.31	1.31
Energy	0.02	0.19	0.08	0.00	0.02	0.02
Mobile	0.94	1.02	8.64	0.02	2.06	0.56
Total	**3.92**	**1.92**	**19.44**	**0.05**	**3.39**	**0.56**
Emissions Threshold	*75*	*250*	*550*	*250*	*100*	*55*
Threshold Exceeded?	**No**	**No**	**No**	**No**	**No**	**No**

Notes: VOC = volatile organic compound; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM_{10} = particulate matter with an aerodynamic diameter equal to or less than 10 microns; $PM_{2.5}$ = particulate matter with an aerodynamic diameter equal to or less than 2.5 microns.
See Appendix A for complete results.
Totals may not sum due to rounding.
Operation of the Project assumes year 2025.
Thresholds are based on the County of San Diego's Guidelines for Determining Significance and Report and Format and Content Requirements – Air Quality.

As shown in Table 3.3-3, Project-generated maximum daily operational emissions would not exceed the significance thresholds for VOC, NO_x, CO, SO_x, PM_{10}, or $PM_{2.5}$.

As noted previously, the SDAB is designated as a federal nonattainment area for O_3 and a state nonattainment area for O_3, PM_{10}, and $PM_{2.5}$. The nonattainment status is the result of cumulative emissions from various sources of air pollutants and their precursors within the SDAB, including motor vehicles, off- road equipment, and commercial and industrial facilities. Construction and operation of the Project would generate VOC and NO_x emissions (which are precursors to O_3) and emissions of PM_{10} and $PM_{2.5}$. However, as indicated in Table 3.3-2 and Table 3.3-3, Project-generated construction emissions and operational emissions would not exceed the emission-based significance thresholds for VOC, NO_x, PM_{10}, or $PM_{2.5}$.

Cumulative localized impacts would potentially occur if a construction project were to occur concurrently with another off-site project. Construction schedules for potential future projects near the Project site are currently unknown; therefore, potential construction impacts associated with two or more simultaneous projects would be considered speculative. However, future projects would be subject to CEQA and would require air quality analysis and, where necessary, mitigation if the project would exceed applied thresholds. Criteria air pollutant emissions associated with construction activity of future projects would be reduced through implementation of control measures required by the SDAPCD. For example, cumulative PM_{10} and $PM_{2.5}$ emissions would be reduced because all future projects would be subject to SDAPCD Rule 55, Fugitive Dust, which sets forth general and specific requirements for all construction sites in the SDAB. In addition, cumulative VOC emissions would be subject to SDAPCD Rule 67.0.1, Architectural Coatings.

Based on the Project-generated construction and operational criteria air pollutant emissions, the Project would not result in a cumulatively considerable increase in emissions of nonattainment pollutants. Therefore, the Project's cumulative air quality impact would be less than significant.

Health Effects of Criteria Air Pollutants

Project construction and operation would not exceed significance thresholds for VOC, NO_x, CO, SO_x, $PM_{10,}$ or $PM_{2.5}$. VOCs and NO_x are precursors to O_3, for which the SDAB is designated as nonattainment with respect to the NAAQS and CAAQS. The health effects associated with O_3 are generally associated with reduced lung function. The contribution of ROGs and NO_x to regional ambient O_3 concentrations is the result of complex photochemistry. The increases in O_3 concentrations in the SDAB due to O_3 precursor emissions tend to be found downwind from the source location to allow time for the photochemical reactions to occur. However, the potential for exacerbating excessive O_3 concentrations also depends on the time of year that the VOC emissions occur, because exceedances of the O_3 CAAQS/NAAQS tend to occur April through October when solar radiation is highest. The holistic effect of a single project's emissions of O_3 precursors is speculative due to the lack of quantitative methods to assess this impact. Operation of the Project would not exceed the significance threshold for NO_x; therefore, implementation of the Project would contribute minimally to regional O_3 concentrations and the associated health effects.

Operation of the Project would not contribute to exceedances of the NAAQS or CAAQS for nitrogen dioxide (NO_2). Health effects that result from NO_2 and NO_x include respiratory irritation, which could be experienced by nearby receptors during the periods of heaviest use of off-road construction equipment. However, Project construction would be relatively short term, and off-road construction equipment would be operating at various portions of the site and would not be concentrated in one portion of the site at any one time. In addition, existing NO_2 concentrations in the area are below the NAAQS and CAAQS standards. Because Project-generated NO_x emissions would not exceed the significance threshold, the Project would not result in potential health effects associated with NO_2 or NO_x.

CO tends to be a localized impact associated with congested intersections. The associated potential impact for CO hotspots was determined to be less than significant. Furthermore, the existing CO concentrations in the area are below the NAAQS and CAAQS standards. Thus, the Project's CO emissions would not contribute to significant health effects associated with this pollutant.

Construction and operation of the Project would not exceed thresholds for PM_{10} or $PM_{2.5}$ and would not contribute to exceedances of the NAAQS or CAAQS for particulate matter or obstruct the SDAB from coming into attainment for these pollutants. The Project would also not result in substantial diesel particulate matter (DPM)

emissions during construction or operation, and, therefore, would not result in significant health effects related to DPM exposure. Additionally, the Project would implement dust control strategies and be required to comply with SDAPCD Rule 55, Fugitive Dust Control, which limits the amount of fugitive dust generated during construction. Due to the minimal contribution of particulate matter during construction and operation, the Project is not anticipated to result in health effects associated with PM_{10} or $PM_{2.5}$.

Of note, there are numerous scientific and technological complexities associated with correlating criteria air pollutant emissions from an individual project to specific health effects or potential additional nonattainment days, and there are currently no modeling tools that could provide reliable and meaningful additional information regarding health effects from criteria air pollutants generated by individual projects within the SDAPCD jurisdiction. The California Supreme Court's *Sierra Club v. County of Fresno* (2018) 6 Cal. 5th 502 decision (referred to herein as the Friant Ranch decision) (issued on December 24, 2018), addresses the need to correlate mass emission values for criteria air pollutants to specific health consequences, and contains the following direction from the California Supreme Court: "The Environmental Impact Report (EIR) must provide an adequate analysis to inform the public how its bare numbers translate to create potential adverse impacts or it must explain what the agency *does* know and why, given existing scientific constraints, it cannot translate potential health impacts further." (Italics original.) (Sierra Club v. County of Fresno 2018.) Currently, the SDAPCD, CARB, and EPA have not approved a quantitative method to reliably, meaningfully, and consistently translate the mass emission estimates for the criteria air pollutants resulting from the Project to specific health effects.

In connection with the judicial proceedings culminating in issuance of the Friant Ranch decision, the South Coast Air Quality Management District (SCAQMD) and the San Joaquin Valley Air Pollution Control District (SJVAPCD) filed amicus briefs attesting to the extreme difficulty of correlating an individual project's criteria air pollutant emissions to specific health impacts. Both SJVAPCD and SCAQMD have among the most sophisticated air quality modeling and health impact evaluation capabilities of the air districts in California. The key, relevant points from SCAQMD and SJVAPCD briefs is summarized herein.

The formation of O_3 and PM in the atmosphere, as secondary pollutants,[5] involves complex chemical and physical interactions of multiple pollutants from natural and anthropogenic sources. Because of the complexity of O_3 formation, a specific tonnage amount of VOCs or NO_X emitted in a particular area does not equate to a particular concentration of O_3 in that area (SJVAPCD 2015). Similarly, because of the complexity of secondary PM formation, including the potential to be transported long distances by wind, the tonnage of PM-forming precursor emissions in an area does not necessarily result in an equivalent concentration of secondary PM in that area (SJVAPCD 2015). This is especially true for individual projects, like the proposed Project, where Project-generated criteria air pollutant emissions are not derived from a single "point source," but from construction equipment and mobile sources (passenger cars and trucks) driving to, from and around the Project Site.

Another important technical nuance is that health effects from air pollutants are related to the concentration of the air pollutant that an individual is exposed to, not necessarily the individual mass quantity of emissions associated with an individual project. However, it takes a large amount of additional precursor emissions to cause a modeled increase in ambient O_3 levels over an entire region (SCAQMD 2015). The lack of link between the tonnage of precursor pollutants and the concentration of O_3 and $PM_{2.5}$ formed is important because it is not necessarily the tonnage of precursor pollutants that causes human health effects; rather, it is the concentration of resulting O_3 that causes these effects (SJVAPCD 2015). While CEQA thresholds are

[5] Air pollutants formed through chemical reactions in the atmosphere are referred to as secondary pollutants.

established at levels that the air basin can accommodate without affecting the attainment date for the AAQS, even if a project exceeds established CEQA significance thresholds, this does not mean that one can easily determine the concentration of O_3 or PM that will be created at or near the project site on a particular day or month of the year, or what specific health impacts will occur (SJVAPCD 2015).

In regard to regional concentrations and air basin attainment, the SJVAPCD emphasized that attempting to identify a change in background pollutant concentrations that can be attributed to a single project, even one as large as the entire Friant Ranch Specific Plan, is a theoretical exercise. The SJVAPCD brief noted that it "would be extremely difficult to model the impact on NAAQS attainment that the emissions from the Friant Ranch project may have" (SJVAPCD 2015). The SJVAPCD brief then indicated that, "Running the photochemical grid model used for predicting O_3 attainment with the emissions solely from the Friant Ranch project (which equate to less than one-tenth of one percent of the total NO_x and VOC in the Valley) is not likely to yield valid information given the relative scale involved" (SJVAPCD 2015). SCAQMD and SJVAPCD have indicated that it is not feasible to quantify project-level health impacts based on existing modeling (SCAQMD 2015; SJVAPCD 2015). Even if a metric could be calculated, it would not be reliable because the models are equipped to model the impact of all emission sources in an air basin on attainment and would likely not yield valid information or a measurable increase in O_3 concentrations sufficient to accurately quantify O_3-related health impacts for an individual project and would not provide a reliable indicator of health effects if modeled.

In summary, because operation of the Project would not result in exceedances of the significance thresholds for NO_x during construction or operation, the potential health effects associated with criteria air pollutants would be less than significant. Furthermore, there are numerous scientific and technological complexities associated with correlating criteria air pollutant emissions from an individual project to specific health effects or potential additional nonattainment days, and there are currently no modeling tools that could provide reliable and meaningful additional information regarding health effects from criteria air pollutants generated by individual projects. As Project-generated construction and operational emissions would be less than the applied mass daily thresholds for all pollutants, health effects associated with Project-generated criteria air pollutant emissions would be less than significant.

c) Would the project expose sensitive receptors to substantial pollutant concentrations?

Sensitive Receptors

Sensitive receptors are those individuals more susceptible to the effects of air pollution than the population at large. People most likely to be affected by air pollution include children, the elderly, and people with cardiovascular and chronic respiratory diseases. Air quality regulators typically define sensitive receptors as schools (preschool–12th grade), hospitals, resident care facilities, daycare centers, and other facilities that may house individuals with health conditions that would be adversely impacted by changes in air quality. However, for the purposes of CEQA analysis, the County of San Diego's definition of a sensitive receptor also includes residents.

The closest sensitive receptors to the project site are single-family residences directly bordering the project site to the east, single-family residences within 300 feet to the south, an elementary school 500 feet to the southwest, and an apartment building 600 feet to the west. Health Effects of Carbon Monoxide, Toxic Air Contaminants, and Valley Fever on sensitive receptors are analyzed below.

Health Effects of Carbon Monoxide

Mobile-source impacts occur on two scales of motion. Regionally, Project-related travel would add to regional trip generation and increase the vehicle miles traveled within the local airshed and the SDAB. Locally, Project-generated traffic would be added to the County's roadway system near the Project site. If such traffic occurs during periods of poor atmospheric ventilation, is composed of a large number of vehicles "cold-started" and operating at pollution-inefficient speeds, and is operating on roadways already crowded with non-Project traffic, there is a potential for the formation of microscale CO hotspots in the area immediately around points of congested traffic. Because of continued improvement in vehicular emissions at a rate faster than the rate of vehicle growth and/or congestion, the potential for CO hotspots in the SDAB is steadily decreasing.

CO transport is extremely limited, and CO disperses rapidly with distance from the source. Under certain extreme meteorological conditions, however, CO concentrations near a congested roadway or intersection may reach unhealthy levels, affecting sensitive receptors such as residents, school children, hospital patients, and older adults. Typically, high CO concentrations are associated with urban roadways or intersections operating at an unacceptable level of service (LOS). projects contributing to adverse traffic impacts may result in the formation of CO hotspots.

Since the last update of the SDAPCD's guidance (2007), the County has evaluated the potential for the growth anticipated under the General Plan Update to result in CO "hot spots" throughout the County (County of San Diego 2009a). To do this, the County reviewed the CO "hot spot" analysis conducted by the South Coast Air Quality Management District (SCAQMD) for their request to the USEPA for resignation as a CO attainment area (SCAQMD 2003). In SCAQMD's analysis, they modeled the four most congested intersections identified in their basin (South Coast Air Basin [SCAB]).3 The SCAQMD's analysis found that the four intersections had an average 7.7 ppm 1-hour CO concentrations predicted by the models, which is only 38.5% of the 1-hour CO CAAQS of 20 ppm. Therefore, even the most congested intersections in SCAQMD's air basin would not experience a CO "hot spot".

The air quality monitoring station closest to the most congested intersection in Los Angeles County (Wilshire Boulevard/Veteran Avenue) is the VA Hospital, West Los Angeles Station (Site ID 060370113) located at Wilshire Boulevard and Sawtelle Boulevard, approximately 0.5 miles to the southwest. Ambient CO levels monitored at this representative monitoring station were a maximum 1-hour of 4.3 and a maximum 8-hour of 2.7 in 2002. In 2021, the maximum 1-hour CO was 1.5 and the maximum 8-hour CO was 1.0. Accordingly, there is noticeable improvement in background levels of CO since the SCAQMD's regional hotspot analysis.

For the County of San Diego, there are no roadways/segments identified as deficient facilities under the worst-case traffic scenario that have an ADT greater than the 100,000 that was anticipated for the most congested intersection analyzed by SCAQMD. The most congested intersection in the County is Campo Road/SR-94 between Jamacha Boulevard and Jamacha Road in Valle De Oro. According to Table 5.23 of the Traffic and Circulation Assessment: County of San Diego General Plan Update (Wilson and Company 2009), this intersection has an ADT of 79,200, which is only 79% of the most congested intersection in the SCAB.

The Project's transportation assessment (Linscott, Law & Greenspan 2022) indicates that the segment from County Complex to Matagual Drive has the highest ADT close to the Project of 33,480, which is

approximately 33% of the most congested intersection in the SCAB (Wilson and Company 2009). The additional trips anticipated with implementation of the Project (340 ADT) could increase ADT at this intersection to 33,680, which is still below the County's most congested intersection. Project-generated trips would only represent 34% of the most congested intersection in the SCAB, which were determined to not experience a CO "hot spot" according to SCAQMD's 2003 analysis.

In addition, the CO "hot spot" analysis performed by the SCAQMD included emissions for 1997 and 2002. Both running exhaust emission factors and idling emission factors predicted by the EMFAC model decreased from 1997 through 2002.[4] This decrease in CO emission factors is indicative of a phase-out of older vehicles and increasingly strict emissions standards implemented by CARB. Continued improvement in vehicular emissions at a rate faster than the rate of vehicle growth and/or congestion means that the potential for CO hotspots in the SDAB is likely to decrease.

The County of San Diego concluded in the General Plan Update (2011) that because the most congested intersections in San Diego are less congested than those from the SCAB, and because emissions of CO would be lower than those used in the SCAQMD analysis, CO concentrations would be lower within San Diego County, and no CO "hot spots" are anticipated as was concluded in the SCAQMD analysis.

Given that proposed development will result in less than 500 ADT, meaning a VMT analysis is not required, coupled with the considerably low level of CO concentrations in the Project area, and continued improvements in vehicle emissions, the Project is not anticipated to result in CO "hot spots" (Linscott, Law & Greenspan 2022). Consequently, implementation of the Project would not result in CO concentrations in excess of the health protective CAAQS or NAAQS, and as such, would not expose sensitive receptors to significant pollutant concentrations or health effects. Therefore, impacts related to sensitive receptor exposure to substantial CO concentrations would be less than significant.

Health Impacts of Toxic Air Contaminants

In addition to impacts from criteria pollutants, impacts may include emissions of pollutants identified by the state and federal government as toxic air contaminants (TACs) or hazardous air pollutants. State law has established the framework for California's TAC identification and control program, which is generally more stringent than the federal program and aimed at TACs that are a problem in California. The state has formally identified more than 200 substances as TACs, including the federal hazardous air pollutants, and adopts appropriate control measures for sources of these TACs. The greatest potential for TAC emissions during construction would be DPM emissions from heavy equipment operations and heavy-duty trucks. The following measures are required by state law to reduce DPM emissions:

- Fleet owners of mobile construction equipment are subject to the CARB Regulation for In-Use Off- Road Diesel Vehicles (13 CCR 2449), the purpose of which is to reduce DPM and criteria pollutant emissions from in-use (existing) off-road diesel-fueled vehicles.
- All commercial diesel vehicles are subject to Title 13, Section 2485 of the California Code of Regulations, limiting engine idling time. Idling of heavy-duty diesel construction equipment and trucks during loading and unloading shall be limited to 5 minutes; electric auxiliary power units shall be used whenever possible.

Health effects from carcinogenic air toxics are usually described in terms of cancer risk. The SDAPCD recommends an incremental cancer risk threshold of 10 in 1 million (Appendix A). "Incremental cancer

risk" is the net increased likelihood that a person continuously exposed to concentrations of TACs resulting from a Project over a 9-, 30-, and 70-year exposure period will contract cancer based on the use of standard Office of Environmental Health Hazard Assessment risk-assessment methodology. The Project would not require the extensive operation of heavy-duty construction equipment, which is subject to a CARB Airborne Toxics Control Measure for in-use diesel construction equipment to reduce DPM emissions, nor would it involve extensive use of diesel trucks, which are also subject to a CARB Airborne Toxics Control Measure.

As shown in Table 3.3-3, maximum daily particulate matter (i.e., PM_{10} or $PM_{2.5}$) emissions generated by construction equipment operation and haul-truck trips during construction (exhaust particulate matter, or DPM), combined with fugitive dust generated by equipment operation and vehicle travel, would be well below the significance thresholds. Moreover, total construction of the Project would last approximately 21 months, after which Project-related TAC emissions would cease. Thus, the Project would not result in a long-term source of TAC emissions. No residual TAC emissions or corresponding cancer risk are anticipated after construction, and no long-term sources of TAC emissions are anticipated during operation of the Project. Therefore, the impact of exposure of Project-related TAC emissions to sensitive receptors would be less than significant.

Additionally, CARB's Air Quality and Land Use Handbook: A Community Health Perspective identifies certain types of facilities or sources that may emit substantial quantities of TACs and therefore could conflict with sensitive land uses, such as "schools and schoolyards, parks and playgrounds, daycare centers, nursing homes, hospitals, and residential communities" (CARB 2005). The Air Quality and Land Use Handbook is a guide for siting of new sensitive land uses, but it does not mandate specific separation distances to avoid potential health impacts. The evaluated facilities or sources include the following (CARB 2005):

- High-traffic freeways and roads
- Distribution centers
- Rail yards
- Ports
- Refineries
- Chrome plating facilities
- Dry cleaners
- Large gas dispensing facilities

CARB recommends that sensitive receptors not be located downwind or in proximity to such sources to avoid potential health hazards.

The Project would not include any of the above-listed land uses nor would it expose future residents of the Project to TAC emissions from these sources. Impacts would be less than significant.

Valley Fever

Coccidioidomycosis, more commonly known as "Valley Fever," is an infection caused by inhalation of the spores of the *Coccidioides immitis* fungus, which grows in the soils of the southwestern United States. The fungus is very prevalent in the soils of California's San Joaquin Valley, particularly in Kern County. Kern County is considered a highly endemic county (i.e., more than 20 cases annually of Valley Fever per

100,000 people) based on the incidence rates reported through 2016 (California Department of Public Health 2017). The ecologic factors that appear to be most conducive to survival and replication of the spores are high summer temperatures, mild winters, sparse rainfall, and alkaline, sandy soils.

The average incidence rate of Valley Fever (coccidioidomycosis) within San Diego County is below the statewide average. Furthermore, construction of the Project would comply with SDAPCD Rule 55, Fugitive Dust Control, which limits the amount of fugitive dust generated during construction. SDAPCD Rule 55 is intended to reduce PM10 emissions from any transportation, handling, construction, or storage activity that has the potential to generate fugitive dust. As explained above, the nearest sensitive-receptor land use (existing residences) are adjacent to Project site to the east. Based on the low incidence rate of coccidioidomycosis on the Project site (less than or equal to 4.9 cases per 100,000 people in 2019 in zip code 92081) and in San Diego County (12.9 cases per 100,000 people in 2019), with the Project's implementation of dust control strategies and Valley Fever awareness and training, and based on the distance from the nearest sensitive receptors, it is not anticipated that earth-moving activities during Project construction would result in exposure of nearby sensitive receptors to Valley Fever (County of San Diego Health and Human Services Agency 2021). Therefore, the Project would have a less than significant impact with respect to Valley Fever exposure for sensitive receptors.

d) Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

The occurrence and severity of potential odor impacts depends on numerous factors: the nature, frequency, and intensity of the source; the wind speeds and direction; and the sensitivity of receiving location. Although offensive odors seldom cause physical harm, they can be annoying and cause distress among the public and generate citizen complaints.

Odors would be generated from vehicles and/or equipment exhaust emissions during construction of the Project. Odors produced during construction would be attributable to concentrations of unburned hydrocarbons from tailpipes of construction equipment and architectural coatings. Such odors would disperse rapidly from the Project site and generally occur at magnitudes that would not affect substantial numbers of people. Therefore, impacts associated with odors during construction would be less than significant.

Land uses and industrial operations associated with odor complaints include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding. The Project would not involve any of these activities. Typical odors generated from operation of the Project would include vehicle exhaust generated by residents traveling to and from the Project site and through the periodic use of landscaping and maintenance equipment. Therefore, the Project would result in an odor impact that is less than significant.

3.4 Biological Resources

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
IV. BIOLOGICAL RESOURCES – Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☒	☐
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 Game 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 a 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?	☐	☐	☐	☒

The following discussion is based on the results of a reconnaissance level survey conducted at the Melrose Vista Residential Project, San Diego County, California, performed by Dudek in July 2022. This assessment included a pre-field review of the latest available relevant literature, published research, maps, soil data, data on biological baselines, special-status vegetation communities, and special-status species distributions to determine those resources that have the potential to occur within the project site and a 100-foot survey buffer (study area).

The reconnaissance survey, conducted by Dudek biologist Dylan Ayers on July 28, 2022, recorded the presence of all native and naturalized plant species encountered in the study area. The potential for special-status plant and

wildlife species to occur within the study area was evaluated based on the vegetation communities, soils present, and documented occurrences within 5 miles of the study area.

a) Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

As discussed above, a reconnaissance survey of the project site was conducted on July 28, 2022. A total of 31 species of vascular plants (7 natives and 24 non-natives) were recorded across the study area. The low plant diversity reflects the study area's relatively small size and its proximity to surrounding commercial and residential development in the study area. Plant species observed within the study areas are listed in Appendix B-1. Additionally, two wildlife species, common raven (*Corvus corvax*) and mourning dove (Zenaida macroura), were observed during the reconnaissance survey. The mourning dove was observed sitting atop an artificial nest box just outside the property boundary, in the study area. The low wildlife diversity reflects the study area's relatively small size and its proximity to surrounding commercial and residential development in the study area. Wildlife species observed within the study area are listed in Appendix B-2.

Special-Status Plant Species

No plant species listed or proposed for listing as rare, threatened, or endangered by either CDFW or the U.S. Fish and Wildlife Service were detected within the study area. The study area is not within Critical Habitat for any special-status plant species (USFWS 2022). Based on the results of the literature review and database searches, 64 special-status plant species have been documented within the region. All of these species were evaluated for potential to occur within the study areas. Criteria used include soils, current disturbance levels, vegetation communities present, elevation ranges, and previous known locations based on the California Natural Diversity Database, California Native Plant Society, and Calflora (2022) records.

Special-Status Wildlife

No wildlife species listed or proposed for listing as rare, threatened, or endangered by either CDFW or the U.S. Fish and Wildlife Service were detected within the study area. The study area is not within critical habitat for any special-status wildlife species (USFWS 2022). Based on the results of the literature review and database searches, 54 special-status wildlife species have been documented within the region. For each species listed, a determination was made regarding potential use of the study area based on information gathered during the field reconnaissance, known habitat preferences, and knowledge of the species' relative distributions in the area.

The study area contains trees, shrubs, and bare ground that would potentially be used by migratory birds for breeding. Direct impacts to migratory nesting birds must be avoided to comply with the Migratory Bird Treaty Act (16 USC 703–712) and California Fish and Game Code. Indirect impacts to nesting birds from short-term, construction-related noise could result in decreased reproductive success or abandonment of an area as nesting habitat if construction were conducted during the breeding/nesting season (i.e., January through August). The project would comply with Migratory Bird Treaty Act and California Fish and Game Code requirements which would include measures such as nesting bird surveys prior to construction.

Conclusion

No special-status plant or wildlife species were detected within the study area during the general biological survey. Offsite improvements are located along Matagual Drive, S Melrose Drive, and Las Palmas Drive. Theses offsite improvements would occur within the existing roadways and are not expected to impact any special wildlife or plant species due to the developed nature of the footprint of the offsite improvements. Furthermore, no federally or state-listed as endangered plant or wildlife species have potential to occur in the study area and all non-listed special-status species were determined to either have low potential or were not expected to occur within the study area. As such, no impact to special-status plants would occur. Additionally, with compliance of the Migratory Bird Treaty Act and California Fish and Game Code, impacts to nesting birds would be less than significant.

b) ***Would the project 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 Game or U.S. Fish and Wildlife Service?***

Only one vegetation community and one land cover type were observed throughout the study area: non-native grassland and urban/developed land. These were identified and mapped within the study area based on general characteristics and/or species composition. Additionally, offsite improvements are located along Matagual Drive, S Melrose Drive, and Las Palmas Drive. Theses offsite improvements would occur within the existing roadways and therefore are considered urban/developed land.

California non-native grassland or California annual grassland is dominated by annual grasses and herbs in the ground layer, including bromes (*Bromus* spp.), filaree (*Erodium* spp.), mustards (*Brassica* spp.), and oats (*Avena* spp.). Although annual brome grasses and wild oats are the dominant plant species in this community composition, native annual forbs also constitute significant cover (Oberbauer et al. 2008). This vegetation community makes up the majority of the project site footprint and showed evidence of regular mowing/maintenance. The North County MHCP lists non-native grassland in Group E (County of San Diego 2003). Any impacts to this land cover type would require a mitigation ratio of 0.5:1.

According to Oberbauer et al. 2008, urban/developed land represents areas that have been constructed upon or otherwise physically altered to an extent that native vegetation communities are not supported. This land cover type generally consists of semi-permanent structures, homes, parking lots, pavement or hardscape, and landscaped areas that require maintenance and irrigation (e.g., ornamental greenbelts). Typically, this land cover type is unvegetated or supports a variety of ornamental plants and landscaping. Small portions of the project site boundary contained this land cover type, though it was most often observed outside the project boundary, in the 100-foot survey area around the project. The North County MHCP does not list urban/developed as a sensitive vegetation community requiring mitigation.

Table 3.4-1 describes the proposed temporary and permanent impacts to vegetation communities and land covers.

Table 3.4-1. Potential Impacts to Land Covers and Vegetation Communities at the Project

Vegetation Communities	Project Site (acres)	Review Area (acres)
Urban/Developed	2.72	9.04

Table 3.4-1. Potential Impacts to Land Covers and Vegetation Communities at the Project

Vegetation Communities	Project Site (acres)	Review Area (acres)
Non-native Grassland	2.55	2.78
Total*	**5.27**	**11.82**

The study area does not contain riparian vegetation communities, or any vegetation communities identified as sensitive. As a result, no direct or indirect impacts to sensitive vegetation communities are expected to occur.

c) ***Would the project 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?***

An investigation of presence and distribution of jurisdictional waters of the United States regulated by the U.S. Army Corps of Engineers, jurisdictional waters of the state regulated by the Regional Water Quality Control Board (RWQCB), and jurisdictional streambed and associated riparian habitat regulated by the California Department of Fish and Wildlife was conducted. No potentially jurisdictional waters were observed in the review area. No blue line streams or waterways are mapped on USGS topographic maps for the study area. No areas potentially supporting vernal pools, ephemeral ponds, or wetlands were observed during the survey. The study area does not contain topographic low points, clay soils, bedrock, or other poorly drained soils typically associated with vernal pools, and vernal pool plant species were not observed.

No state or federally protected wetland waters were recorded within the study area and therefore no impact to state or federally protected wetland waters would occur.

d) ***Would the project 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 wildlife corridors or linkages occur in or near the study area. As such, **no impact** to native resident or migratory wildlife corridors would occur.

e) ***Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?***

As proposed, the project would not conflict with any local policies or ordinances protecting biological resources. Therefore, no impact related to conflicts with policies protecting biological resources would occur.

f) ***Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?***

The North County Multi Habitat Conservation Program covers the northwest portion of San Diego County, including the City of Vista. As described above, no covered plant, wildlife, or vegetation communities were observed in the study area and therefore project implementation would not conflict with North County MCHP. As such, no impact related to conflicts with any local ordinance or habitat conservation plan would occur.

3.5 Cultural Resources

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
V. CULTURAL RESOURCES – Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	☐	☐	☐	☒
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☒	☐	☐
c) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☒	☐	☐

The following analysis is based on the Historical Resources Technical Report and Cultural Resources Inventory Report prepared as part of the proposed project and included as Appendix C and Appendix D, respectively.

a) Would the project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?

Appendix C includes the results of a California Historical Resources Information System (CHRIS) records search; an intensive survey of the project site by a qualified architectural historian; building development and archival research; development of an appropriate historic context for the evaluation of the Project site; and recordation and evaluation of one church property and one single-family residential property over 45 years old for historical significance and integrity in consideration of National Register of Historic Places (NRHP), California Register of Historical Resources (CRHR), and City of Vista designation criteria and integrity requirements. A CHRIS records search was completed by staff at the South Coastal Information Center on August 1, 2022. The records search results identify that 53 previous cultural resources studies have been conducted within 1 mile of the project site. Of the 53 previous studies, two studies intersect the project site. No cultural resources were identified within the project site as a result of the overlapping studies.

Two of the three properties on the project site, contain buildings that are over 45 years old that were identified as requiring recordation and evaluation for historical significance. The Historical Resources Report included as Appendix C, evaluated the two properties as Property 1, 560 South Melrose Drive (APN 166-280-60-00) and Property 2, 622 South Melrose Drive (APN 166- 280- 18- 00). Two total buildings over 45 years of age are located on the Project site (one church and one single-family residence) and were evaluated for historical and architectural significance as two separate properties due to their separate development histories. 560 South Melrose Drive currently consists of a church built in 1958 and 622 South Melrose Drive consists of a single-family residence built in 1949.

No historical resources were identified within or adjacent to the Project site as a result of extensive archival research, a South Coastal Information Center records search, field survey, and property significance evaluations. The Project site is not currently designated or listed under any national, state, or local cultural

resources programs. The Project site has not been identified as eligible for local designation by a recent historic resources survey.

Dudek evaluated the Project site in accordance with Section 15064.5 (a)(2)-(3) of the CEQA Guidelines and using the criteria outlined in Section 5024.1 of the California Public Resources Code. Dudek concludes that the buildings on the Project site do not appear to be eligible for listing in the NRHP, CRHR, or City of Vista Register of Designated Historic Resources due to a lack of significance. As such, no buildings on the Project site appear to be historical resources under CEQA. Further, no potential indirect impacts to historical resources were identified as the proposed Project has no impact to the built environment beyond the project site and no impact would occur.

b) Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

As described in Appendix D, a records search was conducted a CHRIS records search for the project area and a one-mile buffer at the South Coastal Information Center (SCIC) at San Diego State University on August 1, 2022. The records search results indicate that 53 previous cultural resources studies have been conducted within 1 mile of the Project area, two of which intersect the Project area. 29 cultural resources were identified within a one-mile buffer of the project area; however, the SCIC records search did not identify any cultural resources within the Project area. As described above, of the total 29 resources identified in the one-mile buffer, 19 are prehistoric resources and 10 are historic resources. Offsite improvements are located along Matagual Drive, S Melrose Drive, and Las Palmas Drive within the one-mile buffer surrounding the project area.

In addition to the records search, the geomorphological context of the site was reviewed to determine the likelihood of encountering subsurface cultural resources. According to the U.S. Department of Agriculture Natural Resources Conservation Services (USDA 2022), three soil types are mapped in the Project area, including Placentia sandy loam, 5 to 9 percent slopes, eroded, located within the northwestern portion of the Project area; Bosanko clay, 15 to 30 percent slopes, located within the southeastern and eastern portions of the Project area; and Bosanko clay, 2 to 15 precent, slopes, located in the southwest portion of the Project area. Of the three soil types, the Placentia soil series generally occur in settings with alluvial fans. Reoccurring alluvial action and flooding serve to support the development and presence of cultural deposits in the area. Since there are alluvial soils present throughout the Project area, there is moderate potential for subsurface cultural resources.

Dudek archaeologist David Faith conducted an intensive level pedestrian survey of the proposed Project area on August 4, 2022. All survey work was conducted employing standard archaeological procedures and techniques consistent with the Secretary of the Interior Standards. No artifacts or features were identified during this survey.

The SCIC records search and the pedestrian survey did not identify any cultural resources within the Project area, however, because alluvial soils are present throughout the Project area, which has potential to contain subsurface cultural materials, there is moderate potential for subsurface resources. The City of Vista, in consultation with concerned Traditionally and Culturally Affiliated Native American representatives, has determined that cultural monitoring is required. The following standard mitigation measures (**MM-CUL-1 through MM-CUL-5**) would be implemented to reduce impacts to cultural resources: Impacts to archaeological resources would be less than significant with the incorporation of **MM-CUL-1 through MM-CUL-5**.

MM-CUL-1 Cultural resource mitigation monitoring shall be conducted on the site to provide for the identification, evaluation, treatment, and protection of any cultural resources that are affected by or may be discovered during the construction of the proposed project. The monitoring shall consist of the full-time presence of a Qualified Archaeologist and a traditionally and culturally affiliated (TCA) Native American Monitor associated with a TCA tribe for, but not limited to, any clearing or grubbing of vegetation, tree removal, demolition and/or removal of remnant foundations, pavements, abandonment and/or installation of infrastructure; grading or any other ground disturbing or altering activities, including the placement of any imported fill materials (note: all fill materials shall be absent of any and all cultural resources); and any related road improvements, including, but not limited to, the installation of infrastructure, realignments, and/or expansions to parking lots. Other tasks of the monitoring program shall include the following:

- The requirement for cultural resource mitigation monitoring shall be noted on all applicable construction documents, including demolition plans, grading plans, etc.
- The Qualified Archaeologist and TCA Native American Monitor shall attend at least one pre-construction meeting with the Contractor and/or associated Subcontractors (e.g., Grading Contractor) and a representative from the City of Vista's Engineering or Community Development departments to present the archaeological monitoring program as presented in these measures.
- The Qualified Archaeologist shall maintain ongoing collaborative consultation with the TCA Native American Monitor during all ground disturbing or altering activities, as identified above. The Contractor or Grading Contractor shall notify the Director of Community Development & Engineering, preferably through e-mail, of the start and end of all ground-disturbing activities.
- The Qualified Archaeologist and/or TCA Native American Monitor may halt ground-disturbing activities if archaeological artifact deposits or cultural features are discovered. In general, ground-disturbing activities shall be directed away from these deposits for a short time to allow a determination of potential significance, the subject of which shall be determined by the Qualified Archaeologist and the TCA Native American Monitor. If a determination is made that the unearthed artifact deposits or tribal cultural resources are considered potentially significant, the consulting TCA Tribe(s) shall be notified and consulted in regards to the respectful and dignified treatment of those resources. Ground disturbing activities shall not resume until the Qualified Archaeologist, in consultation with the TCA Native American Monitor, deems the cultural resource or feature has been appropriately documented and/or protected. At the Qualified Archaeologist's discretion, the location of ground disturbing activities may be relocated elsewhere on the project site to avoid further disturbance of cultural resources.
- The avoidance and protection of discovered unknown and significant cultural resources and/or unique archaeological resources is the preferable mitigation for the proposed project. If avoidance is not feasible, culturally appropriate treatment of those resources, including but not limited to funding an ethnographic or ethnohistoric study of the resource(s), and/or developing a data recovery plan may be authorized by the City as the Lead Agency under CEQA. If data recovery is required, then the consulting TCA Tribe(s) shall be notified and consulted in drafting and finalizing any such recovery plan.

- Should any cultural resources be found on the project site during construction of the project, consultation with the TCA Tribal Monitor shall occur. Based upon consultation with the TCA monitor, the cultural resources will be relocated for reburial to a portion of the existing site that will remain as open landscaped area (not active recreation areas).

MM-CUL-2 Prior to the submission of a grading plan to City staff for review, the Applicant or Owner, and/or Contractor shall enter into a Pre-Excavation Agreement with a Traditionally and Culturally Affiliated Native American Tribe ("TCA Tribe"). A copy of the agreement shall be included in the grading plan submission. The purpose of this agreement shall be to formalize protocols and procedures between the Applicant or Owner, and/or Contractor, and the TCA tribe for the protection and treatment of, including but not limited to, Native American human remains, funerary objects, cultural and religious landscapes, ceremonial items, traditional gathering areas and cultural items, located and/or discovered through a monitoring program in conjunction with the construction of the proposed project, including additional archaeological surveys and/or studies, excavations, geotechnical investigations, off-site infrastructure installation, grading, and all other ground disturbing activities.

MM-CUL-3 Prior to the release of the Grading Bond, a Monitoring Report and/or Evaluation Report, which shall comply with Government Code Section 6254(r), shall be submitted by the Qualified Archaeologist, along with the TCA Native American Monitor's notes and comments, to the City Planner for the project administrative record.

MM-CUL--4 All cultural materials that are associated with burial and/or funerary goods shall be repatriated to the Most Likely Descendant as determined by the Native American Heritage Commission (NAHC) per California Public Resources Code Section 5097.98.

MM-CUL--5 Recovered cultural material of historic significance, but not of tribal significance, shall be curated with accompanying catalog, photographs, and reports to a San Diego curation facility that meets federal standards per 36 CFR Part 79. If cultural material will be returned to the Tribe(s) rather than curated, diagnostic artifacts or particularly good examples of specific tool types, if such are recovered, should be scanned for 3D printing, with the permission of the Tribe(s). The data from 3D scanning would be curated at an appropriate repository, such as the San Diego Archaeological Center. The cultural material can then be returned to the Tribe(s) for reburial or other treatment. Recovered cultural material of tribal cultural significance shall be repatriated as stipulated in the pre-excavation agreement as described in CR-2.

c) Would the project disturb any human remains, including those interred outside of formal cemeteries?

The project site currently consists of a vacant church, vacant land and a single-family residence. Archival research of aerial photographs does not show the project site being used as a cemetery. As described above, an intensive level pedestrian survey of the proposed project area was conducted on August 4, 2022. The pedestrian survey did not identify any human remains or find any indications that they would be expected to be found on the project site. If remains are discovered during project construction activities however, mitigation is proposed that would require work in the vicinity of the discovery be halted and procedures set forth in the California Public Resources Code (Section 5097.98) and State Health and Safety Code (Section 7050.5) be followed. Impacts to human remains would be less than significant with the incorporation of **MM-CUL-6**.

MM-CUL-6 As specified by California Health and Safety Code Section 7050.5, if human remains are found on the project site during construction or during archaeological work, the person responsible for the excavation, or his or her authorized representative, shall immediately notify the San Diego County Coroner's office by telephone. No further excavation or disturbance of the discovery or any nearby area reasonably suspected to overlie adjacent remains (as determined by the Qualified Archaeologist and/or the TCA Native American monitor) shall occur until the Coroner has made the necessary findings as to origin and disposition pursuant to Public Resources Code 5097.98. If such a discovery occurs, a temporary construction exclusion zone shall be established surrounding the area of the discovery so that the area would be protected (as determined by the Qualified Archaeologist and/or the TCA Native American monitor), and consultation and treatment could occur as prescribed by law. As further defined by State law, the Coroner would determine within two working days of being notified if the remains are subject to his or her authority. If the Coroner recognizes the remains to be Native American, he or she shall contact the Native American Heritage Commission within 24 hours. The Native American Heritage Commission would then make a determination as to the Most Likely Descendent. If Native American remains are discovered, the remains shall be kept in situ ("in place"), or in a secure location in close proximity to where they were found, until after the Medical Examiner makes its determination and notifications, and until after the Most Likely Descendant is identified. The analysis of the remains shall only occur on-site in the presence of a Most Likely Descendant. The specific locations of Native American burials and reburials will be proprietary and not disclosed to the general public. According to California Health and Safety Code, six or more human burials at one location constitute a cemetery (Section 8100), and disturbance of Native American cemeteries is a felony (Section 7052). In the event that the project proponent and the MLD are in disagreement regarding the disposition of the remains, State law will apply, and the mediation process will occur with NAHC. In the event that mediation is not successful, the landowner shall rebury the remains at a location free from future disturbance (see Public Resources Code Section 5097.98(e) and 5097.94(k)).

3.6 Energy

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	☐	☐	☒	☐

a) Would the project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Implementation of the project would result in energy use for construction and operation, including use of electricity, natural gas, and petroleum-based fuels. The electricity and natural gas used for construction of the project would be temporary and would be substantially less than that required for project operation and would have a negligible contribution to the project's overall energy consumption. Although the Project would see an increase in petroleum use during construction and operation, vehicles would use less petroleum due to advances in fuel economy and potential reduction in VMT over time.

The project's impact on energy resources is discussed separately below for construction and operation. Energy consumption (electricity, natural gas, and petroleum consumption) was estimated using CalEEMod data from the GHG emissions assessment. For further detail on the assumptions and results of the energy analysis, please refer to Appendix A.

Short-Term Construction

Electricity

Temporary electric power for as-necessary lighting and electronic equipment such as computers inside temporary construction trailers would be provided by San Diego Gas & Electric (SDG&E). The electricity used for such activities would be temporary and would be substantially less than that required for Project operation and would have a negligible contribution to the Project's overall energy consumption.

Natural Gas

Natural gas is not anticipated to be required during construction of the project. Fuels used for construction would primarily consist of diesel and gasoline, which are discussed below under the "petroleum" subsection. Any minor amounts of natural gas that may be consumed as a result of Project construction would be substantially less than that required for Project operation and would have a negligible contribution to the project's overall energy consumption.

Petroleum

Petroleum-based fuel usage represents most energy consumed during construction. Heavy-duty construction equipment associated with demolition and construction activities for construction would rely on diesel fuel, as would haul trucks involved in removing the materials from demolition and excavation. Construction workers would travel to and from the Project site throughout the duration of construction. It is assumed in this analysis that construction workers would travel to and from the site in gasoline-powered passenger vehicles.

Heavy-duty construction equipment of various types would be used during each phase of project construction. Table 3.6-1 lists the assumed equipment usage for each phase of construction.

Fuel consumption from construction equipment was estimated by converting the total CO_2 emissions from each construction phase, as estimated using CalEEMod, to gallons using the conversion factors for CO_2 to gallons of gasoline or diesel. Construction is estimated to occur in the years 2024 and 2025 based on the construction phasing schedule; all details for construction criteria air pollutants discussed in Section 3.3,

Air Quality, and Appendix A is also applicable for the estimation of construction-related GHG emissions. The conversion factor for gasoline is 8.78 kilograms per metric ton CO_2 per gallon, and the conversion factor for diesel is 10.21 kilograms per metric ton CO_2 per gallon (The Climate Registry 2021). The estimated diesel fuel usage from construction equipment, haul trucks, and vendor trucks, as well as estimated gasoline fuel usage from worker vehicles, is shown in Table 3.6-1.

Table 3.6-1. Total Project Construction Petroleum Demand

Off-Road Equipment (diesel)	Haul Trucks (diesel)	Vendor Trucks (diesel)	Worker Vehicles (gasoline)
Gallons			
54,564	2,877	4,572	4,203

Source: See Appendix A for outputs.

In summary, construction associated with the potential future development facilitated by the Project over the construction period is anticipated to consume 4,203 gallons of gasoline from worker vehicles and 62,013 gallons of diesel from off-road equipment, haul trucks, and vendor trucks. In San Diego County in 2024, it is estimated that approximately 1.5 billion gallons of petroleum would be consumed by on-road vehicles, and approximately 21 million gallons of petroleum would be consumed by off-road equipment (CARB 2022).

The project would be subject to CARB's In-Use Off-Road Diesel Vehicle Regulation that applies to certain off-road diesel engines, vehicles, or equipment greater than 25 horsepower. The regulation (1) imposes limits on idling, requires a written idling policy, and requires a disclosure when selling vehicles; (2) requires all vehicles to be reported to CARB (using the Diesel Off-Road Online Reporting System) and labeled; (3) restricts the adding of older vehicles into fleets starting on January 1, 2014; and (4) requires fleets to reduce their emissions by retiring, replacing, or repowering older engines or installing Verified Diesel Emission Control Strategies (i.e., exhaust retrofits). The fleet must either show that its fleet average index was less than or equal to the calculated fleet average target rate, or that the fleet has met the Best Achievable Control Technology requirements. Overall, the project would not be unusual when compared to overall local and regional demand for energy resources and would not involve characteristics that require equipment that would be less energy-efficient than at comparable construction sites in the region or state.

Additionally, any future development facilitated by the Project would be required to adhere to all federal, state, and local requirements for energy efficiency, including the latest Title 24 standards. Considering these requirements, the project would not result in the inefficient, wasteful, or unnecessary consumption of construction energy and impacts would be less than significant.

Long-Term Operational Impacts

During Project operations, activities that would consume energy would include electricity and natural gas use for building operations, electricity for water and wastewater conveyance, and petroleum consumption from residential vehicle trips. Additional assumptions for these sources are described below and energy use calculations for operations are provided in Appendix A.

Electricity

The operation of the project buildout would require electricity for multiple purposes, including cooling, lighting, appliances, and various equipment. Additionally, the supply, conveyance, treatment, and distribution of water would indirectly result in electricity usage. Electricity consumption associated with Project operation is based on the CalEEMod outputs presented in Appendix A.

CalEEMod default values for energy consumption for each land use were applied for the project analysis. The energy use from residential land uses is calculated in CalEEMod based on the California Commercial End-Use Survey database. Energy use in buildings (both natural gas and electricity) is divided by the program into end use categories subject to Title 24 requirements (end uses associated with the building envelope, such as the HVAC system, water heating system, and integrated lighting) and those not subject to Title 24 requirements (such as appliances, electronics, and miscellaneous “plug-in” uses).

Title 24 of the California Code of Regulations serves to enhance and regulate California’s building standards. The most recent amendments to Title 24, Part 6, referred to as the 2019 standards, became effective on January 1, 2020. Based on CalEEMod estimates, the Project would consume approximately 266,367 kilowatt-hours (kWh) per year during operation (Appendix A). The Project would consume approximately 48,199 kWh per year from water and wastewater sources, resulting in a total use of 314,566 kWh per year. For context, the residential electricity demand in 2020 was 7,387,046,267 kWh (7,387 gigawatt-hours) for San Diego County (CEC 2020). As such, the project would have a negligible impact on demand for San Diego County and SDG&E.

Natural Gas

The operation would require natural gas for various purposes, including water heating and natural gas appliances. Natural gas consumption associated with operation is based on the CalEEMod outputs in Appendix A.

CalEEMod default values for energy consumption for each land use were applied for the Project analysis. According to these estimations, the Project would consume approximately 733,770 kilo-British thermal units per year. For context, the residential natural gas consumption in 2020 was 302,849,797 kilo-British thermal units for San Diego County (CEC 2020).

Petroleum

During operations, the majority of fuel consumption resulting from the Project would involve the use of motor vehicles traveling to and from the Project site, primarily by project residents.

Petroleum fuel consumption associated with motor vehicles traveling to and from the Project site is a function of the VMT as a result of Project operation. As estimated by CalEEMod using trip rates provided in the Linscott, Law & Greenspan Transportation Assessment (2022), the annual net new VMT attributable to the Project is expected to be 970,803 VMT. Similar to the construction worker and vendor trips, fuel consumption from worker and truck trips is estimated by converting the total CO2 emissions from operation of the Project, as estimated using CalEEMod, to gallons using the conversion factors for CO2 to gallons of gasoline or diesel.

Calculations for annual mobile source fuel consumption are provided in Table 3.6-2.

Table 3.6-2. Annual Mobile Source Petroleum Demand

Fuel	Vehicle MT CO_2	kg/CO_2/Gallon	Gallons
Gasoline	372.56	8.78	42,432.65
Diesel	90.90	10.21	8,902.88
		Total	51,335.53

Sources: Trips and vehicle CO_2 (Appendix A); kg/CO_2/Gallon (The Climate Registry 2021).
Notes: MT = metric ton; CO_2 = carbon dioxide; kg = kilogram
Gasoline fuel consumption includes landscape maintenance equipment.

For context, California consumes approximately 28.6 billion gallons of petroleum per year (EIA 2017). Countywide total petroleum use by vehicles is expected to be 1.5 billion gallons per year by 2025 (CARB 2021).

Summary

Over the lifetime of the project, the fuel efficiency of the vehicles being used by visitors, students, and employees is expected to increase. As such, the amount of gasoline and diesel consumed during operation would decrease over time. There are numerous regulations in place that require and encourage increased fuel efficiency. For example, CARB has adopted a new approach to passenger vehicles by combining the control of smog-causing pollutants and GHG emissions into a single coordinated package of standards. The new approach also includes efforts to support and accelerate the numbers of plug-in hybrids and zero-emission vehicles in California (CARB 2017). In the past, Pavley regulations reduced GHG emissions from California passenger vehicles by about 22% in 2012 and by about 30% in 2016, all the while improving fuel efficiency and reducing motorists' costs. As such, vehicle trips associated with the Project are expected to use less petroleum due to advances in fuel economy over time.

The Project would create additional electricity and natural gas demand by adding residences. New facilities associated with the Project would be subject to the State Building Energy Efficiency Standards, embodied in Title 24 of the California Code of Regulations. The efficiency standards apply to new construction of residential buildings and regulate energy consumed for heating, cooling, ventilation, water heating, and lighting.

In summary, although natural gas and electricity usage would increase due to the implementation of the Project, the Project's energy efficiency would comply with relevant codes. Although the Project would see an increase in petroleum use during construction and operation, vehicles would use less petroleum due to advances in fuel economy and potential reduction in VMT over time. Therefore, impacts to energy resources during operation would be less than significant.

b) Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Title 24 of the California Code of Regulations contains energy efficiency standards for residential and non-residential buildings based on a state mandate to reduce California's energy demand. Specifically, Title 24 addresses several energy efficiency measures that impact energy used for lighting, water heating, heating, and air conditioning, including the energy impact of the building envelope such as windows, doors, wall/floor/ceiling assemblies, and roofs.

CCR Part 6 of Title 24 specifically establishes energy efficiency standards for residential and non-residential buildings constructed in California to reduce energy demand and consumption. Part 11 of Title 24 also includes the CALGreen standards, which established mandatory minimum environmental performance standards for new construction projects. The Project would comply with CCR Title 24, Part 6 and Part 11, per state regulations.

The project would also not conflict with the City's Climate Action Plan, which identifies several strategies to reduce GHG emissions through energy efficiency, as discussed in further detail in Section 3.8.

Based on the foregoing, the Project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency; therefore, impacts during construction and operation of the Project would be less than significant.

3.7 Geology and Soils

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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 the 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?	☐	☐	☒	☐

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐

The following analysis is based on the Geotechnical and Infiltration Evaluation prepared by GeoTeck Inc. for the proposed project, which is included as Appendix E to this MND.

a) Would the project 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.

The project site currently consists of a vacant church, a vacant lot and a single-family residence, which would be replaced by 34 single-family residences. The project is located in the Peninsular Ranges geomorphic province in Southern California. There are many faults located in this province and the region is seismically active. The Newport-Inglewood-Rose Canyon fault zone is approximately 10 miles from the project site and is the closest known active fault. No faults are located in the immediate vicinity of the project site. All residences would conform to all applicable federal, state, and local building codes, which would ensure structural integrity. As concluded in Appendix E, the project site is not located within or in proximity to an earthquake fault zone. Impacts related to risks from rupture of a known earthquake fault as part of project implementation would be less than significant.

ii) Strong seismic ground shaking?

As stated above, while the region is seismically active, the closest fault zone to the project site is 10 miles away and therefore the project site is not located in or in proximity to a fault zone. Additionally, the design of the project would conform to all applicable federal, state, and local building codes, which would ensure structural integrity. Impacts related to risks from strong seismic ground shaking as part of project implementation would be less than significant.

iii) Seismic-related ground failure, including liquefaction?

A variety of factors contribute to liquefaction potential including the soil type and groundwater levels. The soils underneath the project site are characterized as dense, with relatively shallow hard bedrock below, and a lack of shallow groundwater. As described above, the project site is not located in proximity to a fault

zone. Therefore, due to nature of the subsurface conditions on the project site and the distance from and active fault zone, impacts related to risks from seismic related ground failure, including liquefaction, would be less than significant.

iv) Landslides?

As described above, the project would introduce 34 single- family residences to the project site. Currently, the western portion of the project site is developed and relatively flat, with increased steepness as you move to the eastern portion of the project site. During the geotechnical investigation of the project site, there was no evidence of landslide or slope instabilities at the project site. Additionally, no landslides were mapped in the general vicinity of the project site (Appendix E). Impacts related to risks from landslides would be less than significant.

b) Would the project result in substantial soil erosion or the loss of topsoil?

The project site is currently characterized by an undeveloped area adjacent to an existing church. The project would propose the complete development of the site to include 34 single-family residences, open space and amenities. Potential erosion and sedimentation impacts would be temporarily increased during proposed construction, through activities such as grading, and removal of surface stabilizing features (e.g., vegetation and pavement). Developed areas would be most susceptible to erosion between the beginning of grading or construction and the installation of pavement or establishment of permanent cover in landscaped areas. Short-term erosion and sedimentation impacts would be addressed through conformance with the National Pollutant Discharge Elimination System (NPDES) standards. Additionally, the project would be required to draft and implement an approved Stormwater Pollution Prevention Plan (SWPPP) and best management practices (BMPs), including appropriate measures to address erosion and sedimentation during construction. Once the project is in operation, the project site will be developed and would not result in the substantial erosion of topsoil. Impacts related to soil erosion would be less than significant.

c) Would the project 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?

As stated above, the project site is relatively flat and is not located at the base of any hillsides, ridgeline, or slopes, and is not located in or near known fault zones. Lateral spreading is unlikely to occur at the project site because the project site is relatedly flat and is not located near water. Human or natural activities have the potential to cause subsidence, however, the project does not propose any uses that would remove material from under the site post construction. As described above, the project site is not subject to liquefaction. Additionally, the design of the project would conform to all applicable federal, state, and local building codes, which would ensure structural integrity regardless of the characteristic of the underlying soils. Therefore, impacts related to on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse would be less than significant.

d) Would the project 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?

The project would introduce 34 single-family residences to the project site. As determined in Appendix E, soils on the project site have been identified as having medium expansion potential. The project foundation

shall follow the guidelines of the 2019 California Building Code and would not create a substantial direct or indirect risk to life or property. Impacts would be less than significant.

e) Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

The project does not include the construction of septic tanks or alternative wastewater disposal systems. As described in Section 3.17, the project would connect to existing wastewater lines located under Matagual Drive. Therefore, the project would have no impact related to the capability of the site to dispose of wastewater from the project site.

f) Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

The project is located within the Mar Vista/ Sunset/ Carriage Hill neighborhood. The Vista GP EIR has identified areas within the southwestern and southeastern portion of the planning areas as having high potential for paleontological resources. The project site is located in the northern portion of this planning area which has not been identified as an area that has high sensitivity for paleontological resources (City of Vista 2011). The majority of the project site is underlain by middle Cretaceous (approximately 100 million years ago) Tonalite, undivided (map unit Kt), with a small portion of the northeastern corner of the site underlain by Holocene (<11,700 years ago) alluvial deposits (map unit Qa) (Kennedy et al. 2007. The Geotechnical and Infiltration Evaluation confirmed geological mapping and indicated areas of the project underlain by Holocene alluvial deposits are in turn underlain by Cretaceous Tonalite from 2.5 to 13 feet below the ground surface (Appendix E). The project site is located approximately 0.5 miles from Buena Vista Creek which has been identified as having low sensitivity for paleontological resources (City of Vista 2011).

Per the County of San Diego's (2009b) guidelines for determining significance for paleontological resources, the middle Cretaceous Tonalite has no paleontological sensitivity, and the Holocene alluvial deposits have low paleontological sensitivity on the surface that increases to moderate or high with depth. Due to the required grading of the project, the geologic units on site that have the potential to contain paleontological resources at depth, and the moderate potential for the inadvertent discovery of cultural resources (as described in Section 3.5), mitigation measure MM-GEO-1 is provided in the event excavation results in the unanticipated discovery of paleontological resources, and impacts would be reduced to less than significant with mitigation incorporated.

Mitigation Measures

MM GEO-1 Unanticipated Paleontological Resources. If an inadvertent discovery of paleontological resources (e.g., fossilized plant, shell, or animal bone) is made during project-related construction activities, ground disturbance in the area of the find shall be halted; the discovered resource shall be roped off; and the City of Vista and a qualified professional paleontologist shall be contacted. The qualified paleontologist shall be assigned to determine whether the resource is potentially significant as per the Society of Vertebrate Paleontology 2010 and County of San Diego (2009) guidelines for mitigation and develop appropriate treatment measures.

3.8 Greenhouse Gas Emissions

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	☐	☐	☒	☐

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

Greenhouse gases (GHG) are those that that absorb infrared radiation (i.e., trap heat) in the Earth's atmosphere. The trapping and buildup of heat in the atmosphere near the Earth's surface (the troposphere), is referred to as the "greenhouse effect," and is a natural process that contributes to the regulation of the Earth's temperature, creating a livable environment on Earth. The Earth's temperature depends on the balance between energy entering and leaving the planet's system, and many factors (natural and human) can cause changes in Earth's energy balance. Human activities that generate and emit GHGs to the atmosphere increase the amount of infrared radiation that gets absorbed before escaping into space, thus enhancing the greenhouse effect and causing the Earth's surface temperature to rise. This rise in temperature has led to large-scale changes to the Earth's system (e.g., temperature, precipitation, wind patterns, etc.), which are collectively referred to as climate change. Global climate change is a cumulative impact; a Project contributes to this impact through its incremental contribution combined with the cumulative increase of all other sources of GHGs. Thus, GHG impacts are recognized exclusively as cumulative impacts (CAPCOA 2008).

As defined in California Health and Safety Code Section 38505(g) for purposes of administering many of the state's primary GHG emissions reduction programs, GHGs include CO_2, methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride, and nitrogen trifluoride (see also CEQA Guidelines Section 15364.5). The primary GHGs that would be emitted by Project-related construction and operations include CO_2, CH_4, and N_2O. Emissions of hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride, and nitrogen trifluoride are generally associated with industrial activities, including the manufacturing of electrical components and heavy-duty air conditioning units and the insulation of electrical transmission equipment (substations, power lines, and switch gears.). Therefore, emissions of these GHGs were not evaluated or estimated in this analysis because the Project would not include these activities or components and would not generate hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride, and nitrogen trifluoride in measurable quantities.

The Intergovernmental Panel on Climate Change developed the global warming potential (GWP) concept to compare each GHG's ability to trap heat in the atmosphere relative to another gas. The reference gas used is CO2; therefore, GWP-weighted emissions are measured in metric tons (MT) of CO2 equivalent (CO2e). Consistent with CalEEMod Version 2020.4.0, this GHG emissions analysis assumed the GWP for CH4 is 25 (i.e., emissions of 1 MT of CH4 are equivalent to emissions of 25 MT of CO2), and the GWP for N2O is 298, based on the Intergovernmental Panel on Climate Change's Fourth Assessment Report (IPCC 2007).

The potential for the Project to generate GHG emissions that may have a significant impact on the environment and the potential for the Project to conflict with an applicable plan, policy or regulation adopted for the purpose of reducing GHG emissions is evaluated based on the Project's consistency with the City's Climate Action Plan (CAP), which was adopted in 2021. The CAP is a qualified plan under CEQA Guidelines Section 15183.5(b) meaning it meets the CEQA criteria for "a plan for the reduction of greenhouse gas emissions," such that it may be used for the specific purpose of streamlining the analysis of GHG emissions for subsequent projects. With associated CEQA coverage, the City's CAP provides environmental review streamlining benefits for development projects proposed in the city provided they demonstrate consistency with this CAP.

The intent of the CAP to implement a CAP Consistency Review Checklist (Checklist). The Checklist would contain GHG reduction measures applicable to development projects that are required to be implemented on a Project-by-Project basis to ensure that the specific emission targets identified in the CAP are achieved. New development projects will need to incorporate all applicable CAP measures to demonstrate consistency with the CAP. However, at the time of preparation of this analysis, the Checklist has not been prepared by the City. In the absence of the Checklist, the Project development is compared to the CAP emission reduction strategies and measures, as provided in in Chapter 3 of the CAP.

The Project's consistency evaluation with the City's CAP is presented in Table 3.8-1 (City of Vista, 2021).

Table 3.8-1. City of Vista CAP Consistency

Strategy	Measure	Consistency Analysis
1: Increase Use of Zero-Emission/Alternative Fuel Vehicles	T-1: Transition to a Clean and More Efficient Municipal Vehicle Fleet	**Not applicable**. The Project would not obstruct the City of Vista from transitioning to a clean and more efficient municipal fleet.
	T-2: Increase Electric Vehicle Charging Stations at Public Facilities	**Not applicable**. The Project does not involve public facilities.
	T-3: Require Electric Vehicle Charging Stations at New Multi-Family and Commercial Developments. Require that three percent of total parking spaces required in new multi-family projects have EV charging stations, and six percent of total parking spaces required in new commercial projects have EV charging stations, starting in 2021.	**Not applicable**. The Project does not involve multi-family or commercial developments.
2. Reduce Vehicle Miles Traveled	T-4: Participate in the San Diego Association of Government's iCommute Vanpool Program	**Not applicable**. The iCommute program is targeted towards businesses.

Table 3.8-1. City of Vista CAP Consistency

Strategy	Measure	Consistency Analysis
	T-5: Implement the City's Bicycle Master Plan. Implement projects identified in the city's Bicycle Master Plan, including adding new bicycle lanes and improving existing bicycle lanes. Support the SANDAG Regional Bicycle Plan Inland Rail Trail segment that is within the city's boundary.	**Not applicable**. The Project would not prevent the City from implanting the City's Bicycle Master Plan.
	T-6: Increase Density and Mixed-Use Development. Increase density and destination accessibility in the Opportunity Areas identified in the General Plan and the SANDAG Smart Growth Areas	**Consistent**. The Project includes 34 single-family homes with a proposed designation of medium density.
3. Reduce Fossil Fuel Use	T-7: Require Electric-Powered or Alternative Fueled Construction Equipment. Require that 30 percent of construction equipment in new development projects be electric powered or alternatively fueled	**Consistent**. As discussed in the CAP, "emissions reductions in this strategy would be achieved through working with developers and fleet owners to phase out old, fossil fuel reliant equipment." The applicant will work with the Project construction contractors to incorporate to the extent available electric and alternative fueled construction equipment.
4. Increase Building Energy Efficiency	E-1: Implement Energy Efficient projects in Municipal Facilities	**Not applicable**. The Project is not a municipal facility.
	E-2: Continue Photovoltaic Installation at Municipal Facilities	**Not applicable**. The Project is not a municipal facility.
	E-3: Join a Program to Increase Grid-Supply Renewable and Zero-Carbon Electricity	**Not applicable**. The Project would not prevent the City from joining a program to increase grid-supply renewable and zero-carbon electricity.
6. Reduce and Recycle Solid Waste	W-1: Reduce Solid Waste Disposal and Increase Recycling. Achieve 85 percent waste diversion citywide (equivalent to reducing per capita waste landfilled to two pounds per person) by 2030.	**Consistent**. The Project will adhere to any applicable City requirements developed and implemented by the City to reduce solid waste and increase recycling.
7. Carbon Sequestration	C-1 Increase Tree Planting at Municipal Facilities and Public Rights-of-Way	**Not applicable**. The Project is not a municipal facility or Public Right-of-Way.
	C-2 Increase Tree Planting at New Private Properties. Enforce the new development tree requirements from landscape plans and track the new trees planted.	**Not applicable.** The Project would not prevent the City from enforcing the new tree requirements and tracking new trees planted.

As shown in Table 3.8-1, the Project would not conflict with the City's CAP emission reduction strategies and measures.

For informational purposes, the Project's construction and operational-related GHG emissions are provided below.

Construction Emissions

GHG emissions would be associated with the construction phase of the Project components through use of construction equipment and vehicle trips. GHG emissions were estimated using the CalEEMod Version 2020.4.0. All construction assumptions in the air quality analysis are relevant to the construction GHG emissions estimates; as such, see the construction scenario in Table 3.3-1 in the air quality analysis.

Table 3.8-2 shows the estimated annual GHG construction emissions associated with the Project. Complete details of the emissions calculations are provided in Appendix A of this document.

Table 3.8-2. Estimated Annual Construction GHG Emissions

Year	CO_2	CH_4	N_2O	CO_2e
	Metric Tons			
2024	369.30	0.10	0.01	373.72
2025	289.75	0.06	0.00	292.58
Total	**659.05**	**0.15**	**0.01**	**666.30**

Source: CalEEMod Version 2020.4.0.
Notes: GHG = greenhouse gas; CO_2 = carbon dioxide; CH_4 = methane; N_2O = nitrous oxide; CO_2e = carbon dioxide equivalent. See Appendix A for complete results. <0.01 = reported value is less than 0.01.

As shown in Table 3.8-2, the estimated total GHG emissions from construction of the Project would be approximately 666 MT CO_2e. When amortized over 30 years, the estimated annual GHG emissions from construction of the Project would be approximately 22 MT CO_2e per year.

Operational Emissions

Operation of the Project would result in GHG emissions from area sources, mobile sources, energy (natural gas and electricity), solid waste, and water and wastewater, which are briefly described below.

Area

The area source category calculates direct sources of GHG emissions located at the Project site including hearths and landscape maintenance equipment. The Project will not have residential woodburning fireplaces or woodstoves but was assumed to feature one natural gas fireplace per home.

Energy

As represented in CalEEMod, energy sources include emissions associated with building electricity and natural gas usage (non-hearth). CalEEMod default values for energy consumption were applied to each land use. The energy use from residential land uses is calculated in CalEEMod based on the Residential Appliance Saturation Survey (CAPCOA 2021).

Annual natural gas (non-hearth) and electricity emissions were estimated in CalEEMod using default values for emissions factors for San Diego Gas and Electric (SDG&E), which would be the energy source provider for the Project.

Mobile Sources (Motor Vehicles)

As discussed under air quality, Project operation of the 34 residential units would generate vehicular tips. Project specific trip rates was utilized from the Linscott, Law & Greenspan Transportation Assessment (2022). Emission factors representing the vehicle mix and emissions for 2025, which represents the first year of Project operation, were used to estimate emissions associated with vehicular sources.

Solid Waste

The Project would generate solid waste, and therefore, result in CO_2e emissions associated with landfill off-gassing. CalEEMod default values for solid waste generation were used to estimate GHG emissions associated with solid waste.

Water and Wastewater

Supply, conveyance, treatment, and distribution of water for the Project require the use of electricity, which would result in associated indirect GHG emissions. Similarly, wastewater generated by the Project requires the use of electricity for conveyance and treatment, along with GHG emissions generated during wastewater treatment. Water consumption estimates for both indoor and outdoor water use and associated electricity consumption from water use and wastewater generation were estimated using CalEEMod default values.

Table 3.8-3 shows the total operational GHG emissions for the Project after accounting for amortized construction emissions.

Table 3.8-3. Summary of Estimated Annual GHG Emissions

Emissions Source	CO_2	CH_4	N_2O	CO_2e
	Metric Tons per Year			
Area	34.07	0.03	0.00	35.04
Energy	104.40	0.00	0.00	104.87
Mobile	303.98	0.02	0.01	308.63
Solid Waste	8.08	0.48	0.00	20.01
Water and Wastewater	12.51	0.07	0.00	14.86
			Amortized Construction Emissions	*22.21*
			Total Project Emissions	**505.62**

Source: See Appendix A for complete results.
Notes: GHG = greenhouse gas; CO_2 = carbon dioxide; CH_4 = methane; N_2O = nitrous oxide; CO_2e = carbon dioxide equivalent.

As shown in Table 3.8-3, estimated annual Project-generated GHG emissions would be approximately 506 MT CO2e per year as a result of Project operations and amortized construction.

As previously noted, the Project's construction and operational-related GHG emissions are provided for informational purposes only and the Project's potential to result in a GHG emissions impact is based on

consistency with the City's CAP. As provided in Table 3.8-1, the Project would be consistent with the CAP and therefore Project impacts related to GHG emissions would be less than significant.

3.9 Hazards and Hazardous Materials

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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 that 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 or public use airport, would the project result in a safety hazard or excessive noise for people residing or working 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?	☐	☐	☒	☐

a,b) Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? Would the project 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?

Construction

The project applicant proposes the development of 34 single-family residential development and associated construction of a private road, a dog park, a tot lot, and recreation areas. Project construction would entail transport, use, or disposal of potentially hazardous materials including, but not limited to, diesel fuel, gasoline, equipment fluids, concrete, cleaning solutions and solvents, lubricant oils, adhesives, human waste, and chemical toilets. Direct impacts to human health and biological resources from accidental spills of small amounts of hazardous materials from construction equipment could occur with the transport, use, or disposal of these materials. However, existing federal and state standards related to the handling, storage, and transport of these materials would be implemented during construction of the project. These regulations include the Federal Chemical Accident Prevention Provisions (Part 68 of the Code of Federal Regulations); California Highway Patrol and California Department of Transportation container and licensing requirements for transportation of hazardous waste on public roads; the International Fire Code; the Resource Conservation and Recovery Act of 1976 as amended by the Hazardous and Solid Waste Amendments of 1984; California's Hazardous Waste Control Law; California Fire Code; California Health and Safety Code Hazardous Materials Release Response Plans and Inventory; California Integrated Waste Management Act; regulations developed by California Occupations Safety and Health Administration; and the state Hazardous Waste Control Act.

Operation

As described above, the project is residential in nature. During project operation the only hazardous materials anticipated for transport, use, or disposal associated would be routinely used household products such as cleaners, paint, solvents, motor oil/automotive products, batteries, and garden maintenance products, typical of residential uses. The use, handling, and disposal of these products is addressed by household hazardous waste programs that are part of the Integrated Waste Management Plan (IWMP) of the County of San Diego and the project is not expected to create a significant hazard to the public or environment through hazardous upsets or accidents. The Household Hazardous Waste Element of the IWMP specifies the means by which hazardous wastes generated by households shall be collected, recycled, treated, and disposed of safely (County of San Diego 2005). The use, handling, and disposal of these products are addressed by household hazardous waste programs that are part of the IWMP of the County of San Diego.

Conclusion

The project 's compliance with all standards required through federal, state, county, and municipal regulations, in addition to project-specific plans reviewed by the City, would ensure potential impacts to the public or the environment through routine transport, use, or disposal of hazardous materials would not be substantial. Therefore, impacts related to transport of hazardous materials or potential upset and accident conditions involving release of hazardous materials in the environment are determined to be less than significant.

c) Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

The project site is located approximately 0.1 miles northeast from Breeze Hill Elementary school located on the other side of S Melrose Drive. As described above, the project is residential in nature and hazardous materials onsite would be limited to routinely used household products and hazardous materials used during construction. Additionally, project construction and operation would comply with all standards required through federal, state, county, and municipal regulations. Therefore, impacts related to the emission or handling of hazardous materials in proximity to an existing school are determined to be less than significant.

D) Would the project be located on a site that 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?

A Phase I Environmental Site Assessment was performed for the project site and is included as Appendix F. The ESA concluded that there is no evidence of a recognized environmental condition on the project site. Additionally, the project site has not been identified as being a Cortese List hazardous material site (Cal EPA 2022; DTSC 2022; SWRCB 2022a, 2022b) and therefore the project would result in no impact related to a hazardous materials site on the project site.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

There are two airports in the vicinity of the project site, Palomar- McCellan Airport and Oceanside Municipal Airport. The project site is approximately 4.5 miles away from Palomar and 6 miles away from Oceanside Municipal Airport. In addition to the project site being more than 2 miles away from an airport. The project site has not been identified within an airport influence or notification area in either of the airports Airport Land Use Compatibility Plans (ALUC 2010,ALUC 2011). The project would have no impact resulting from the project being in proximity to an airport.

f) Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

The project would introduce 34 single-family residences to the project site. The City does not have an adopted emergency response plan or emergency evacuation plan, however, the City is a participating jurisdiction in San Diego County Operational Area Emergency Operations Plan which provides a planned response to disasters within the operational area (County of San Diego 2022). The project would conform with the standards set forth in the Operation Area Emergency Operations Plan. As required under the California Fire Code, the project would be required to present development plans which afford fire and emergency responders suitable fire access roads dimensions and surfaces (Chapter 5, §503.1 through §503.4 of the California Fire Code), an adequate number of emergency rated entrances to the community (Appendix D, Section D106 of the California Fire Code). The proposed points of entry and private driveways will be reviewed by VFD and would be required to meet the qualifications for emergency access to and from the project site.

Implementation of the project is not expected to impact any roadway or staging areas that are identified in any emergency planning documents and would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan and impacts would be less than significant.

g) Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

The project site is partially undeveloped with an existing single-family residence and church. The project site is not located within a Fire Hazard Severity Zone (CALFIRE 2022). The project site is an infill site that is relatively flat and does not contain any steep slopes. As described above, the project would introduce 34 single-family residences that would replace the existing church and single-family residence. The project would not introduce infrastructure that would exacerbate fire risk to the site. The project would be required to comply with all applicable state and local fire codes, including compliance with the California Fire Code and the Vista Fire Department, which require a design that affords fire and emergency responders suitable fire access roads dimensions and surfaces (Chapter 5, § 503.1 through 503.4 of the California Fire Code); an adequate number of emergency rated entrances to the community (Appendix D, Section D106 of the California Fire Code).

For the reasons stated above and considering the project site is located in an urbanized area surrounded by existing development, implementation of the project would not expose people or structures to risk of loss, injury, or death involving wildfires, and impacts would be less than significant.

3.10 Hydrology and Water Quality

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	☐	☐	☒	☐
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☒	☐
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:				
v) result in substantial erosion or siltation on- or off-site;	☐	☐	☒	☐

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
vi) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	☐	☐	☒	☐
vii) 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	☐	☐	☒	☐
viii) impede or redirect flood flows?	☐	☐	☒	☐
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☒	☐
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☒	☐

a) Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

The project proposes to remove an existing single-family residence and church and redevelop the project site to include 34 single-family residences.

Project construction would include the demolition and removal of the existing single-family residence and church on the project site. Sources of polluted runoff could include, heavy metals, organic compounds, trash and debris, oxygen demanding substances, oil and grease, bacteria and viruses, pesticides, sediments, and nutrients could occur as a result of project uses. The proposed demolition, grading, and construction associated with the project could create additional sources of pollution which could potentially cause short term impacts to water quality. Impacts related to pollution form sedimentation would occur when soil would be exposed during project grading and construction. Project construction activities would be subject to RWQCB requirements related to erosion control, sedimentation, and runoff prevention. Additionally, a Stormwater Pollution Prevention Plan (SWPPP) will be prepared for the project that would specify best management practices (BMPs) that would be implemented during construction to minimize impacts to water quality during construction.

Proposed residential uses are not typically characteristic of generating, releasing, or using large amounts of hazardous materials. The only hazardous materials anticipated would be for transport, use, or disposal of routinely used household products such as cleaners, paint, solvents, motor oil/automotive products, batteries and garden maintenance products, typical of residential land uses. Operation of the project is not expected to include such uses that would violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality.

As discussed in Appendix G, stormwater runoff from the project site would be collected and conveyed into two Stormgardern Biofiltration Systems within the proposed curb inlet and one Rtank underground storage facility. These project components would assist in meeting the requirements for pollutant control, hydromodification management flow control, and mitigation for the 100- year 6- hour storm event. Additionally, the project would comply with California Regional Water Quality Control Board San Diego Region municipal storm water permit (Appendix H).

Upon compliance with the RWQCB standards, implementation of a SWPPP along with site-specific BMPs, the project would not violate water quality standards. Therefore, impacts would be less than significant.

b) Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

The project site currently consists of a partially developed site with an existing church, a vacant lot and a single-family residence. The project would remove the existing structures on the project site and would develop the site to include 34 single-family residences, construction of an onsite roadway, landscaping, and recreational amenities. The project would add additional impervious surfaces. As described in Section 3.19, the Vista Irrigation District would supply water to the project site. Water supplied by the VID primarily comes from desalination, and local and imported surface water (VID 2022a). Additionally, as described in Section 3.19, the VID has adequate water supply to provide water supply to the project site and therefore it is not expected that the project would require the use of local groundwater supplies. Portions of the project site including landscaped areas, recreational amenities, and private open space (in front and rear yards) would be pervious and allow for groundwater recharge. As described under Section 3.7, the project site does not have shallow groundwater on the project site. As described under threshold a) the project would be required to comply with RWQCB standards, and implement a SWPPP and site-specific BMPs.

While the project site would introduce new impervious surfaces to the project site, the project would not substantially impair the ability for groundwater recharge. Additionally, the project would require compliance with RWQCB standards and implementation of SWPPP and BMPS. Therefore, the project would not impact groundwater supplies and impacts would be less than significant.

c) Would the project 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?

The project site currently contains a church, a vacant lot and a single-family residence. The project would introduce 34 single-family residences, associated roads, sidewalks, landscaping, and amenities. Once constructed, the project site will contain more impervious surfaces that will reduce the impacts of erosion on the project site. The project would alter the existing drainage patter to flow to the northwest and would be captured by into a proposed curb inlet. The project would include a Rtank underground storage facility to provide flow control from the project site. Therefore, erosion impact resulting from hydromodification would be less than significant.

ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?

The project site currently contains a church, a vacant lot and a single-family residence. the project would introduce 34 single-family residences, associated roads, sidewalks, landscaping, and amenities. Once constructed, the project site will contain more impervious surfaces that have the potential to increase flows coming from the project site. The project proposed 5 drainage basins to capture surface runoff from the project site that will collect into proposed storm drainage pipes. Additionally, the project would include a Rtank underground storage facility to provide flow control from the project site. The drainage basins and Rtank, the project were designed to manage flows for a 100-year 6-hour storm event (Appendix G). Therefore, with the incorporation of the drainage basins and Rtank, the impacts related to flooding on- or off-site would be less than significant.

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?

Once constructed the project would increase the surface flows compared to existing conditions. To counteract the increase in peak discharge, the project would utilize a Rtank underground storage facility to provide flow control from the project site. The drainage basins and Rtank were designed to manage flows for a 100-year 6-hour storm event (Appendix G). As concluded in Appendix G, with the incorporation of the drainage basins and Rtank, the project would be able to accommodate the peak runoff from the project site and would not exceed the capacity of current drainage systems. Additionally, as described above, the project would comply with RWQCB standards and include the implementation of SWPPP and BMPS. Impacts related to increase runoff from the project site would be less than significant.

iv) Impede or redirect flood flows?

Project implementation would alter the existing drainage pattern on the project site. The project site is not located within proximity to a flood hazard zone (FEMA 2021). Once constructed, the project site will contain more impervious surfaces that have the potential to increase flows coming from the project site. The project proposed 5 drainage basins to capture surface runoff from the project site that will collect into proposed storm drainage pipes. Additionally, the project would include a Rtank underground storage facility to provide flow control from the project site. The drainage basins and Rtank were designed to manage flows for a 100-year 6-hour storm event (Appendix G). Therefore, with the incorporation of the drainage basins and Rtank, the impacts related to flooding on- or off-site would be less than significant.

d) In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation?

The project site is approximately 6.75 miles inland from the Pacific Ocean and would not be subject to inundation by tsunami. The FEMA National Flood Hazard Layer shows that the project site is not within a flood hazard area (FEMA 2021). The project is not located in a tsunami or seiche zones. Given that the project site is not located near a large standing body of water, inundation by seiche (or standing wave) is considered negligible. The project site is generally flat with no steep slopes and does not contain slopes subject to mudflows; and therefore, potential impacts related to inundation are determined to be less than significant.

e) Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

The project is subject to the Carlsbad Management Area Water WQIP. The project is located within the Buena Vista Creek Hydrologic Area. The Carlsbad Management Area Water WQIP outlines areas of priority water quality conditions and highest priority water quality conditions (Carlsbad Watershed Management Area Responsible Agencies 2018). As determined in Appendix G, the with the inclusion of the Stormgarden Biofiltration Systems and Rtank, the project would meet the requirement of the MS4 permit for Hydromodification. Additionally, the project would be required to comply with RWQCB standards and include the implementation of SWPPP and BMPS. As such, the project would not conflict with or obstruct implementation of the Carlsbad Management Area Water WQIP or any other water quality plan. Further, the site is not located within a sustainable groundwater management plan area. Therefore, impacts relating to a conflict with a water quality control plan or sustainable groundwater management plan are determined to be less than significant.

3.11 Land Use and Planning

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XI. LAND USE AND PLANNING – Would the project:				
a) Physically divide an established community?	☐	☐	☐	☒
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?	☐	☐	☒	☐

a) Would the project physically divide an established community?

The project is located within the central portion of the City. The area surrounding the project site consists of commercial uses to the west and south, residential uses to the south and east, and institutional uses to the north. The project site is zoned as Office Professional (O-P) and Residential (R-1) and has a General Plan designation of Commercial Office (CO) and Medium Low Density (MLD). The project would rezone the project site to R-1-B, and change the land use designation to Medium Density Residential (MD), which would be consistent with the existing residential uses to the south and east. Therefore, because the project site is surrounded by existing development, no impact from the physical division of an established community would occur as a result of project implementation.

b) Would the project 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?

As described above, the project would require a General Plan Amendment of the Land Use Element and Zoning Amendment. The General Plan and Zoning Amendment does not inherently ensure consistency with the general plan. The City of Vista's General Plan contains seven elements (Circulation; Healthy Vista; Housing; Land Use & Community Identity' Noise; Public Safety, Facilities & Services; and Resources Conservation & Sustainability Element).

The project would introduce residential uses to a site that currently is designated for commercial and residential uses. The residential nature of the project would be consistent with the land use pattern of the area with other single- family land uses to the south and east. Project residents would have access to transit, bicycle and pedestrian modes of transportation with the inclusion of street improvements along the project frontage. Additionally, as concluded in this MND, all impacts related to noise, transportation, aesthetics, and public services were determined to be less than significant or less than with the incorporation of mitigation. The project would be consistent with the goals and policies within all elements of the City's General Plan.

Title 18 of the City of Vista development code regulates zoning within the city. Approval of the proposed Rezone would allow for development of the project site with the proposed residential land uses and associated amenities. Although the project would amend the land use designation to Residential, the concurrent process of amending the Zoning designation does not necessarily equate to consistency with the Zoning Ordinance. However, the project would be consistent with the General Plan's Goals and Policies and therefore would be consistent with the zoning ordinance.

Based on the considerations outlined above, the project would not conflict with an applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. Therefore, project impacts related to land use and planning are determined to be less than significant.

3.12 Mineral Resources

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	☐	☐	☐	☒
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?	☐	☐	☐	☒

a-b) ***Would the project 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? Would the project 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?***

According to the Department of Conservation Mineral Land Classification, the project area is classified as MRZ-3 (DOC 2017). The MRZ-3 Classification is defined by "areas containing known or inferred mineral occurrences of undetermined mineral resource significance." The project proposes residential uses and would not result in the loss of any known mineral resources of value to the region or residents of the state. The City's General Plan EIR does not identify any mineral resources of local importance within the City (City of Vista 2011). Therefore, the project would not contribute to the loss of any mineral resources considered of value to the region or state or mineral resource that is considered to be locally important. Therefore, no impact to mineral resources would occur.

3.13 Noise

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	☐	☒	☐	☐
b) Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐

a) ***Would the project result in 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?***

Short-Term Construction

Equipment that would be in use during construction would include, in part, graders, backhoes, rubber-tired dozers, loaders, cranes, forklifts, pavers, rollers, and air compressors.

Aggregate noise emission from proposed project construction activities, broken down by sequential phase, was predicted at two evaluation distances to the nearest existing noise-sensitive receptor: 1) from the nearest position of the construction site boundary and 2) from the geographic center of the construction site, which serves as the time-averaged location or geographic acoustical centroid of active construction equipment for the phase under study. A Microsoft Excel–based noise prediction model emulating and using reference data from the Federal Highway Administration Roadway Construction Noise Model (RCNM) (FHWA

2008) was used to estimate construction noise levels at the nearest occupied noise-sensitive land use. The resulting predicted construction noise levels from this model are displayed in Table 3.13-1.

Table 3.13-1. Predicted Construction Noise Levels per Activity Phase

Construction Phase (and Equipment Types Involved*)	8-Hour Leq at Nearest Noise-Sensitive Receptor to Construction Site Boundary (dBA)	8-Hour Leq at Nearest Noise-Sensitive Receptor to Acoustical Centroid of Site (dBA)
Demolition (concrete saw/industrial saw, dozer, excavator)	68.4	67.1
Site preparation (dozer, tractor, front end loader, backhoe)	89.0	71.0
Grading (excavator, grader, scraper, track dozer, tractor, front end loader, backhoe)	90.0	72.5
Utilities (excavator)	73.9	66.0
Streets (grader, paver)	73.2	67.8
Building construction (crane, forklift, generator, tractor, front end loader, backhoe, welder/torch)	77.4	68.8
Paving (paver, paving equipment, roller)	75.0	72.1
Architectural coating (air compressor)	70.9	58.8

Notes: L_{eq} = equivalent noise level; dBA = A-weighted decibels. *italicized equipment types are the loudest and used singularly to evaluate noise for the "nearest" assessment scenario.

As presented in Table 3.13-1, the estimated construction noise levels are predicted to be as high as 90 dBA L_{eq} over an 8-hour period at the nearest occupied property (as close as 12.5 feet away) when grading activities take place near the southeastern project boundaries. Note that these estimated noise levels at a source-to-receiver distance of 12.5 feet are conservatively high, in that they presume the noted pieces of heavy equipment would each operate, on average at this distance, for a cumulative period of four hours a day. Under the studied conditions, construction activity noise levels associated with site preparation and grading phases are expected to exceed an 8-hour L_{eq} value of 75 dBA L_{eq} and thereby exceed the City's adopted daytime threshold for construction noise exposure at an occupied property. Thus, temporary construction-related noise impacts would be considered potentially significant, and mitigation is required.

Long-Term Operational

Off-Site Traffic Noise Exposure

The proposed project would result in the creation of additional vehicle trips on local arterial roadways (i.e., Melrose Drive), which could result in increased traffic noise levels at adjacent noise-sensitive land uses. As concluded in Appendix I, the project would generate an additional 340 average daily trips adjacent to the project site.

According to the Caltrans Technical Noise Supplement to the Traffic Noise Analysis Protocol, a three-dBA change in sound is the beginning at which humans generally notice a barely perceptible change in sound, a five-dBA change is generally readily perceptible, and a 10-dBA increase is perceived by most people as a doubling of the existing noise level (Caltrans 2013). Due to the existing and proposed urban setting of the

project area, a readily perceptible change in noise (five dBA) would be the appropriate threshold to determine significant increases in traffic noise.

Potential noise effects from vehicular traffic were assessed using the Federal Highway Administration's Traffic Noise Model version 2.5 (FHWA 2004). Information used in the model included the roadway geometry, existing (year 2022), and existing plus project traffic volumes and posted traffic speeds. Noise levels were modeled at representative noise-sensitive receivers ST1 through ST4, as shown in Figure 6 The noise model results are summarized in Table 3.13-2. Based on results of the model, implementation of the proposed project would not result in readily perceptible increases in traffic noise.

Table 3.13-2. Roadway Traffic Noise Modeling Results

Modeled Receiver No.	Existing (2022) Noise Level (dBA CNEL)	Existing with Project Noise Level (dBA CNEL)	Maximum Project-Related Noise Level Increase (dB)
ST1	68.3	68.3	0.0
ST2	69.0	69.2	0.2
ST3	66.5	66.7	0.2

Source: Appendix I.
Notes: dBA = A-weighted decibel; CNEL = community noise equivalent level; dB = decibel.

Table 3.13-2 shows that at all three listed representative receivers, the addition of proposed project traffic to the roadway network would result in an increase in the CNEL of less than 3 dB, which is below the discernible level of change for the average healthy human ear. Thus, a less-than-significant impact is expected for proposed project-related off-site traffic noise increases affecting existing residences in the vicinity.

On-site Traffic Interior Noise Exposure

Aside from exposure to aviation traffic noise, current CEQA noise-related guidelines at the state level do not require an assessment of exterior-to-interior noise intrusion, environmental noise exposure to occupants of newly created project residences, or environmental noise exposure to exterior non-residential uses attributed to the development of the proposed project. Nevertheless, the City's General Plan and the California Building Code requires that interior background noise levels not exceed a CNEL of 45 dB within habitable rooms. Hence, the following predictive analysis of traffic noise exposure at the exteriors of occupied residences and outdoor living areas is provided below.

In addition to the prediction results presented in Table 3.13-2, the FHWA TNM software was also used to predict the Horizon-with-project scenario traffic noise levels at multiple on-site exterior areas, as listed in Table 3.13-3. Predicted exterior sound levels presented in Table 3.13-4 that are higher than 65 dBA CNEL indicate locations where an exterior-to-interior noise analysis should be performed for the proximate occupied residential unit.

Table 3.13-3. Future Ambient Noise Levels at Residential Facades

Modeled Receptor	Noise Level (A-weighted CNEL)	
	1st Floor	2nd Floor
M1	69.7	69.7
M2	62.3	62.4
M3	55.3	58.2
OS–1	52.5	

The prediction results from Table 3.13-3 indicate that future traffic noise levels would not exceed 70 dBA CNEL. With the 45 dBA CNEL interior background sound level limit, this means the minimum composite sound transmission class (STC) rating for the exterior shell separating the habitable interior space from the outdoor sound level should be at least 25.

Table 3.13-4 summarizes the calculated noise levels after applying the STC ratings for a set of sample occupied room facades that are anticipated to be exposed to predicted exterior noise levels greater than 60 dBA CNEL. An open window compromises the sound insulation performance of the façade wall assembly, as presented for the sample units appearing in Table 3.13-4. However, when such windows and doors are closed, all facades are anticipated to exhibit a predicted STC rating of at least 35, and thus would provide sufficient exterior-to-interior sound insulation from outdoor traffic noise to yield interior background sound levels that are less than 45 dBA CNEL and thus compliant with the City and state standards. Recall that none of the predicted exterior traffic noise levels at the studied receptor locations exceeded 70 dBA CNEL; thus, the STC rating value (for closed windows and doors) subtracted from these exterior noise values must result in interior noise levels of less than 45 dBA CNEL (e.g., 70 – 35 = 35 dBA CNEL, which is less than 45). Thus, the City's threshold of 45 dB CNEL within habitable rooms would not be exceeded and thus demonstrates expected project compliance with this standard.

Table 3.13-4. Predicted Net Sound Transmission Class of Occupied Room façade

Occupied Rolade	Predicted Net Sound Transmission Class (STC) for Scenario	
	Closed Window(s) and Door *	Open Window(s) & Closed French Door*
1st floor living room w/ porch,l ©	35	6
2nd floor living room, western façade	35	6

n/a = not applicable

* Doors are only modeled for scenarios that contain the balcony door.

On-Site Open Spaces

Shared outdoor project spaces such as "OS-1" and the Dog Park are expected to experience noise levels that are compliant with the City's General Plan Noise Element guidance of 65 dBA CNEL for "parks" and "playgrounds". For residential unit yards that may be used as outdoor spaces, and if sufficiently proximate to roadway traffic noise exposures where predicted exterior noise levels potentially exceed 65 dBA CNEL, feasible noise reduction techniques should be analyzed and incorporated to yield compliance with this standard. If exterior noise levels exceed 65 dBA CNEL, impacts would be potentially significant.

Stationary Noise Sources

The incorporation of new multi-family homes and a mix of open space uses attributed to development of the proposed project will add a variety of noise-producing electro-mechanical equipment.

Residential Unit Heating, Ventilation, and Air Conditioning Noise

For purposes of this analysis, each of the new occupied residential units would be expected to feature a split-system type air-conditioning unit, with an air-cooled refrigeration (2-ton capacity) condenser unit. Assuming each condenser unit has an SPL of 68 dBA at 3 feet based on available data from a likely manufacturer (Carrier 2012), and the units would generally be installed near the apparent "front porch" areas. Therefore, the closest existing noise-sensitive residential receptor to the west of the proposed project's eastern unit would be as close as 50 horizontal feet to the nearest of these condenser units. The predicted sound emission level from the combination of all 34 operating condenser units as received by this offsite single-family home would be 45 dBA L_{eq} and thus be compliant with the City's nighttime threshold of 50 dBA hourly L_{eq}. Under such conditions, impacts from the operation of residential air-conditioning units would be less than significant.

Conclusion

As described above, the project would exceed the City impacts related to storm term construction noise would be potentially significant because project construction would exceed the City's adopted daytime threshold for construction noise exposure at an occupied property. Implementation of Mitigation Measure **MM-NOI-1** would reduce construction noise to be within City's adopted daytime threshold for construction to reduce impacts to be less than significant.

Additionally, exposure to traffic noise on the project site has potential to exceed City's exterior noise expectation of 65 dBA CNEL, however, with the implementation of mitigation measure **MM-NOI-2**, the resultant exterior noise levels would meet the City's exterior noise standard and impacts would be less than significant.

Mitigation Measures

The following mitigation measures shall be implemented as part of project implementation:

MM-NOI-1 Construction Noise Reduction. The following recommendations from Appendix I shall be implemented by the construction contractor to reduce construction noise onsite, to the satisfaction of the City of Vista Community Development Department, to ensure that project construction would not exceed the City's adopted daytime threshold for construction noise exposure of 75 dBA for an eight-hour period:

- Administrative controls (e.g., prohibit usage of equipment type[s] within certain distances).
- Engineering controls (upgrade noise controls, such as install better engine exhaust mufflers).
- Install noise abatement on the site boundary fencing (or within, as practical and appropriate) in the form of sound blankets or comparable temporary barriers (e.g., stacked sheets of plywood supported with framing) to occlude construction noise

emission between the site (or specific equipment operation as the situation may define) and offsite noise-sensitive receptor(s) of concern.

- At the outset of a project construction activity, an unattended noise level monitor shall be deployed onsite to measure and document that noise exposure levels attributed to project construction activity at adjacent offsite sensitive receptors are in conformance with the 75 dBA 8-hour L_{eq} threshold.

MM-NOI-2 Traffic Noise Reduction. Where exterior noise levels are predicted to exceed 65 dBA CNEL at useable open space areas, the contractor should install noise-reducing features external to or upon the useable open space areas (or within, as practical and appropriate) in the form of sound walls, fencing, landscape berms, or similarly performing barriers of at least 6 feet in height to occlude incoming roadway traffic noise, to the satisfaction of the City of Vista Community Development Department, to ensure that there is no exceedance of the 65 dBA CNEL threshold.

b) Would the project result in generation of excessive groundborne vibration or groundborne noise levels?

Construction activities may expose persons to excessive groundborne vibration, causing a potentially significant impact. Information from Caltrans indicates that continuous vibrations with a PPV of approximately 0.2 ips is considered "annoying." For context, heavier pieces of construction equipment, such as a bulldozer that may be expected on the project site, have peak particle velocities of approximately 0.089 ips or less at a reference distance of 25 feet (DOT 2006).

Groundborne vibration attenuates rapidly—even over short distances. And when groundborne vibration encounters a building foundation, a coupling loss occurs depending on its mass and design. The foundation of this residential structure would, per the coupling loss, cause a reduction in the vibration as received by the building occupant. Hence, instead of the 96 VdB received at the interface of the structure foundation and the surrounding soil/strata, the occupant would experience 91 VdB (i.e., 5 VdB less) that equates to a PPV level of 0.13 ips that is less than the Caltrans guidance threshold for annoyance. Therefore, vibration-induced annoyance to occupants of nearby existing homes would be considered less than significant.

Once operational, the proposed project would not be expected to feature major producers of groundborne vibration. Anticipated mechanical systems like heating, ventilation, and air-conditioning units are designed and manufactured to feature rotating (fans, motors) and reciprocating (compressors) components that are well-balanced with isolated vibration within or external to the equipment casings. On this basis, vibration due to proposed project operation should be less than significant.

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 or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

There are no private airstrips within the vicinity of the project site. The closest airport to the proposed project site is the McClellan-Palomar Airport, approximately 5 miles southwest of the site and would therefore not expose people residing or working in the project area to excessive noise levels. Impacts would be less than significant.

3.14 Population and Housing

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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)?	☐	☐	☒	☐
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☒	☐

a) Would the project 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)?

The project proposes the development of 34 single-family residences. The project site currently has a land use designation of Commercial Office (APNs 166-280-60-00 and 166-280-61-00) and Medium Low Density Residential (APN 166-280-18-00) in the City's General Plan and therefore only a portion of the property was anticipated to include residential development in the planning documents. The project would include a General Plan Amendment to change the land use designation from Commercial Office (CO) and Medium Low Density Residential (MLD) to Medium Density Residential (MD). and Zoning Amendment to changing the zoning of the project site from Office Professional (O-P) and Single Family (R-1) to Single Family Residential (R-1-B).

The City of Vista projects that by 2030, 38,779 residents will live in Medium Density Residential dwellings, assuming 3.26 persons per household (City of Vista 2012). Using this assumption, the Project would cause a population increase of approximately 111 residents. Although not all residents of the development would be new to the City of Vista, and a portion of the site has been designated as residential in the General Plan, residential development on the project site would still result in unplanned growth within the City. The residential land use for the project site was not accounted for in the City's General Plan. While the project would create an unplanned population increase, SANDAG projects that the population of the City of Vista would grow by 4,860 residents between 2020 and 2030; the addition of 111 residents within a year would be within the projected addition of 486 residents a year between 2020 and 2030 (SANDAG 2011) Therefore, the population growth from the project would not be considered substantial given the expected growth for the area. Additionally, the project applicant would be required to pay development impact fees to the City. The project site is surrounded by existing development and there is no need for the extension or construction of roads or the need for expansion of utilities and therefore no indirect impact would occur.

While only part of the project site is designated for residential uses, the project would introduce an unplanned population to a portion of the project site. However, the introduction of 111 people would not be considered substantial unexpected population increase and the project would not induce indirect population growth, therefore impacts would be less than significant.

b) Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

The project site currently contains an existing church, a vacant lot and a single-family residence. Displacement of people would be limited to the residences in the single- family residence on the project site and would not cause the need for construction of replacement housing. Additionally, the proposed project would introduce 34 new single- family residences to the site. Impacts related to the displacement of people or housing would be less than significant.

3.15 Public Services

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	☐	☐	☒	☐
Police protection?	☐	☐	☒	☐
Schools?	☐	☐	☒	☐
Parks?	☐	☐	☒	☐
Other public facilities?	☐	☐	☒	☐

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?

The project site is currently served by the Vista Fire Department, which has six fire stations. The closest fire station to the site is Vista Fire Station 1, located at 175 N Melrose Drive, approximately 0.6 miles from the site (City of Vista 2022a). The project would introduce 34 single-family residences to the project site. As described above, only a portion of the project site was designated as residential, while the other portion was designated for commercial uses, therefore only some residents were accounted for in planning. The project would introduce approximately 111 people to the project site. Although not all residents of the project are not expected be new or additional to the City, the estimated additional numbers of residents at

the project site would increase the need for fire protection services related to routine fire and emergency medical call. The project would generate emergency calls, primarily medical, proportionally with its population. Additionally, the project would be required to comply with VFD and California Fire Code requirements. As described in section 3.20, the project would not substantially increase the fire risk at the project site.

While the introduction of new residents of the project site would increase the number of people and therefore the number of calls to the project site, the project applicant would be required to pay Fire Protection Development impact fees. With the payment of development fees, project impacts on fire protection services within the City would be less than significant.

Police protection?

Police services within the City of Vista are provided through a contract with the San Diego County Sheriff's Department. The Vista Station is located at 325 S Melrose Drive, approximately 0.4 miles away from the project site. Similar to fire protection resources, the introduction of 111 people to the project site would increase the demand for police protection services. Implementation of the project would be expected to increase the frequency of emergency and non-emergency calls to the Sherriff's Department. While the project would increase call volume, the Vista Sheriff's Station has over 150 staff members (sworn, professional and volunteer) that provides services including general patrol, investigations, narcotics and gang investigations, crime prevention, juvenile intervention, community policing and administrative services (City of Vista 2022b; San Diego County Sheriff's Department 2022) Service ratios and response times are anticipated to remain adequate with implementation of the project. Therefore, while the project would place a slight increased demand on police protection services, it is not anticipated that the project would result in the need for construction or expansion of existing police facilities and impacts to police response resulting from the project would be less than significant.

Schools?

The project site is served by the Vista Unified School District. The VUSD has a total of 29 schools serving over 19,000 students from preschool to 12th grade (VUSD 2022a). The project site is within Breeze Hill Elementary School, Madison Middle School and Rancho Buena Vista Highschool boundaries (VUSD 2022b). The project would introduce 111 new people to the project site, however, not all people being introduced to the site would be students. Senate Bill (SB) 50, or the Leroy F. Greene School Facilities Act of 1998 states that payment of school fees is required for new residential development, and payment of these fees is considered full and complete mitigation of any school impacts (Government Code section 65996). The project would be required to pay development fees to the VUSD, which would mitigate impacts related to an increase in students generated from project implementation. While the project would increase the number of students feeding VUSD, this would not represent a substantial increase that would require the construction of new schools. Therefore, impacts related to schools would be less than significant.

Parks?

As of 2011, the city has 764.4 acres of park and recreation space (City of Vista 2011a). The Vista General Plan Policy 9.2 creates a goal for the city to provide 3 acres of community parks per 1,000 residents and 2 acres of neighborhood parks. As of 2021, the population was 99,536, and the city was still meeting this goal. The city currently provides 7.68 acres of parkland per 1,000 residences. The addition of approximately

111 new residents to the area would not substantially increase the use of existing parks and would still comply with the City's policy for minimum park requirements. Additionally, the project applicant would be required to pay development impact fees, including a park fee as part of project implementation. Impacts related to increase of use of existing neighborhood and regional parks would be less than significant.

Other public facilities?

As described above, the project includes the development of 34 single-family residences that would introduce 111 people to the project site. As described in Section 3.14, this increase in population was determined to be less than significant. No other public facilities were identified as being impacted by the proposed project, impacts would be less than significant.

3.16 Recreation

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	☐	☐	☒	☐
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☒	☐

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?

The project applicant proposes the development of 34 single-family residences, internal circulation, and recreational amenities including a tot lot and dog park. As described in Section 3.14, the project would introduce approximately 111 people to the project site. The closest neighborhood park to project is Breeze Hill Park, located 0.15 miles from the project site. The Vista General Plan Policy 9.2 creates a goal for the city to provide 3 acres of community parks per 1,000 residents and 2 acres of neighborhood parks. As discussed above, the Vista General Plan Policy 9.2 creates a goal for the city to provide 3 acres of community parks per 1,000 residents and 2 acres of neighborhood parks. As of 2011, the city has 764.4 acres of park and recreation space (City of Vista 2011a). As of 2021, the population was 99,536, and the city was still meeting this goal. The city currently provides 7.68 acres of parkland per 1,000 residences. The addition of approximately 111 new residents to the area would not substantially increase the use of existing parks and would still comply with the City's policy for minimum park requirements. As described above, the project applicant would be required to pay development impact fees, including park fees. Impacts related to increase of use of existing neighborhood and regional parks would be less than significant.

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

The project would include recreational amenities including a dog park and tot lot. These recreational amenities are analyzed as part of this MND. As concluded in the MND, all impacts associated with this project would be less than significant with mitigation incorporated. Therefore, impacts related to the construction of recreational facilities would be less than significant.

3.17 Transportation

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	☐	☐	☒	☐
b) Conflict or be 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)?	☐	☐	☒	☐
d) Result in inadequate emergency access?	☐	☐	☒	☐

a) Would the project conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

The project includes the redevelopment of an existing church, a vacant lot and single-family residence into 34 single-family residences and associated amenities. The project would include a private roadway, and street improvements along the project frontage. The closest Sprinter (commuter train) station to the project site is located approximately 600 feet from the project entrance along South Melrose Drive. Bike lanes are provided along South Melrose Drive adjacent to the project site. The City of Vista General Plan Circulation Element outlines goals and policies for circulation within the City. Goals and policies include topics such as maintaining Level of Service (LOS), multi-modal transportation options, transportation safety, and mobility improvements. The City of Vista Development Code Title 16 sets forth standards for development, including that of roads and driveways within the City. The applicant would be required to pay transportation related development fees to help with long term transportation projects.

Appendix J-1 analyzed intersections and street segments in the study areas surrounding the project site. All intersections and street segments were determined to operate at LOS D or better during peak hour conditions and the project would not have any substantial effects on the study area. Additionally, as described in further detail below, the project would be designed to avoid hazards resulting from project

implementation. Future project residents will have access to multi-modal transportation given the location of the project site. As described above, the project site is in proximity to an existing transit stop and Class II Bike Lanes. While sidewalks are currently not provided on the south side of Matagual Drive along the project frontage, the project would extend the existing sidewalk along South Melrose Drive along the project frontage on Matagual Drive to allow pedestrian ingress and egress from the project site.

As the project would maintain operation of intersections and street segments, improve sidewalks along the project frontage, provide access to existing multi-modal forms of transportation, and pay applicable development fees, the project would be consistent with the City's General Plan. Additionally, the project would comply with all applicable driveway, street, and access standards within the City's Development Code. Therefore, the project would not conflict with any transportation plans, programs, or policies, and impacts would be less than significant.

b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

As discussed in Appendix J-2, the project would generate 340 ADT as a result of project implementation. Per the City of Vista's Transportation Impact Analysis Guideline, VMT analysis for CEQA is required if a project equals or exceeds 1000 ADT if the project is consistent with the General Plan. If the project is not consistent with the General Plan, then VMT analysis is required for projects that generate more that 500 ADTR. Given that the project would generate less than 500 ADT, VMT analysis is not required. Therefore, due to the small nature of the project, the project screens out of the need for VMT analysis and impacts would be less than significant.

c) Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

The project is located in an area surrounded by development and is bound by South Melrose Drive and Matagual Drive to the east and north. Internal roadways on the project site allows for two-way flow of vehicle traffic. The internal circulation for the project would not include any hazardous design features or incompatible uses. The project would include connections to existing roadways within the vicinity of the project site, and access to regional arterial and highway networks. The project would avoid ingress/ egress points along S Melrose Drive, which is a 6-lane urban major roadway adjacent to the project site. As determined in Appendix J-1, the project driveway is located an adequate distance from South Melrose Drive to operate well. Additionally, all uses on-site, including vehicle, pedestrian and bicycle circulation would be typical of a residential land use, and no incompatible uses, or equipment is proposed. The project would not increase hazards due to a geometric design feature or incompatible use, impacts would be less than significant.

d) Would the project result in inadequate emergency access?

The project would provide access to the site via Matagual Drive on the northern boundary of the project site. As determined in Appendix J-1, the project driveway is located an adequate distance from South Melrose Drive to operate well and no access is proposed via South Melrose Drive, which is desirable. The project would have a single private street through the project site to the single-family residences. The project roadway and access would be designed to meet the design requirements codified in the California Fire Code. With compliance with California Fire Code requirements, the project would provide adequate emergency access to the site, impacts would be less than significant.

3.18 Tribal Cultural Resources

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XVIII. TRIBAL CULTURAL RESOURCES				
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:				
a) 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	☐	☐	☐	☒
b) 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.	☐	☒	☐	☐

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:

a) 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)?

Dudek conducted a California Historical Resources Information Systems (CHRIS) records search for the Project area and a one-mile buffer at the South Coastal Information Center (SCIC) at San Diego State University on August 1, 2022. The records search results indicate that 53 previous cultural resources studies have been conducted within one mile of the Project area. Of the 53 previous studies, two studies intersect the Project area. None of the previous cultural resource studies identified any resources within the Project area.

As discussed under Section 3.4, Cultural Resources, the project site was evaluated in accordance with Section 15064.5 (a)(2)-(3) of the CEQA Guidelines and using the criteria outlined in Section 5024.1 of the California Public Resources Code. The buildings on the Project site do not appear to be eligible for listing in the NRHP, CRHR, or City of Vista Register of Designated Historic Resources due to a lack of significance. As such, no buildings on the Project site appear to be historical resources under CEQA. Further, no potential

indirect impacts to historical resources were identified as the proposed Project has no impact to the built environment beyond the Project site.

b) ***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 Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.***

The Phase I cultural resources inventory of the Project indicates that there is moderate sensitivity for identifying intact subsurface archaeological deposits during Project implementation. The SCIC records search and the pedestrian survey did not identify any cultural resources within the Project area. However, there are two historic-age structures (e.g., church and single-family property) located in the Project area. Due to the presence of historic-age structures in the Project area, and because alluvial soils, which has potential to contain subsurface cultural materials, are present throughout the Project area, there is moderate potential for subsurface resources. As disclosed in Section 3.5, cultural resources monitoring with a qualified archaeologist and Luiseño Native American monitor is recommended during initial ground-disturbing activities within the Project area to assess the extent of previous disturbances and the potential for buried archaeological resources. Monitoring can be reduced or terminated should no discoveries be made or if documentation is provided which demonstrates that ground-disturbing activities will be occurring in sediments with no potential for cultural resources.

A Native American Heritage Commission (NAHC) search of the Sacred Lands File (SLF) was requested on July 22, 2022, for the Project area. The SLF consists of a database of known Native American resources. These resources may not be included in the SCIC database. The NAHC replied on September 6, 2022 with positive results. The NAHC additionally provided a list of Native American tribes and individuals/ organizations with traditional geographic associations that might have knowledge of cultural resources in this area. Outreach letters were mailed on September 14, 2022. A response was received by the Pechanga Band of Mission Indians on September 9, 2022, stating that a Traditional Cultural Property is located within five miles of the Project area. Additionally, two Ancestral Placenames are located within a mile of the Project area, and due to the proximity of Buena Vista Creek, two historic-era homesteads, and a large cultural-archaeological site, there is a high possibility of recovering sensitive subsurface resources during ground-disturbing activities for the Project. The NAHC correspondence is included in Appendix B of Appendix D.

Dudek archaeologist David Faith conducted an intensive level pedestrian survey of the proposed Project area on August 4, 2022. All survey work was conducted employing standard archaeological procedures and techniques consistent with the Secretary of the Interior Standards. No artifacts or features were identified during this survey.

The SCIC records search and the pedestrian survey did not identify any cultural resources within the Project area, however, because alluvial soils are present throughout the Project area, which has potential to contain subsurface cultural materials, there is moderate potential for subsurface resources. Cultural resources monitoring with a qualified archaeologist and Luiseño Native American monitor is recommended during initial ground-disturbing activities within the Project area to assess the extent of previous disturbances and the potential for buried archaeological resources. Monitoring can be reduced or terminated should no discoveries be made or if documentation is provided which demonstrates that ground-disturbing activities will be occurring in sediments with no potential for cultural resources. Impacts to tribal cultural resources would be less than significant with the incorporation of **MM-CUL-1 through MM-CUL-6** (Refer to Section 3.5, Cultural Resources).

3.19 Utilities and Service Systems

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	☐	☐	☒	☐
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?	☐	☐	☒	☐
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?	☐	☐	☒	☐

a) ***Would the project 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?***

The project would include the development of 34 single-family residences and associated offsite improvements within a developed area of Vista. The project site currently contains an existing church, a parking lot associated with the church, a vacant lot and a single-family residence. Project impacts on each utility is described in further detail below.

Water

The project site is within the Vista Irrigation District (VID) service area. VID services the City of Vista as well as portions of San Marcos, Escondido, Oceanside and unincorporated areas of San Diego County (VID 2022b). The project site is surrounded by existing development and therefore the project would be able to

connect to existing water lines along Matagual Drive near the project entrance Additionally, the project would include the abandonment of the existing waterline within Las Palmas Drive and reconnection of water services for the three residences on Las Palmas. These offsite improvements are analyzed as part of this MND. The Vista Irrigation District 2020 Urban Water Management Plan (UWMP) analyzes the water demand and water supply for 2020 to 2045. The project would require a change in land use compared to existing conditions, however the increase in water demand is minimal. As described in further detail below, the UWMP determined that VID would be able to adequately supply water for VID until 2045. In conclusion, the project would be able to connect to existing pipelines, the increase in water usage from the project is expected to be met by VID Water during normal, and dry years, and therefore the project would not require the construction of new facilities to supply water to the area and impacts would be less than significant.

Wastewater Treatment

The City's Wastewater Maintenance Division is responsible for operation and maintenance of the Buena Vista Sanitation District (BVSD) sewer system (SVSD 2022). The project would connect to existing sewer lines along Matagual Drive within the BVSD. The project applicant would be required to obtain a will serve letter from the BVSD and the payment of development fees paid to the BVSD (City of Vista 2020) The payment of development fees and will serve letter would ensure that BVSD would be able to adequately serve the project site and therefore impacts to wastewater facilities would be less than significant.

Stormwater Drainages

As discussed in Section 3.10, Hydrology and Water Quality, once constructed the project would increase the surface flows compared to existing conditions. To counteract the increase in peak discharge, the project would utilize a Rtank underground storage facility to provide flow control from the project site. The project storm drain system would connect to the existing storm drain main within the intersection of Melrose and Matagual. Additionally, the project would install a new storm drain catch basin on Matagual near the intersection of Matagual Drive and S Melrose Drive. Impacts of these offsite improvements are analyzed as part of the project within this MND and are less than significant. As concluded in Appendix G, with the incorporation of the drainage basins and Rtank, the project would be able to accommodate the peak runoff from the project site and would not exceed the capacity of current drainage systems. Project implementation would not result in the need to create new stormwater facilities, and therefore impacts would be less than significant.

Electric Power

As discussed in Section 3.6, Energy, the project would consume approximately 314,566 kWh per year. The residential electricity demand in 2020 was 7,387,046,267 kWh (7,387 gigawatt-hours) for San Diego County (CEC 2020). Electricity use during project construction would be temporary and negligible. As such, the project would have a negligible impact on demand for San Diego County and SDG&E. The project would include the undergrounding of existing powerlines along the project boundary along Matagual Drive, impacts of these offsite improvements are analyzed as part of the project within this MND and have been determined to be less than significant. Given that the project would not significantly increase demand for electricity and would not require the expansion of or construction of electric power facilities, therefore impacts would be less than significant.

Natural gas

As discussed in Section 3.6, Energy, natural gas is not anticipated to be required during construction of the project, and the project operation is estimated to consume approximately 733,770 kilo-British thermal units per year. For context, the residential natural gas consumption in 2020 was 302,849,797 kilo-British thermal units for San Diego County (CEC 2020). As such, the project would have a negligible impact on demand for City of Vista and SDG&E. The project would not significantly increase demand for natural gas and would not require the expansion of or construction of natural gas facilities, therefore impacts would be less than significant.

Telecommunication facilities

The project site is currently served by various telecommunication service distributors. Communications systems for telephones, computers, and cable television are serviced by utility providers such as AT&T, Cox, Spectrum and other independent cable companies. The project would include the undergrounding of existing communications along the project boundary along Matagual Drive, impacts of these offsite improvements are analyzed as part of the project within this MND and have been determined to be less than significant. While the project would introduce additional demand for telecommunication services as it would introduce 34 new single-family residences, no additional infrastructure improvements are proposed beyond the undergrounding of the communication lines. Due to the existing infrastructure served in the surrounding project area, the proposed project would not result in impacts associated with the construction of telecommunications, and impacts are determined to be less than significant.

b) Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

The project site is within the Vista Irrigation District (VID) service area. The Vista Irrigation District 2020 Urban Water Management Plan (UWMP) analyzes the water demand and water supply for 2020 to 2045. The 2020 UWMP analysis is based off of projected growth rates from the SANDAG Series 14 Regional Growth Forecast which analyzes planned population and employment growth for the region. Total potable water use in 2020 was estimated to be 16,416 million gallons (MG) (7,614 million gallons for single family use) and is projected to increase to 21,728 MG (10,083 MG of single family) by 2045. The projected water supplies for the district are expected to match the projected demand for a normal, dry, and multiple dry year water years (VID 2020). As described in Section 3.14, Population and Housing, SANDAG projects that the population of the City of Vista would grow by 486 residents per year, and the 111 residents that would be within the projected growth for the City of Vista (SANDAG 2011).

The project would include the replacement of an existing church, and a single-family residence with 34 single-family residences. The project site is surrounded by existing development and therefore the project would be able to connect to existing water lines. Water use during construction is expected to be temporary and minimal. Project operation would increase the number of single-family residences on the site from 1 to 34. While this would increase the water demand on site, the project would be required to comply with current Building Code, all buildings would be equipped with fire sprinklers and water conservation features such as water efficient faucets and shower heads and high-performance toilets.

In conclusion, the project would be able to connect to existing pipelines, the increase in water usage from the project is expected to be met by VID Water during normal, and dry years, and therefore the project

would not require the construction of new facilities to supply water to the area and impacts would be less than significant.

c) Would the project 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?

As described above, the Buena Vista Sanitation District (BVSD) sewer system serves the project area. The project would connect to existing sewer lines within the BVSD. The project applicant would be required to obtain a will serve letter from the BVSD. The will serve letter would ensure that BVSD would be able to adequately serve the project site and therefore impacts to wastewater facilities would be less than significant.

d) Would the project 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?

Construction of the project would result in the generation of solid waste such as scrap lumber, concrete, residual wastes, packing materials, plastics, and demolition material from the demolition of the existing church and single-family residence. Required by Municipal Code Section 13.17.020, the applicant would be required to submit a Waste Management Plan for the construction and demolition waste generated by the project (City of Vista 2022c).

Operation of the project would represent an increase in intensity of uses and generation of solid waste on the project site compared to existing conditions. Solid waste generated by the project would be serviced by EDCO, and solid waste would then be transferred to Sycamore Landfill. According to CalRecycle, the facility has a daily permitted capacity of 5,000 tons per day for solid waste. As of December 2016, the remaining capacity of Sycamore Sanitary Landfill is 113,972,673 cubic yards, with an anticipated closure date of 2042. Further, four other landfills in the County accept municipal solid waste, including Borrego Landfill, Miramar Landfill, Otay Landfill, and Romona Landfill. The anticipated operational solid waste generation from the project was estimated using CalRecycle's Estimated Solid Waste Generation Rates (CalRecycle 2019). It is estimated that the project (34 units) would generate approximately 415.82 pounds of solid waste per day (12.23 pounds per household). This does not consider any waste diversion through recycling. According to CalRecycle, the City of Vista has a disposal rate of 5.3 pounds per person per day. The most recent data from CalRecycle identifies the annual per capita disposal rate is 4.9 pounds per person per day (CalRecycle 2020).

The project would be required to comply with applicable state and local regulations related to solid waste, waste diversion and recycling at the time of development. Implementation of the project is not expected to 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, and impacts related to solid waste is determined to be less than significant.

e) Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

As described above, the project would be required to comply with all federal, state, and local statues and regulations related to solid waste, diversion of waste, and recycling. All solid waste facilities, including

landfills, require solid waste facility permits to operate. In San Diego County, Public Resources Code (Sections 44001-44018) and California Code of Regulations Title 27, Division 2, Subdivision 1, Chapter 4 (Section 21440 et seq.) authorizes the County Department of Environmental Health, Local Enforcement Agency to issue solid waste facility permits. Sycamore Sanitary Landfill is a permitted facility and EDCO is a licensed hauler. For these reasons, and the reasons stated above, impacts related to solid waste as a result of project implementation would be less than significant.

3.20 Wildfire

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	☐	☐	☒	☐

a) Would the project substantially impair an adopted emergency response plan or emergency evacuation plan?

As described in Section 3.9, Hazards and Hazardous Materials, the City does not have an adopted emergency response plan or emergency evacuation plan, however, the City is a participating jurisdiction in San Diego County Operational Area Emergency Operations Plan which provides a planned response to disasters within the operational area (County of San Diego 2022). The project would conform with the standards set forth in the Operation Area Emergency Operations Plan. Additionally, as required under the California Fire Code, the project would be required to present development plans which afford fire and emergency responders suitable fire access roads dimensions and surfaces (Chapter 5, §503.1 through §503.4 of the California Fire Code), an adequate number of emergency rated entrances to the community (Appendix D, Sedction D106 of the California Fire Code). The proposed points of entry and private driveways

will be reviewed by VFD and would be required to meet the qualifications for emergency access to and from the project site.

Implementation of the project is not expected to impact any roadway or staging areas that are identified in any emergency planning documents and would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan and impacts would less than significant.

b) Due to slope, prevailing winds, and other factors, would the project exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

The project site is located in a heavily urbanized area and is not within a high fire hazard severity zone (HFHSZ) (CALFIRE 2022). The project site is located in the center of the City of Vista, which is heavily urbanized. The San Diego region is susceptible to droughts, and prevailing winds, all which increase the risk of wildfires but due to the heavily developed nature of the project site and the surrounding area, the wildfire risk at the site is considered low. Additionally, the project components would be built to the most recent fire code standards. Impacts would less than significant.

c) Would the project 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?

As described above, the project site is located within a heavily urbanized area and represents a low wildfire risk. The project would redevelop the project site to include 34 new homes, an internal roadway, amenities and offsite improvements. Offsite improvements would include the connection to existing water and sewer lines and the undergrounding of existing powerlines and communication lines. The undergrounding of the existing power and communication lines would reduce the fire risk in the area by removing a potential source of ignition and potential source of fuel. Maintenance of associated infrastructure surrounding the site would be similar to maintenance of the surrounding area. Additionally, as described above, the project is located within a highly developed area with low fire risk. The project would not exacerbate fire risk due to the introduction of new infrastructure or require maintenance of infrastructure that would exacerbate fire risk and impacts would be less than significant.

d) Would the project 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?

The project would introduce 34 new homes to the project site. The project site is generally flat and does not contain steep slopes. The project site is surrounded by existing development with low fire risk. As described in Section 3.7, Geology and Soils, no evidence of landslide or slope instabilities were at the project site. and no landslides were mapped in the general vicinity of the project site. Additionally, as described in Section 3.10, Hydrology, drainage changes from the project site would not result in flooding on the project site with the inclusion of onsite drainages and a Rtank storage tank. Therefore, the project would not expose people or structures to significant risk of flooding or landslides and impacts would be less than significant.

3.21 Mandatory Findings of Significance

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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 which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐

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?***

As described in Section 3.4, Biological Resources, the project site consists of non-native grassland and urban/developed area, neither of which are considered a sensitive vegetation community. No special-status plant or wildlife species were detected within the study area during the general biological survey. Furthermore, No federally or state-listed as endangered plant or wildlife species have potential to occur in the study area and all non-listed special-status species were determined to either have low potential or were not expected to occur within the study area. As concluded in Section 3.4, the project would result in less than significant impacts related to biological resources.

Additionally, as discussed in Section 3.5, Cultural Resources, and Section 3.18, Tribal Cultural Resources, there is potential for unanticipated discovery of Cultural or Tribal Cultural Resources. Impacts to

archaeological and tribal cultural resources would be less than significant with the incorporation of **MM-CUL-1 through MM-CUL-5** (Refer to Section 3.5, Cultural 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.)

As addressed throughout this document, the project would have either no impact, a less-than-significant impact, or a less-than-significant impact with mitigation incorporated with respect to all environmental impact areas. Cumulative impacts of several resource areas have been addressed in individual resource sections, including Section 3.3 Air Quality, and Section 3.8, Greenhouse Gas Emissions, and concluded that cumulative impacts would be less than significant.

Given the nature of the project, potential cumulative impacts could occur during the temporary construction work if other nearby projects occur in the same timeframe. However, given the small scale of the proposed project, the potential for the project to contribute to a cumulative impact when combined with other past, present, and reasonably foreseeable projects is unlikely. Additionally, as described under Section 3.17, project operation would generate approximately 340 ADT during operations, and in turn, would generate minimal criteria air pollutant emissions, greenhouse gas emissions, and noise. In many instances site-specific conditions and features on the project site would not combine to create cumulative impacts with other projects occurring elsewhere in the City. Therefore, the project would not have the potential to contribute to an existing cumulative impact.

Moreover, no other resource area analyzed as part of this MND, would substantially increase when construction or operation of the proposed project is considered in combination with cumulative projects identified in the vicinity. Therefore, operational impacts associated with these combined projects would be negligible. Furthermore, the proposed project, as with potential cumulative projects, would incorporate mitigation measures to reduce impacts and would be required to comply with applicable City and state plans and policies.

Other resource areas including Aesthetics; Agricultural and Forestry Resources; Biological Resources, Energy; Hazards and Hazardous Materials; Hydrology and Water Quality; Land Use and Planning; Mineral Resources; Population and Housing; Public Services; Recreation; Transportation; Utilities and Services Systems; and Wildfire, were determined to have a less than significant or no impact relative to existing conditions; thus, the project would not contribute to cumulative impacts related to these environmental topics. Other issue areas (Cultural Resources, Geology and Soils, and Tribal Cultural Resources) are, by their nature, project- and/or site-specific, and impacts at one location do not add to impacts at other locations or create additive impacts.

For all resource areas analyzed, project impacts would be reduced to less-than-significant or less- than significant with mitigation included levels, which would, in turn, reduce the potential for these impacts to be considered an additive to an existing cumulative impact. For these reasons, impacts would less than significant.

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

As evaluated throughout this document, with the incorporation of mitigation, potential environmental impacts associated with the project would be reduced to less-than-significant levels. Therefore, with mitigation incorporated, the project would not directly or indirectly cause substantial adverse effects on human beings, and impacts would be less than significant.

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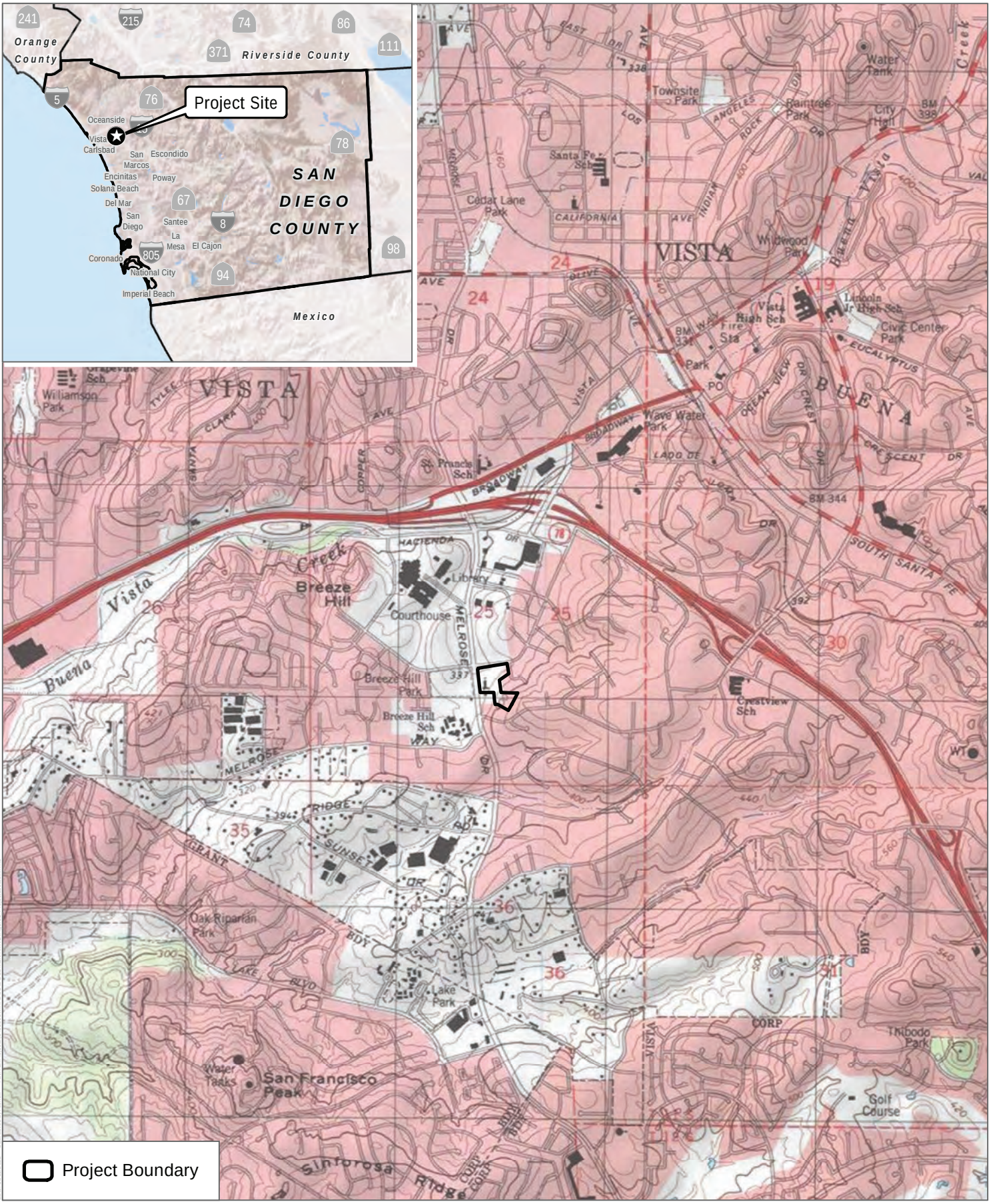

SOURCE: USGS 7.5-Minute Series San Luis Rey Quadrangle

DUDEK

0 1,000 2,000 Feet

FIGURE 1

Project Location

Vista Melrose

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SITE PLAN LANDSCAPE KEY

1. PARKWAY PLANTING (LOW, DROUGHT TOLERANT GROUNDCOVER)
2. SIDEWALK
3. ENTRY DRIVE
4. HABITAT AND HERITAGE GARDEN
5. 40' DIA PLAY AREA WITH STRUCTURE AND LOW SEAT WALLS/ RETAINING WALLS. PLAY AREA TO BE ACCESSIBLE WITH ENTRY RAMP, FIBAR SURFACING, AND ACCESSIBLE EQUIPMENT (per 11b-1008 of the 2019 CBC)
6. SHORT TREE BUFFER
7. RECREATION LAWN
8. 20'-0" WIDE SEWER EASEMENT, UNOBSTRUCTED. PATH DOUBLES AS ALL-WEATHER 6' WIDE ACCESS ROAD TO MANHOLE.
9. SEATING AREA WITH ACCESSIBLE SEATING (per 11-b division 9 of the 2019 CBC)
10. CONCRETE WALKWAY
11. LAWN AND DOG RUN OVER UNDERGROUND WATER CISTERN

LANDSCAPE CALCULATIONS

SEE COVER SHEET FOR SITE CALCULATIONS.
DUPLICATED BELOW FOR REFERENCE

SITE DATA AREA (SQ. FT.)			COVERAGE %	DWELLING	UNITS	COMMON OPEN SPACE	
LOT:	227,752		100%	2 BDRM	-	PROVIDED	REQUIRED
BLDG:	47,940		21%	3 BDRM	-	13,082 SF	6,800 SF
PARKING/PVMT:	72,436		32%	4 BDRM	17	PRIVATE OPEN SPACE	
LANDSCAPE:	107,376		47%	5 BDRM	17	PROVIDED	REQUIRED
				TOTAL UNITS	34	18,700 SF	6,800 SF
PARKING		ORD. REQ.	136	DRIVEWAY (SIZE & SLOPE)		SETBACKS	
GARAGE	68	LOADING	-	REC. VEH. STORAGE SPACES	1 WAY 12' MIN.	FRONT 10'/20'	REAR 10'
GUEST	68	HANDICAP	-		2 WAY 24' MIN.	L. SIDE 5'	SPECIAL N/A
OPEN	35	TOTAL	171	N/A	SLOPE VARIES	R. SIDE 5'	ACCES. BLDG N/A

TREE LEGEND

SYMBOL	SPECIES
	EVERGREEN STREET TREE GEIJERA PARVIFLORA / AUSTRALIAN WILLOW
	EVERGREEN ACCENT TREE RHUS LANCEA / AFRICAN SUMAC
	DECIDUOUS FLOWERING TREE CHILOPSIS LINEARIS / DESERT WILLOW

SEWER NOTES:
PROVIDE ROOT BARRIER WHERE TREES ARE WITHIN 10' OF SEWER EASEMENT. TREES SELECTED DO NOT HAVE INVASIVE ROOT SYSTEMS. NO OBSTRUCTIONS (TREES, SHRUBS, OR FENCES) TO OCCUR IN PUBLIC SEWER EASEMENT

0' 40' 80' 120' 160'
SCALE 1" = 40'
NORTH

SOURCE: RRM Design Group 2023

DUDEK

FIGURE 2
Project Site
Vista Melrose

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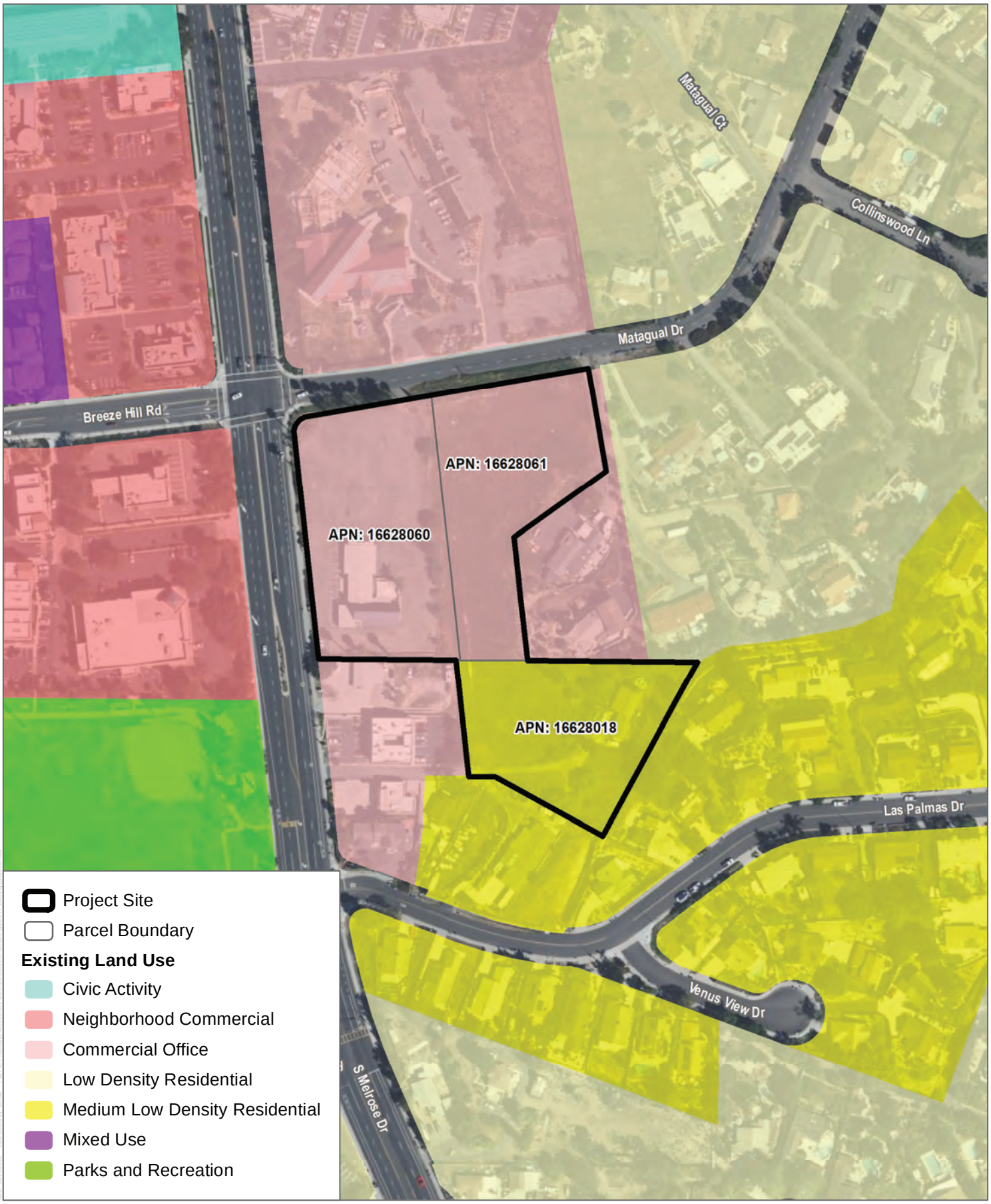

SOURCE: Bing Imagery 2021, City of Vista 2022, Open Street Map

DUDEK

0 85 170 Feet

FIGURE 3-A

Existing Land Use

Vista Melrose

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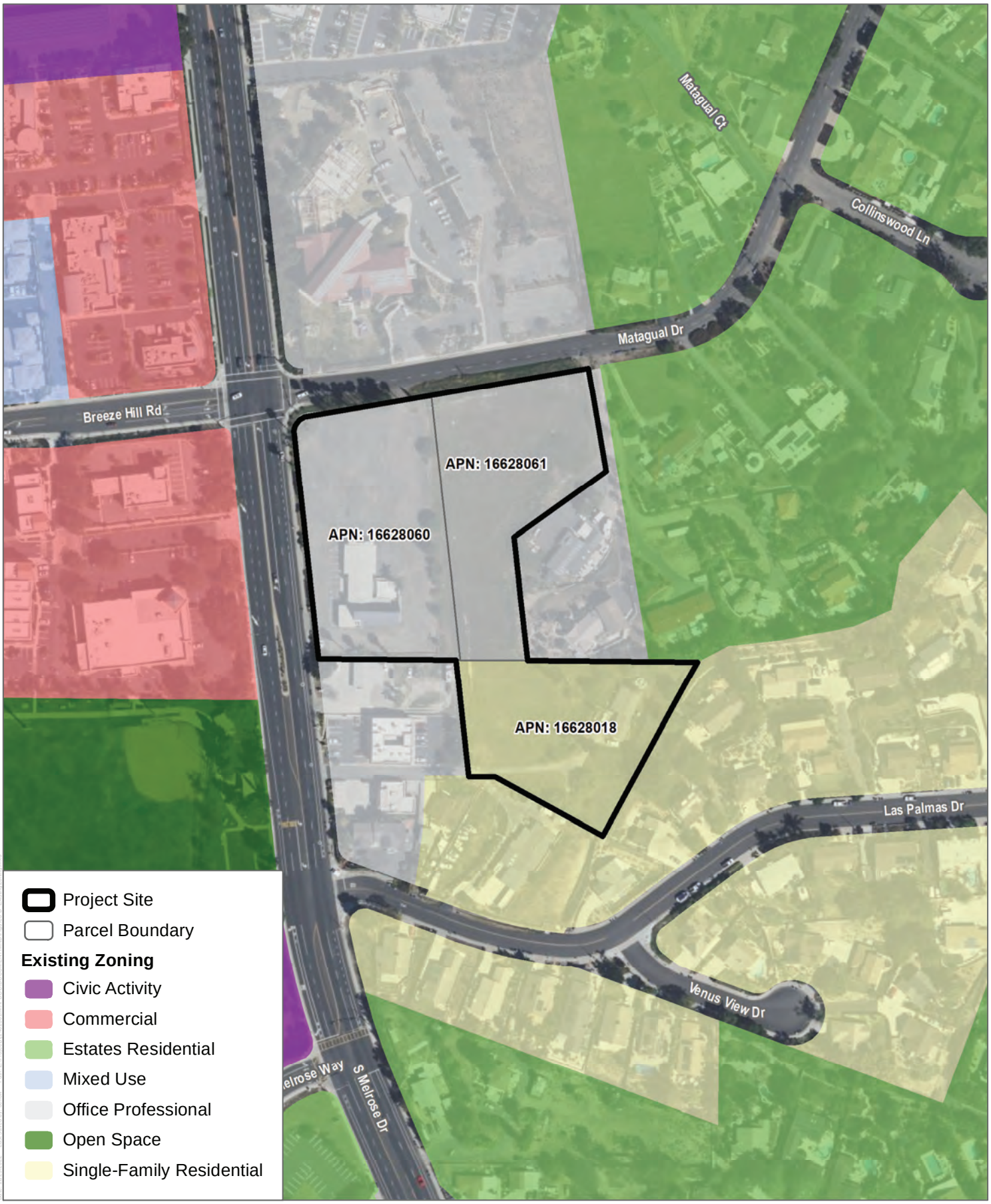

SOURCE: Bing Imagery 2021, City of Vista 2022, Open Street Map

DUDEK

0 85 170 Feet

FIGURE 3-B

Existing Zoning

Vista Melrose

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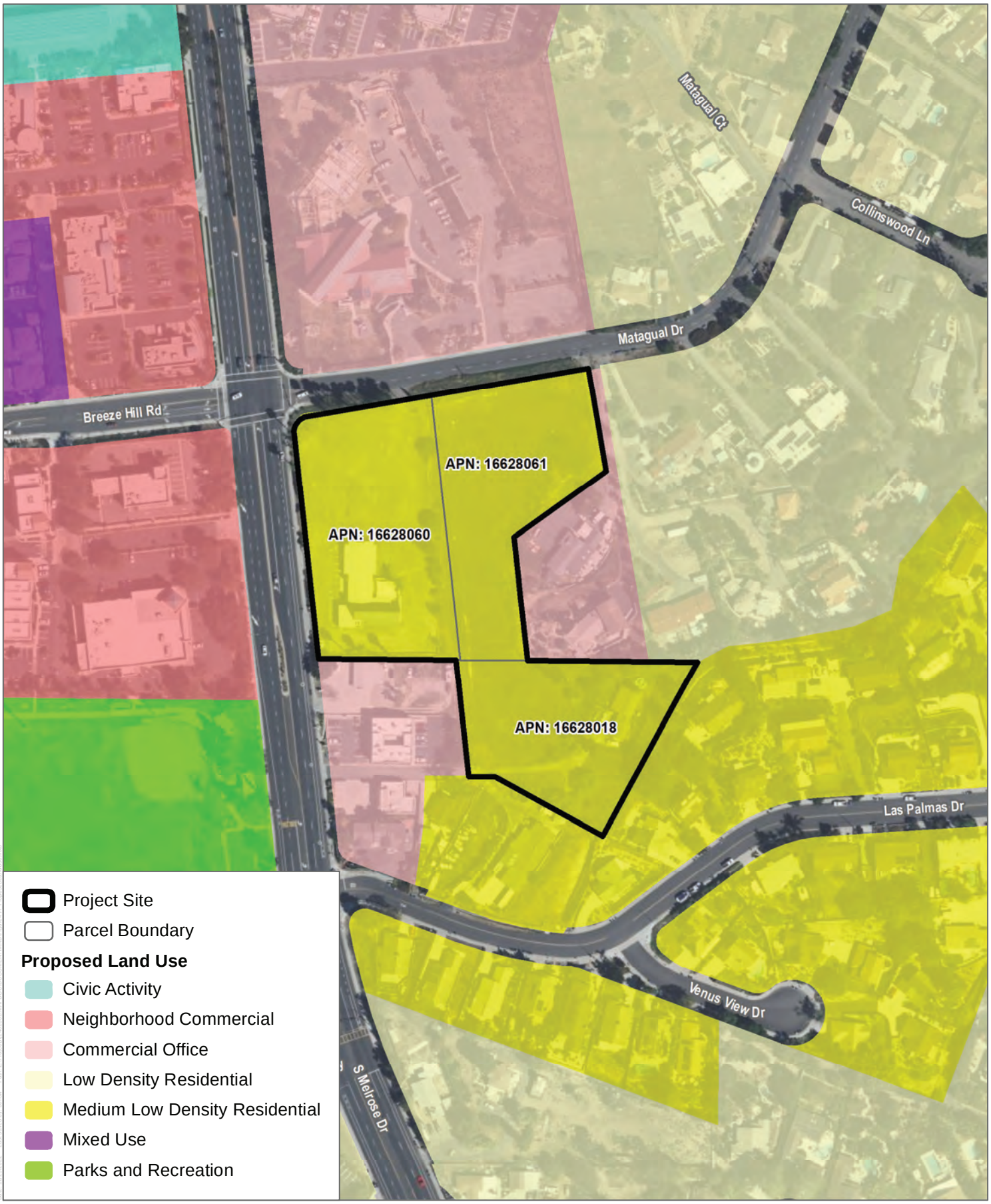

SOURCE: Bing Imagery 2021, City of Vista 2022, Open Street Map

DUDEK

0 85 170 Feet

FIGURE 4-A

Proposed Land Use

Vista Melrose

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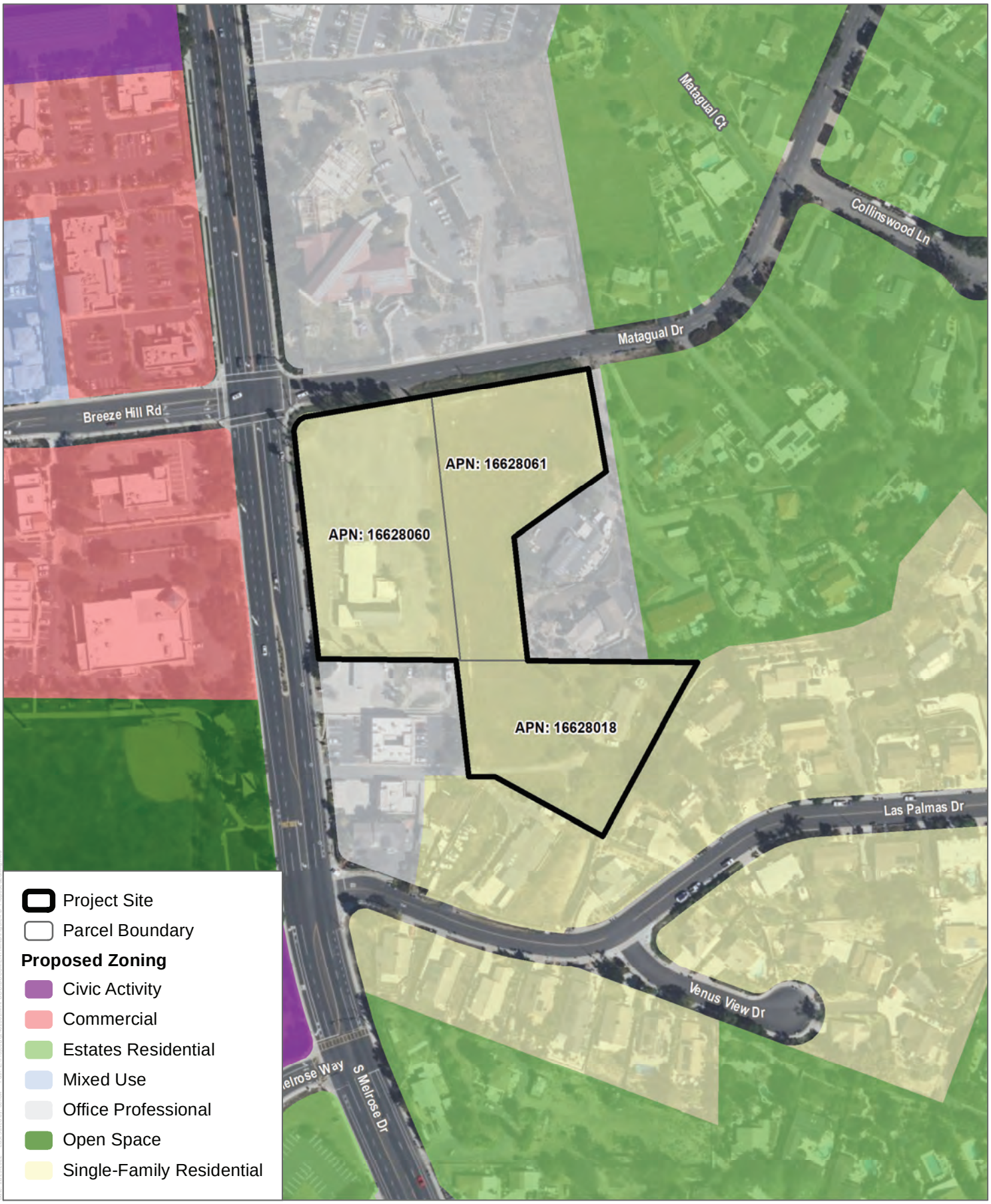

SOURCE: Bing Imagery 2021, City of Vista 2022, Open Street Map

DUDEK

0 85 170 Feet

FIGURE 4-B

Proposed Zoning

Vista Melrose

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SOURCE: Dudek 2022

FIGURE 5-A

Visual Simulation

Vista Melrose

DUDEK

INTENTIONALLY LEFT BLANK

SOURCE: Dudek 2022

FIGURE 5-**B**

Visual Simulation

Vista Melrose

DUDEK

INTENTIONALLY LEFT BLANK

SOURCE: Dudek 2022

FIGURE 5-**C**

Visual Simulation

Vista Melrose

DUDEK

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SOURCE: Bing Imagery 2021, Open Street Map

DUDEK

0 50 100 Feet

FIGURE 6

Noise Measurement Locations

Vista Melrose

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Mitigation, Monitoring, and Reporting Program

Vista Melrose Residential Project

APRIL 2023

Prepared for:

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Mitigation Monitoring and Reporting Program

PROJECT NAME: Vista Melrose Residential Project

DESCRIPTION: The proposed Vista Melrose Residential Project (Project) consists of a residential development within the City of Vista (City). The approximately 5.55-acre site includes Assessor's Parcel Numbers [APNs] 166-280-60-00, 166-280-61-00, and 166-280-18-00. The properties at 560 S. Melrose Drive and APN 166-280-61-00 are both currently zoned O-P (Office Professional) and a corresponding General Plan designation of Commercial Office (CO). The property at 622 S. Melrose Drive is currently zoned R-1 (Residential) and has a corresponding General Plan designation of Medium Low Density Residential (MLD). The applicant, TTLC Vista Melrose, LLC, proposes to rezone all three properties to R-1-B (Residential) with a corresponding General Plan change to Medium Density Residential (MD). Furthermore, the applicant proposes a thirty-seven (37) lot Tentative Subdivision Map to redevelop the site to include thirty-four (34) single-family residences, which would result in a proposed density of 6.1 dwelling units per acre, a private street, private park with a tot lot and a dog park. The project will utilize the City of Vista Small Lot Subdivision standards per Vista Development Code Section 18.33 to achieve their project design. The proposed project would also include landscaping and offsite street and utility improvements.

LOCATION: 560 S. Melrose Drive, 622 S. Melrose Drive and APN#166-280-61-00, within the city of Vista.

Table 1. Mitigation Monitoring and Reporting Program

Mitigation Measure	Staff Monitor	Timing of Compliance	Date of Completion
Cultural Resources			
MM-CUL-1 Cultural resource mitigation monitoring shall be conducted on the site to provide for the identification, evaluation, treatment, and protection of any cultural resources that are affected by or may be discovered during the construction of the proposed project. The monitoring shall consist of the full-time presence of a Qualified Archaeologist and a traditionally and culturally affiliated (TCA) Native American Monitor associated with a TCA tribe for, but not limited to, any clearing or grubbing of vegetation, tree removal, demolition and/or removal of remnant foundations, pavements, abandonment and/or installation of infrastructure; grading or any other ground disturbing or altering activities, including the placement of any imported fill materials (note: all fill materials shall be absent of any and all cultural resources); and any related road improvements, including, but not limited to, the installation of infrastructure, realignments, and/or expansions to parking lots. Other tasks of the monitoring program shall include the following: ▪ The requirement for cultural resource mitigation monitoring shall be noted on all applicable construction documents, including demolition plans, grading plans, etc. ▪ The Qualified Archaeologist and TCA Native American Monitor shall attend at least one pre-construction meeting with the Contractor and/or associated Subcontractors (e.g., Grading Contractor) and a representative from the City of Vista's Engineering or Community Development departments to present the archaeological monitoring program as presented in these measures.	City of Vista Community Development Department, qualified archeologist, TCA Native American Monitor	During construction	

Table 1. Mitigation Monitoring and Reporting Program

Mitigation Measure	Staff Monitor	Timing of Compliance	Date of Completion
▪ The Qualified Archaeologist shall maintain ongoing collaborative consultation with the TCA Native American Monitor during all ground disturbing or altering activities, as identified above. The Contractor or Grading Contractor shall notify the Director of Community Development & Engineering, preferably through e-mail, of the start and end of all ground-disturbing activities. ▪ The Qualified Archaeologist and/or TCA Native American Monitor may halt ground-disturbing activities if archaeological artifact deposits or cultural features are discovered. In general, ground-disturbing activities shall be directed away from these deposits for a short time to allow a determination of potential significance, the subject of which shall be determined by the Qualified Archaeologist and the TCA Native American Monitor. If a determination is made that the unearthed artifact deposits or tribal cultural resources are considered potentially significant, the consulting TCA Tribe(s) shall be notified and consulted in regards to the respectful and dignified treatment of those resources. Ground disturbing activities shall not resume until the Qualified Archaeologist, in consultation with the TCA Native American Monitor, deems the cultural resource or feature has been appropriately documented and/or protected. At the Qualified Archaeologist's discretion, the location of ground disturbing activities may be relocated elsewhere on the project site to avoid further disturbance of cultural resources.			

Table 1. Mitigation Monitoring and Reporting Program

Mitigation Measure	Staff Monitor	Timing of Compliance	Date of Completion
▪ The avoidance and protection of discovered unknown and significant cultural resources and/or unique archaeological resources is the preferable mitigation for the proposed project. If avoidance is not feasible, culturally appropriate treatment of those resources, including but not limited to funding an ethnographic or ethnohistoric study of the resource(s), and/or developing a data recovery plan may be authorized by the City as the Lead Agency under CEQA. If data recovery is required, then the consulting TCA Tribe(s) shall be notified and consulted in drafting and finalizing any such recovery plan. ▪ Should any cultural resources be found on the project site during construction of the project, consultation with the TCA Tribal Monitor shall occur. Based upon consultation with the TCA monitor, the cultural resources will be relocated for reburial to a portion of the existing site that will remain as open landscaped area (not active recreation areas).			
MM-CUL-2 Prior to the submission of a grading plan to City staff for review, the Applicant or Owner, and/or Contractor shall enter into a Pre-Excavation Agreement with a Traditionally and Culturally Affiliated Native American Tribe ("TCA Tribe"). A copy of the agreement shall be included in the grading plan submission. The purpose of this agreement shall be to formalize protocols and procedures between the Applicant or Owner, and/or Contractor, and the TCA tribe for the protection and treatment of, including but not limited to, Native American human remains, funerary objects, cultural and religious landscapes, ceremonial items, traditional gathering areas and cultural items, located and/or discovered through a monitoring program in conjunction with the construction of the proposed project, including additional archaeological surveys and/or studies, excavations, geotechnical investigations, off-site infrastructure installation, grading, and all other ground disturbing activities.	City of Vista Community Development Department, qualified archeologist, TCA Native American Monitor	Prior to construction	

Table 1. Mitigation Monitoring and Reporting Program

Mitigation Measure	Staff Monitor	Timing of Compliance	Date of Completion
MM-CUL-3 Prior to the release of the Grading Bond, a Monitoring Report and/or Evaluation Report, which shall comply with Government Code Section 6254(r), shall be submitted by the Qualified Archaeologist, along with the TCA Native American Monitor's notes and comments, to the City Planner for the project administrative record.	City of Vista Community Development Department, qualified archeologist, TCA Native American Monitor	After construction and prior to issuance of occupancy permits.	
MM-CUL-4 All cultural materials that are associated with burial and/or funerary goods shall be repatriated to the Most Likely Descendant as determined by the Native American Heritage Commission (NAHC) per California Public Resources Code Section 5097.98.	City of Vista Community Development Department, qualified archeologist, TCA Native American Monitor	During and post construction	
MM-CUL-5 Recovered cultural material of historic significance, but not of tribal significance, shall be curated with accompanying catalog, photographs, and reports to a San Diego curation facility that meets federal standards per 36 CFR Part 79. If cultural material will be returned to the Tribe(s) rather than curated, diagnostic artifacts or particularly good examples of specific tool types, if such are recovered, should be scanned for 3D printing, with the permission of the Tribe(s). The data from 3D scanning would be curated at an appropriate repository, such as the San Diego Archaeological Center. The cultural material can then be returned to the Tribe(s) for reburial or other treatment. Recovered cultural material of tribal cultural significance shall be repatriated as stipulated in the pre-excavation agreement as described in MM-CUL-2	City of Vista Community Development Department, qualified archeologist, TCA Native American Monitor	During and post construction	
MM-CUL-6 As specified by California Health and Safety Code Section 7050.5, if human remains are found on the project site during construction or during archaeological work, the person responsible for the excavation, or his or her authorized representative, shall immediately notify the San Diego County Coroner's office by telephone. No further excavation or disturbance of the discovery or any nearby area reasonably suspected to overlie adjacent remains (as determined by the	Qualified archeologist, TCA Native American monitor, San Diego County Corner	During construction	

Table 1. Mitigation Monitoring and Reporting Program

Mitigation Measure	Staff Monitor	Timing of Compliance	Date of Completion
Qualified Archaeologist and/or the TCA Native American monitor) shall occur until the Coroner has made the necessary findings as to origin and disposition pursuant to Public Resources Code 5097.98. If such a discovery occurs, a temporary construction exclusion zone shall be established surrounding the area of the discovery so that the area would be protected (as determined by the Qualified Archaeologist and/or the TCA Native American monitor), and consultation and treatment could occur as prescribed by law. As further defined by State law, the Coroner would determine within two working days of being notified if the remains are subject to his or her authority. If the Coroner recognizes the remains to be Native American, he or she shall contact the Native American Heritage Commission within 24 hours. The Native American Heritage Commission would then make a determination as to the Most Likely Descendent. If Native American remains are discovered, the remains shall be kept in situ ("in place"), or in a secure location in close proximity to where they were found, until after the Medical Examiner makes its determination and notifications, and until after the Most Likely Descendant is identified. The analysis of the remains shall only occur on-site in the presence of a Most Likely Descendant. The specific locations of Native American burials and reburials will be proprietary and not disclosed to the general public. According to California Health and Safety Code, six or more human burials at one location constitute a cemetery (Section 8100), and disturbance of Native American cemeteries is a felony (Section 7052). In the event that the project proponent and the MLD are in disagreement regarding the disposition of the remains, State law will apply, and the mediation process will occur with NAHC. In the event that mediation is not successful, the landowner shall rebury the remains at a location free from future disturbance (see Public Resources Code Section 5097.98(e) and 5097.94(k)).			

Table 1. Mitigation Monitoring and Reporting Program

Mitigation Measure	Staff Monitor	Timing of Compliance	Date of Completion
Geology and Soils			
MM GEO-1 Unanticipated Paleontological Resources. If an inadvertent discovery of paleontological resources (e.g., fossilized plant, shell, or animal bone) is made during project-related construction activities, ground disturbance in the area of the find shall be halted; the discovered resource shall be roped off; and the City of Vista and a qualified professional paleontologist shall be contacted. The qualified paleontologist shall be assigned to determine whether the resource is potentially significant as per the Society of Vertebrate Paleontology 2010 and County of San Diego (2009) guidelines for mitigation and develop appropriate treatment measures.	City of Vista Community Development Department, Qualified Paleontologist	During	
Noise			
MM-NOI-1 Construction Noise Reduction The following recommendations from Appendix I shall be implemented by the construction contractor to reduce construction noise onsite, to the satisfaction of the City of Vista Community Development Department, to ensure that project construction would not exceed the City's adopted daytime threshold for construction noise exposure of 75 dBA for an eight-hour period: ▪ Administrative controls (e.g., prohibit usage of equipment type[s] within certain distances). ▪ Engineering controls (upgrade noise controls, such as install better engine exhaust mufflers). ▪ Install noise abatement on the site boundary fencing (or within, as practical and appropriate) in the form of sound blankets or comparable temporary barriers (e.g., stacked sheets of plywood supported with framing) to occlude construction noise emission between the site (or specific equipment operation as the situation may define) and offsite noise-sensitive receptor(s) of concern.	City of Vista Community Development Department	Prior to and during construction	

Table 1. Mitigation Monitoring and Reporting Program

Mitigation Measure	Staff Monitor	Timing of Compliance	Date of Completion
▪ At the outset of a project construction activity, an unattended noise level monitor shall be deployed onsite to measure and document that noise exposure levels attributed to project construction activity at adjacent offsite sensitive receptors are in conformance with the 75 dBA 8-hour L_{eq} threshold.			
MM-NOI-2 Traffic Noise Reduction. Where exterior noise levels are predicted to exceed 65 dBA CNEL at useable open space areas, the contractor should install noise-reducing features external to or upon the useable open space areas (or within, as practical and appropriate) in the form of sound walls, fencing, landscape berms, or similarly performing barriers of at least 6 feet in height to occlude incoming roadway traffic noise, to the satisfaction of the City of Vista Community Development Department, to ensure that there is no exceedance of the 65 dBA CNEL threshold..	City of Vista Community Development Department	During construction	
Tribal Cultural Resources			
See Mitigation Measures **MM-CUL-1** through **MM-CUL-5** above.	See above.	See above.	