



MITIGATED NEGATIVE DECLARATION AND INITIAL STUDY CHECKLIST P16-0032

PROJECT NAME: Vista Melrose 47 Project

PROJECT LOCATION: 1630 S. Melrose Drive, Vista, California 92081
Located on the east side of the road between Buena Vista Drive to the north and Live Oak Road to the south.

APN(s): APN 183-220-30

PROJECT APPLICANT: Warmington Residential - Southern California Division
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PUBLIC REVIEW PERIOD: September 30, 2016 to October 19, 2016

This Mitigated Negative Declaration/Initial Study Checklist 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 Mitigated Negative Declaration and Initial Study Checklist must be made in writing to Mr. John Hamilton, Environmental Planner, c/o Planning Division, 200 Civic Center Drive, Vista, California 92084-6275, and mailed to the address or sent via e-mail to jhamilton@cityofvista.com. All 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.

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Chapter 1

INTRODUCTION

Overview

The City of Vista (City) Planning Division within the Community Development Department has prepared this Mitigated Negative Declaration/Initial Study (MND/IS) to evaluate the potential environmental consequences associated with the Vista Melrose 47 Project (or “the project”). As part of the discretionary approval process by the Planning Division, the proposed project is required to undergo an environmental review pursuant to the California Environmental Quality Act (CEQA). One of the main objectives of CEQA is to disclose to the public and the decision makers the potential environmental effects of the proposed activities. CEQA requires that the lead agency prepare an Initial Study to determine whether an Environmental Impact Report (EIR), Negative Declaration (ND), or a Mitigated Negative Declaration (MND) is needed. The City’s Planning Division is the Lead Agency for the proposed project under CEQA. A description of this project is found in Chapter 2 of this document.

Authority

The preparation of this MND/IS is governed by two principal sets of documents: CEQA (Public Resources Code Section 21000, et seq.) and the State CEQA Guidelines (California Code of Regulations Section 15000, et seq.). Specifically, the preparation of an MND/IS is guided by the State CEQA Guidelines Section 15063 describes the requirements for an Initial Study. State CEQA Guidelines Section 15070–15075 describes the process for the preparation, public review, and adoption of an MND. Where appropriate and supportive to an understanding of the issues, reference will be made to either the CEQA statute or State CEQA Guidelines. This MND/IS contains all of the contents required by CEQA. This includes: a brief description of the project, including a commonly used name for the project, if any; the location of the project; the name of the project proponent; a proposed finding that the project will not have a significant effect on the environment; and mitigation measures, if any, included in the project to avoid potentially significant effects.

Scope

This MND/IS evaluates the proposed project’s effects on the following resource topics:

- aesthetics
- agriculture and forestry resources
- air quality
- biological resources
- cultural resources
- 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/traffic
- utilities and service systems
- mandatory findings of significance

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Chapter 2

ENVIRONMENTAL SETTING AND PROJECT DESCRIPTION

Project Overview

The proposed Vista Melrose 47 Project (the “project”) involves the construction and operation of a new 47-condominium unit residential community in the west-southern-central portion of the city (see Figure 1 - Location Map in Attachment A). Specifically, the site of the proposed project is located at South (S.) Melrose Drive between Buena Vista Drive to the north and Live Oak Road to the south (see Figure 2 - Aerial of Existing Property and Surrounding Uses). It consists of one parcel (APN 183-220-30) that is 3.14 acres in size. The site is currently occupied by the First Church of Christ, Scientist, Carlsbad-Vista and related surface parking lot. The project proposes to demolish this building and the surrounding parking lot to allow for redevelopment of the site. Relevant maps, aerial photos and proposed plans are included in Attachment A to this document.

Existing Environmental Setting

CITY OF VISTA

Vista is a largely built-out, predominantly low-density residential community located seven miles inland from the Pacific Ocean in northern San Diego County. Clusters of urbanized higher density developments are scattered throughout its central portion, generally along major roads. The city is located in rolling topography of the western foothills of the San Marcos Mountains, with elevations ranging from approximately 200 feet to about 750 feet above mean sea level (AMSL). Pleasant views are found from various points throughout the city with some higher elevations offering captivating vistas of the Pacific Ocean to the west. In addition to the pleasing topography of the mountains and hills, Vista is lushly vegetated from the low-level creek beds to the steep slopes of the foothills, which also contributes to the overall beauty of the community. The city also has three major creeks that flow through its boundaries, Buena Vista Creek, Agua Hedionda Creek, and Buena Creek.

PROJECT SITE

As stated above, and shown in Figure 3 - Aerial View of Existing Property in Attachment A, the 3.14-acre site is currently occupied by a church building and associated parking area. The site is zoned as Commercial (C-1) under the City’s Zoning Ordinance, and has a land use designation of Rural Residential (RR) in the *City of Vista General Plan 2030 Update (GP 2030 Update)*.

The project site is within the southeast quadrant of the S. Melrose Drive and Buena Vista Drive intersection. It is located 1.5 miles west-southwest of State Route (SR) 78, and 0.5 mile north of the S. Melrose Drive and Shadowridge Drive intersection.

According to the *Traffic Impact Study (TIS)* for the proposed project (Chen-Ryan, 2016); S. Melrose Drive between Cannon Road and Longhorn Drive is a six-lane roadway with a landscaped raised median, and a posted speed limit of 45 miles per hour (mph). Sidewalks and Class II bicycle lanes are provided on both sides of S. Melrose Drive, and on-street parking is prohibited along this section of the road. This roadway is classified as a 6-Lane Prime Arterial in the Circulation Element of the City’s *GP 2030 Update (2011)*. The North County Transit District’s (NCTD) BREEZE bus line No. 332, runs on this road between the Vista Transit Station and the Buena Creek Station on the SPRINTER line. There is a northbound bus stop near the intersection with Live Oak Road, and a southbound stop near the intersection with Buena Vista Drive. The average existing daily traffic volume on S. Melrose Drive from Cannon Road to Longhorn Drive is approximately 33,800 vehicles (*TIS - Chen-Ryan, 2016*).

Within the project study area, Buena Vista Drive between S. Melrose Drive and Wesley Avenue is a two-lane undivided roadway with a posted speed limit of 30 mph. Sidewalks are provided on both sides of the roadway, but bicycle facilities are not. In addition, on-street parking is prohibited on both sides of the roadway. Buena Vista Drive is classified as a 2-Lane Semi-Rural Street in the Circulation Element of the City's *GP 2030 Update* (2011). The average existing daily traffic volume on Buena Vista Drive between S. Melrose Drive and Wesley Avenue is approximately 5,810 vehicles (TIS - Chen-Ryan, 2016).

Entry/access to the project site is provided by a private loop road that connects with S. Melrose Drive to the west and Buena Vista Drive to the north. There is no access to or from the subject property from Live Oak Road. The loop road also serves two other adjacent commercial uses.

The overall topography of the project site is gently sloped at roughly three to five percent from the northwest portion to the northeast and southeast. According to a slope analysis prepared for the Site Development Plan submittal (Hunsaker, 2016), a majority of the site (45.9 percent) is sloped from zero to five percent range, 17.4 percent of the site has slopes ranging from six to 10 percent, and 26.6 percent of the site has slopes ranging from 11 to 15 percent. The rest of the site (10.1 percent) has slopes ranging from 16 to over 25 percent. Approximately one-half of the site (1.57 acres) is made up of impervious surfaces that consists of the existing church building (6,665 square feet (SF)) and a paved parking lot for 99 vehicles (see Figure 3 - Aerial of Existing Property). The remaining portions of the site consist of landscaping, which is made up of ornamental trees, shrubs and groundcovers.

As stated in the *Geotechnical Update Compaction Report (Geotech Report)* (Vinje & Middleton, Inc., (VME), June 2016) prepared for the project, the church building and parking lot are constructed on elevated graded surfaces. Short transition fill slopes descend from the graded developed surfaces to natural and modified terrain along the northeastern and southeastern areas of the site, and a narrow strip along the eastern margin of the site. Geologically, the project site is underlain by Eocene age siltstone-sandstone rocks (i.e., Santiago Formation), which ranges in depth from approximately 1.5 to 8.0 feet below surface grade. According to the *Geotech Report* (VME, 2016), the underlying Santiago Formation is known to be locally associated with landslides and instability in graded and natural slope conditions. Recent on-site test pits, excavated in support of this effort, exposed fractured and potentially unstable rocks along the east margin of the site. As exposed, the rocks are characterized by chalky deposits that are highly fractured and chaotic in appearance. As further noted in the *Geotech Report* (VME, 2016), natural surfaces (which appear to be located in areas in the east and southeast) are mantled by shallow clay-bearing topsoil. Shallow to modest fill deposits at the property include engineered fills beneath church building and parking lot (up to approximately seven feet in depth), and undocumented fills that were left in place along the east and south portions of the site (up to approximately eight feet in depth). The project site's natural subsoil chiefly consists of plastic, clay-bearing soils and very dense sandstone/siltstone deposits that may be characterized as Hydrologic Soil Group D. Group D soils have a very slow infiltration rate when thoroughly wetted. They are composed chiefly of clays that have a high shrink-swell potential; soils that have a high permanent water table; soils that have a claypan or clay layer at or near the surface; or soils that are shallow over nearly impervious material. Rate of water transmission is very slow.¹ The topsoil and undocumented fills are also considered to have expansive qualities that do not meet current codes and standards for compacted fill material.

Hydrologically the project site is situated in the Los Monos Hydrologic Sub-Area (904.31) of the Agua Hedionda Hydrologic Area (904.30) within the Carlsbad Hydrologic Unit (904.0). Receiving waters include Agua Hedionda Creek, Agua Hedionda Lagoon, and the Pacific Ocean. Agua Hedionda Creek and Agua Hedionda Lagoon are both on the 2008 California Clean Water Act Section 303(d) List Of Water Quality Limited Segments. The Creek is listed due to Manganese, Selenium, Sulfates, and Total Dissolved Solids pollutants, while the Lagoon is listed due to Indicator Bacteria, Sedimentation/Siltation (*Storm Water Quality Management Plan (SWQMP)*, Hunsaker & Associates, April 2016).

¹ San Diego County Hydrology Manual, Dept. of Public Works, Flood Control Section, June 2003.

As stated in the *SWQMP* (Hunsaker, 2016), the existing site is partially developed and drains overland towards either the southeast or the northeast corners of the site. This site does not receive any run-on from adjacent properties. Grate inlets then collect runoff and convey it east to the Live Oak Road drainage system. The northeast inlet discharges to an open space area where it is recollected by a headwall at the western side of Live Oak Road and conveyed downstream by 24-inch storm drain. The southeast inlet discharges into a brow ditch and then channels to Live Oak Road via sidewalk underdrain. Runoff from this point is conveyed via curb and gutter west on Live Oak Road then south on S. Melrose Drive until it is collected by an existing inlet. Collected runoff from this inlet is conveyed west in the existing storm drain towards the Shadowridge Drive storm drain. Runoff is then conveyed into a tributary of Agua Hedionda Creek that is located south of Shadowridge Drive (west of S. Melrose Drive) and then outfalls in the main branch of the Creek. From this junction, runoff from Agua Hedionda Creek is then conveyed west about 4.5 miles until it outfalls into Agua Hedionda Lagoon and the Pacific Ocean.

SURROUNDING LAND USES

As shown in Figure 2 - Aerial View of Immediately Surrounding Area in Attachment A, the surrounding adjacent land uses include:

- North - Church (Palomar Unitarian-Universalist Church and associated parking lot)
- East - Multi-family Residential (Shadowridge Country Club Apartments across Live Oak Road)
- South - Retail/Commercial (Melrose Square shopping center - e.g., Melrose Veterinary Hospital, Little Caesars Pizza, etc.)
- West - Retail/Commercial (Burger King, 7-11 store and gas station)

In general, land uses within a one-half mile radius from the project site consists of:

- a mix of multi- and single-family residential, institutional, and a scattering of commercial (along S. Melrose Drive) within Vista, and agriculture in unincorporated San Diego County, to the north;
- a mix of commercial/retail, educational, recreational, and multi- and single-family residential to the south;
- multi- and single-family residential, and recreational to the east, and;
- a mix of commercial/retail, institutional, multi- and single-family residential within Vista, and single-family within Oceanside, to west.

Agua Hedionda Creek, which runs from east to west, is located 0.85 mile to the south. The closest public park is the Buena Vista Ballfields located at 1851 S. Melrose Drive, just over 0.25 mile south of the project site. The closest public school is the Rancho Buena Vista High School located within the southwest quadrant of the Longhorn Drive/S. Melrose Drive intersection. The closest fire station is Vista Fire Station No. 5 located at 2009 S. Melrose Drive, several hundred feet north of the Agua Hedionda Creek. The closest Sprinter station is the Buena Creek Station is located about 2.25 miles to the east of the project site. The McClellan-Palomar Airport Municipal Airport, which is the closest airport to the project site, is located 2.85 miles to the southwest.

Proposed Project Description

The applicant seeks approval of a General Plan Amendment, a Zone Change, a Tentative Subdivision Map, a Special Use Permit, and a Condominium Housing Permit for the development of 47 condominium units on a 3.14-acre site.

The required discretionary approvals are described below:

- General Plan Amendment: Per Chapter 18.48.020 of the Vista Development Code, this application is required in order to change the existing *GP 2030 Update* land use designation from RR (Rural Residential) to MU (Mixed Use);
- Zone Change: Per Chapter 18.06.020 of the Vista Development Code, this amendment to the Zoning Map is required to change the existing zoning of the subject property from Commercial (C-1) to M-U (40) (Mixed Use zone with a maximum density not to exceed 40 Dwelling Units per Acre);
- Tentative Subdivision Map: Per Chapter 17.12 of the Vista Development Code, this map is required for the development of the condominiums;
- Special Use Permit: Per Chapter 18.74 of the Vista Development Code, this permit is required in order to meet certain requirements regarding compatibility with the general plan, existing and planned land uses, etc.
- Condominium Housing: Per Chapter 18.60 of the Vista Development Code, this permit is required to be filed and processed with the Tentative Subdivision Map.

PROPOSED OVERALL SITE PLAN

The proposed project would be developed in compliance with the land use and zoning designations the applicant is seeking approval of for the subject property: MU (Mixed Use – 40 DU/AC) as identified in the City's *GP 2030 Update*, and the M-U zoning designation (minimum 40 DU/AC) in the City's *Zoning Ordinance* (see Section IX - Land Use and Planning in Chapter 3 for additional information). As shown in Figure 4 - Proposed Site Plan in Attachment A, vehicular access to the project site is taken off a "private" loop road that connects with S. Melrose Drive to the west and Buena Vista Drive to the north. This loop road also serves the two other adjacent commercial uses (i.e., Burger King and 7-11). The 47-condominium units would be accommodated within nine three-story buildings. As depicted in Figure 4, the buildings would be laid out around a centrally located recreation area, with three buildings located adjacent to the northern property line, two buildings along the southern property line; four buildings would be located in a group of two on the northern and southern sides of the recreation area.

On-site parking includes 47 two-car garage spaces which would be provided on the first floor of the residences and would be "tucked under" the units. An additional 54 open/guest spaces would be provided on-site within the western, northern, eastern and southern sides of the community (see Figure 4 - Proposed Site Plan) for a total of 151 parking spaces consistent with City parking requirements for the project. The project includes three handicapped parking spaces on-site.

Five of the nine 3-story condominium buildings would be located adjacent to the northern and southern edges of the parcel; the four remaining buildings would be located within the center of the site, adjacent to the 10,280 SF central outdoor community recreation area (see Figure 4 – Proposed Site Plan). Other site improvements and/or amenities would include outdoor common areas; walkways; exterior lighting; trash and recycling enclosures; walls and fences; and landscaping.

The site plan (see Figure 4 – Proposed Site Plan) contemplates a mix of four (4), Five (5) and six (6) unit buildings totaling 47 units. The condominiums will range in size from 1,735 SF to 1,998 SF and will include either three or four bedrooms and each home would include 3.5 bathrooms.

The proposed unit mix is as follows:

- Plan 1 – 1,735 SF – 3bd/3.5ba - 18 units
- Plan 2 – 1,823 SF – 3bd/3.5ba – 11 units
- Plan 3 – 1,998 SF – 4bd/3.5ba – 18 units

The architecture proposed is a Modern Spanish style, with a combination of hip, gable, sloping, and flat tiled components. The massing of each building is brought down to a pedestrian scale by articulating each unit with a varied arrangement of building massing at differing heights, color blocking and material such as the various Spanish stucco colors and architectural elements. The elevation is textured with other design details such as window treatments, fabric awnings, wrought iron railings/treatments, a bold cornice and Spanish tile accents. The entrance to each unit will be delineated by an accented door under arched architectural features. The garage door is on the opposite side of the building from the entrance which allows the front elevation to be experienced and accessed at a pedestrian oriented level.

Community Open Space Provided:

The proposed project includes approximately 19,135 SF of common useable open space (equal to approximately 407 SF per unit) (see Figure 4 – Proposed Site Plan) which shows common open space areas. This City requirement for outdoor space is 140 SF per unit within the M-U (mixed use) zone. Common open space with amenities is a total of approximately 12,170 SF, which includes a 10,280 SF central common recreation area, a 1,050 SF common open space area along the northern site boundary, and an 840 SF common open space area along the southern site boundary. Private open space (private patios/decks) is approximately 6,965 SF.

The central open space of the community is anticipated to include amenities such as a pool, spa, seating areas, bbq locations, pool building and fireplace/fire pit, open turf play area, and a walkable, landscaped environment. The perimeter of the project will include an open Paseo oriented open space that will serve as both front access to all perimeter units as well as passive, landscaped open common areas.

PROJECT CONSTRUCTION

Overall, the proposed project is anticipated to be constructed in one progressive phase that would take approximately 15 months to complete. Although actual construction activities typically overlap (e.g., grading and installation of a detention basin as part of a storm water system), the general stages of expected site and building development have been identified and are discussed below. In addition, as part of the project conditions of approval, the applicant (and/or contractor) would be required to prepare and implement a construction Traffic Management Plan to the satisfaction of the City Traffic Engineer to avoid significant construction-related impacts to nearby streets and intersections, especially during peak hour times.

SITE DEVELOPMENT

Demolition

The initial stage of site development would include demolition of the existing church building in the center of the property, as well as such items as existing trees and shrubs, curbs, parking lot paving, lighting, etc. Demolition would also involve the cutting, capping, and removal of certain sections of existing utility lines such as sewer, electrical, water, etc. that would be in the way of building construction. The demolition of the existing church building would be pulled down either manually or mechanically using large hydraulic equipment: elevated work platforms, cranes, excavators or bulldozers. Building materials and asphalt paving are anticipated to be transported to a Materials Recovery Facility (MRF), such as the Palomar MRF in Carlsbad, to be recycled or disposed of in a landfill.

Grading and Utilities

The next stage of site development would include re-grading the site and the installation of wet and dry utilities. According to information provided in the project submittal, a total of 20,864 cubic yards (cu. yds.) of cut and 13,627 cu. yds. of fill are proposed; requiring the export of 7,237 cu. yds. of material. Grading is expected to be completed in about 30 days. See Figure 5 - Conceptual Grading Plan in Attachment A for additional information.

Anticipated utilities to be installed include sewer, potable water and fire service water lines, a storm drain system, and gas, electrical, and telephone service. An existing sewer main serving the existing building will be capped and removed. The project's 8-inch private sewer mains would connect with an existing Vista Sanitation District (VSD) 8-inch sewer main within S. Melrose Drive. New 6-inch sewer laterals would extend from the private sewer mains to the new buildings and each unit will have its own lateral line.

New private 3-inch PVC water lines for potable drinking water would connect to the existing water lines within Buena Vista Drive and extend into the site and the new buildings. In addition, separate private 8-inch PVC water lines for fire sprinklers in the buildings, and new fire hydrants, would connect to existing fire service lines located adjacent to Buena Vista Drive and S. Melrose Drive.

Proposed storm drain improvements would include curbs (wedged) and gutters, curb inlets, proprietary bio-filtration curb inlets, catch basins, shallow ribbon gutters, 18-inch HDPE (high-density polyethylene) and 8-inch and 6-inch PVC underground pipe, pervious pavement, three modular wetlands, and underground hydromodification vault. According to the SWQMP (Hunsaker, 2016), the proposed project would modify existing drainage patterns.

The proposed design will include regrading, which would alter the areas draining towards the existing discharge points. One of the two existing outlet points at the northeast corner of the site will be removed while the other will be reduced to about 0.03 cfs and only includes impervious slope drainage from a portion of the site's eastern slope adjacent to Live Oak Road. The grading revisions to the main portion of the development would increase the drainage area tributary to the southeast discharge point along Live Oak Road. However, the site will include pervious pavers throughout the street areas, which reduces the imperviousness and the runoff coefficient. The reductions would decrease the peak flow rates so that they would be less than the existing condition peak flows. Therefore, on-site detention is not necessary.

The proposed storm drain system for the site would include two inlets to collect storm water runoff and storm drain system to convey it to the proposed hydromodification vault which will mitigate for flow-control hydromodification. The revised area that would drain to the southeast corner of the site would be 3.06 acres with a peak flow of 7.61 cfs compared with 10.95 cfs in the existing condition.

Connections for electricity, gas, telephone, service would be made at existing supply lines, junction boxes and/or control panels adjacent to the project site along Buena Vista Drive and/or S. Melrose Drive. The respective lines would be placed underground and brought to each building.

Site Improvements and Amenities

Proposed site improvements and amenities in the next stage of construction would include the installation of surface (uncovered) parking areas; hardscape; outdoor recreation areas; walkways; perimeter walls and fences; and exterior lighting. There would be 54 parking spaces (covered and uncovered) located throughout the project site to provide close access for all of the site's residents and guests.

Hardscaping on-site would utilize permeable pavers, decomposed granite, concrete bands, pedestrian paving, and concrete masonry unit (CMU) screen walls. The proposed outdoor recreation areas include a community pool and spa, fire pit, community barbeque area, turf area and pool building (restrooms and pool equipment), which are all centrally located as shown in Figure 6 - Conceptual Landscape Plan and shown in more detail in Figure 7 - Area Enlargements - Conceptual Landscape Plan in Attachment A. Walkways would provide pedestrian connections between the buildings and common outdoor recreation areas.

Perimeter walls and fences would all be a maximum of six-feet tall. They would consist of a combination of slump block walls with pilasters, tubular steel fences, and tubular steel fences on low slump block retaining walls. Pedestrian and vehicular access gates would also consist of six-foot tubular steel fencing.

All of the exterior lighting has been designed to comply with the applicable requirements in Section 18.58.260 - Outdoor Lighting Facilities and/or Fixture in the City's Development Code. According to the Operational Photometric Assessment (Photometric Assessment) prepared by Investigative Science and Engineering in May 2016 (ISE, 2016) the exterior lighting plan consists of 75 13-watt compact florescent (CFL) fixtures wall mounted at 7-feet above the ground and would cast the illumination downward.

Landscaping

As proposed, perimeter landscaping would consist of trees, shrubs and vines along the northern, eastern, southern and western property lines. Additional landscaping would consist primarily of larger palms and other shade trees and hedges adjacent to or within the outdoor recreation area, and a mix of medium and small trees, hedges, vines and succulents planted throughout the rest of the site. Landscaped areas would cover approximately 51,110 SF (about 37 percent) of the site (Figure 6 - Conceptual Landscape Plan). Plant selection is required to comply with the City's Water Efficient Landscaping Ordinance per the Development Code, Chapter 18.56. The proposed plant species require moderate to low water use and they would be grouped with other plants with similar water, climatic, and soil requirements.

The irrigation system is also designed to meet all of the applicable requirements of the City's Water Efficient Landscaping Ordinance. The Maximum Applied Water Allowance for the proposed project (MAWA) and the Estimated Total Water Use (ETWU) is detailed in Table 2-1, below.

**TABLE 2-1
LANDSCAPE WATER REQUIREMENTS**

MAWA FORMULA*	ETWU FORMULA*
Water Budget = (ETo)(0.62) [(0.7)(LA)] Abbreviations: ETo = Evapotranspiration in inches per year. 0.62 = Conversion factor to gallons per square foot. 0.7 = Evapotranspiration (ET) adjustment for plant factors and irrigation efficiency. LA = Landscape Area in square feet.	Estimated Water Use = (ETo)(0.62) ((PF x HA / IE) Abbreviations: ETo = Evapotranspiration in inches per year. 0.62 = Conversion factor to gallons per square foot. PF = Plant factor from WUCOLS (Water Use Classification Of Landscape Species). HA = Hydrozone Area in square feet; each HA shall be classified according to its water use – high, medium, low, or very low - according to the legends on the planting plans. IE = Irrigation Efficiency (Minimum Average 0.71).
PROPOSED PROJECT WATER BUDGET	PROPOSED PROJECT ESTIMATED WATER USE
TOTAL (51.1)(0.62) [(0.71)(33,509)] = 477,734 GAL/YR.	Hydro-Zone 1: Low water use & native succulent planting, drip and micro-spray Irrigation (51.1)(0.62) [(0.2 x 3,375/0.8)]
	Hydro-Zone 2: Low and moderate water use and bioswale planting, spray irrigation (51.1)(0.62) [(0.4 x 27,610/0.75)]
	Hydro-Zone 3: Low and moderate water use, hedges and vines, drip and micro-spray irrigation (51.1)(0.62) [(0.5 x 827/0.8)]
	Hydro-Zone 4: Moderate water use, turf area, spray irrigation (51.1)(0.62) [(0.6x1,697/0.75)]
	Total Estimated Water Use = 436,052 GAL/YR.

Source: Vista Melrose 47 Project, Water Conservation Plan (Sheet L-04) 2016

Notes: * - As identified in City of Vista Development Code 18.56 – Water Efficient Landscaping, Section 18.56.090

As shown in Table 2-1 the total estimated water use for the proposed landscape plan would be 436,052 gallons per year, some 41,682 gallons per year less than the allowable water budget.

BUILDING DEVELOPMENT

Condominium Buildings

There would be ten buildings constructed on the project site. The project proposes to construct nine 3-story attached condominium buildings each with a two-car garage on the ground level, and a 1-story small building by the pool containing restrooms and pool equipment. The project would also include outdoor common areas and 54 additional guest/open parking spaces (see Figure 4 - Proposed Site Plan).

The condominiums would range in size from 1,735 SF to 1,998 SF and each unit would include 3.5 bathrooms and either three or four bedrooms. There would be 29 three-bedroom and 18 four-bedroom condominiums are proposed to be constructed. Two entrances into each of the units would be provided including one entrance from the garage, and one entrance from the front door. Each residence includes a two-car garage that is “tucked under” the unit for a total of 94 garage spaces. The buildings would contain either four, five or six condominiums and would be comprised of up to four different unit floorplans or configurations.

In compliance with open space requirements in the development standards for the M-U zoning designation, the units would have private patios at the ground level and private balconies/decks on the second floor of the residence, which would contribute to the required 140 SF of open space per unit for a total required amount of 6,580 SF of open space (see Figure 4 - Proposed Site Plan). The proposed project includes approximately 19,135 SF of common useable open space (equal to approximately 407 SF per unit).

Common open space with amenities is approximately 12,170 SF which includes an 10,280 SF central common recreation area and a 1,050 SF common open space area along the northern site boundary and an 840 SF common open space area along the southern site boundary. Private open space (private patios/decks) is approximately 6,965 SF.

The proposed buildings would be constructed per the requirements of the California Building Code (CBC) that is in effect at the time building plans are submitted for permit approvals (including CALGreen requirements). The buildings would also be fully protected by a fire sprinkler system that conforms to applicable standards of the National Fire Protection Association edition in effect at the time building plans are submitted for permitting. The buildings would also conform to all applicable requirements of the current CBC standards for disabled accessibility.

Proposed Architectural Design

The architecture proposed is a Modern Spanish style, with a combination of hip, gable, sloping, and flat roofs. The massing of each building is brought down to a pedestrian scale by articulating each unit with a varied arrangement of building massing at differing heights, color blocking and material such as the various Spanish stucco colors and architectural elements. The elevation is textured with other design details such as window treatments, fabric awnings, wrought iron railings/treatments, a bold cornice and Spanish tile accents. The entrance to each unit will be delineated by an accented door under arched architectural features. The garage door is on the opposite side of the building from the entrance which allows the front elevation to be experienced and accessed at a pedestrian oriented level. (See Figures 8 - 10 - in Attachment A, which show examples of building perspectives and elevations).

The building façades would include white, light tan and beige exterior cement plaster finishes with faux chimneys, extruded cornice eaves, recessed faux vents and medallions, decorative metal railings, scalloped arches and illuminated three-dimensional addresses. The windows and sliding glass doors would consist of low “e-glazing” glass, with bronze vinyl windows and doorframes. Architectural details would also include archways, arched doors and windows, wrought iron decorative railings and accents, decorative tiles and wooden trellises. Each of the units would have a fiberglass front entry door painted with an accent color to distinguish the buildings. The rooflines of the buildings would be comprised of a combination of flat, gable, sloping and hip roofs. The flat roofs would have parapets with masonry caps along the edges, which would shield the roof-mounted Heating, ventilation and air conditioning (HVAC) condenser units from public view. The gable and hipped roofs would have concrete “S” tiles in a rustic Spanish terra cotta color. All garage doors would be wood or painted metal that would be complementary to the building’s colors. The exterior of the pool building would also be finished with the same architectural details on the façades and roofs as noted above for the condominium buildings.

ADDITIONAL APPROVALS

Besides review under CEQA, the proposed project would be required to obtain the following additional approvals from the City: Construction Traffic Management Plan, Landscape Construction Plan, Grading Permit, Right-of-Way Permit, Building Permit, and Certificate of Occupancy. In addition, all Conditions of Approval must be satisfactorily completed. Other public agency approvals are cited on page 3-1.

Chapter 3

**INITIAL STUDY
ENVIRONMENTAL CHECKLIST**

Project Information

Project Title:	Vista Melrose 47
Lead Agency Name and Address:	City of Vista Community Development Department Planning Division 200 Civic Center Drive Vista, CA 92084-6275
Contact Person and Phone Number:	Michael Ressler, Principal Planner (760) 643-5388
Project Location:	1630 S. Melrose Drive, Vista, California 92081 Located on the east side of the road between Buena Vista Drive to the north and Live Oak Road to the south.
Project Applicant:	Warmington Residential - Southern California Division 3090 Pullman Street Costa Mesa, California 92626 Contact: Tony Arnest (714) 434-4439
General Plan Designation:	Existing: RR (Rural Residential) Proposed: Mixed Use (MU)
Zoning Designation:	Existing: Commercial (C-1) Proposed: Mixed Use (M-U (40))
Description of Project:	See Chapter 2, Project Description.
Surrounding Land Uses and Setting:	See Chapter 2, Project Description.
Other Public Agency Approvals:	Submittal of a Notice of Intent (NOI) to the RWQCB and preparation of a Storm Water Pollution Prevention Plan (SWPPP) in accordance with the requirements of the National Pollutant Discharge Elimination System (NPDES) General Construction Activities Permit.

Environmental Factors Potentially Affected

Based upon the initial evaluation presented in the following IS, it is concluded that the proposed project would not result in significant adverse environmental impacts.

Environmental Determination

Based on the initial evaluation of the attached Initial Study:

- I find the proposed project COULD NOT have a significant effect on the environment and a NEGATIVE DECLARATION will be prepared.
- I find that although the 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 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 EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.






John Hamilton, Environmental Planner Date

The signature below signifies that the applicant has read and accepts the mitigation measures detailed in this final Mitigated Negative Declaration.

Applicant or Owner

Date

Evaluation of Environmental Impacts

The following IS checklist provides analysis of the proposed project's potential to result in significant adverse environmental impacts. Section 15063(c) of the Guidelines indicates that the purpose of an IS Checklist is to:

1. Provide the Lead Agency (the City of Vista) with information to use as the basis for deciding whether to prepare an Environmental Impact Report (EIR) or Negative Declaration (ND);
2. Enable an applicant or Lead Agency to modify a project, mitigating adverse impacts before an EIR is prepared, thereby enabling the project to qualify for a ND;
3. Assist the preparation of an EIR, if one is required, by:
 - a. Focusing the EIR on the effects determined to be significant;
 - b. Identifying the effects determined not to be significant;
 - c. Explaining the reasons why potentially significant effects would not be significant; and,
 - d. Identifying whether a program EIR, tiering, or another appropriate process can be used for analysis of the project's environmental effects.
4. Facilitate environmental assessment early in the design of a project.
5. Provide documentation of the factual basis for the finding in an ND that a project will not have a significant effect on the environment.
6. Eliminate unnecessary EIRs.
7. Determine whether a previously prepared EIR could be used with the project.

IMPACT TERMINOLOGY

The following terminology is used to describe the level of significance of impacts:

- A finding of no impact is appropriate if the analysis concludes that the project would not affect the particular topic area in any way.
- An impact is considered less than significant if the analysis concludes that it would not cause substantial adverse change to the environment and requires no mitigation.
- An impact is considered less than significant with mitigation incorporated if the analysis concludes that it would not cause substantial adverse change to the environment with the inclusion of environmental commitments that have been agreed to by the applicant.
- An impact is considered potentially significant if the analysis concludes that it could have a substantial adverse effect on the environment.

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

Discussion

a-b. No Impact. A scenic vista is generally defined as the view of an area that is visually or aesthetically pleasing. The City’s *GP 2030 Update Program EIR (PEIR) (2011)* identifies scenic resources within the city and its sphere of influence (SOI) as the rugged San Marcos Mountains to the east and northeast; various ridgelines, hills, and valleys; creeks and streams; distant mountains to the north; public and private open space with native vegetation; the city’s public parks; a network of hiking and horseback riding trails; various private and public recreation facilities (such as the Guajome Regional Park, a 557-acre, County-owned park that offers a diversity of habitats and outdoor experiences); and buildings of historical and cultural significance (such as the Braun House, Rancho Minerva, Rancho Buena Vista, and the Guajome Ranch House – a National Historic Landmark). Further, the *GP 2030 Update PEIR (2011)* identifies two main view sheds that have been identified within the city and its SOI based on general viewing areas: (1) the San Marcos Mountains to the east and northeast of the city, and (2) canyons in the southwestern portions of the city.

The 3.14 acre site project site is located setback from a commercial and multi-family residential area located along S. Melrose Drive. There are no General Plan or zoning code designated scenic resources within or adjacent to the project site, and the site is not located along a state scenic highway. Furthermore, the proposed project would not substantially impact the observation of the two view sheds identified above, or any scenic resources or historic buildings within a state scenic highway. Consequently, project development would not substantially damage scenic resources or create a substantially adverse effect on a scenic vista; therefore, significant impacts would not occur.

c-d. Less than Significant Impact. The proposed project would not substantially degrade the existing visual character or quality of the project site or surroundings, or create a substantial source of light or glare. The proposed project would alter the visual character of the existing site, which is currently occupied by a church building and parking area along S. Melrose Drive to a redeveloped site with 47 condominium units in buildings that would be architecturally compatible with other residential similar developments to the east. The development of the proposed project would also include extensive landscaping, walkways; parking area and walkway lighting; enclosures, and a variety of perimeter walls and fences.

As described under the project description, the design of all the buildings would be designed with Modern Spanish architectural elements that would create buildings of interest and remain architecturally appropriate within the city. The residential buildings would be three-story buildings with a maximum height of 35 - 40 feet (See Figure 9– Example of Proposed Building Elevation).

Given the visual character of the existing site, the proposed project may be an enhancement of the existing visual quality of the property. An *Operational Photometric Assessment* (Investigative Science and Engineering, Inc., 2016) was prepared to ensure that the installation of outdoor lighting would comply with the lighting requirements of the Development Code. In addition, the proposed buildings would utilize non-reflective glass. As a result, project development would result in less than significant light and glare impacts and no mitigation is required.

II. Agriculture and Forestry Resources <i>Would the project:</i>	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to nonagricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

a-e. No Impact. The subject property is not identified as Prime Farmland, Unique Farmland or Farmland of Statewide Importance on the most recent maps of the California Department of Conservation’s Farmland Mapping and Monitoring Program. The 3.14 acre site project site is located within a mixed commercial and residential area along S. Melrose Drive, in the west- southern-central portion of the City. Further, the site is not located in an area designated as forest land or timberland, and it is not currently in active agricultural use or under a Williamson Act contract. As a result, project development would not convert any farmland to non-agricultural use or forest land to non-forest use, or conflict with existing agricultural or timberland zoning or Williamson Act contracts. Therefore, implementation of the proposed project would not result in significant impacts.

III. Air Quality <i>Would the project:</i>	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
a. Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed qualitative thresholds for ozone precursors?)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

The discussion below is summarized and based on the findings contained within the *Air Quality Analysis for the Vista Melrose 47 Project (Scientific Resources Associated [SRA], 2016)* prepared for the proposed project. This report is on file and available for review with the City’s Planning Division.

Discussion

a. Less Than Significant Impact. Projects that are consistent with existing General Plan documents, which are used to develop air emissions budgets for the purpose of air quality planning and attainment demonstrations, would be consistent with the SDAB’s air quality plans, including the Regional Air Quality Strategy (RAQS) and the State Implementation Plan (SIP). Both of these air quality plans contain strategies for the region to attain and maintain the ambient air quality standards. Provided the project complies with applicable Rules and Regulations adopted by the SDAPCD through their air quality planning process, the project would not conflict with or obstruct implementation of the RAQS or SIP.

The Vista Melrose 47 Project is proposing to construct 47 residences on a site that is currently occupied by a church. The City’s *GP 2030 Update (2011)* currently designates the site as rural residential. The project will increase the density at the site, but is within the housing projections for the City of Vista. The project replaces an existing use (the church), which is a current source of air emissions. The project would therefore not conflict with or obstruct implementation of the RAQS or SIP.

The project will be in compliance with applicable Rules and Regulations adopted by the SDAPCD, and will therefore not conflict with or obstruct implementation of the RAQS or SIP, and would not result in a significant impact.

b. Less Than Significant Impact. Air quality impacts can result from the construction and operation of the project. Construction emissions are finite and include fugitive dust, equipment exhaust, and indirect mobile source emissions associated with construction workers commuting, material hauling, and deliveries. The proposed project would be constructed in one progressive phase estimated to take approximately 15 months. Operational impacts are primarily due to emissions from mobile sources associated with the vehicular travel along roadways and area sources, such as natural gas use for space and water heating.

Air emissions were calculated using the California Emissions Estimator Model (CalEEMod) computer program (California Air Pollution Control Officers Association [CAPCOA] 2013). CalEEMod is a tool used to estimate air emissions resulting from land development projects. The model generates emissions from two basic sources: construction and operation sources.

Significance thresholds for air quality impacts for the SDAPCD are shown in Table AQ-1 below. The identified pollutants include Carbon Monoxide (CO), Reactive Organic Gases (ROG),

Carbon Monoxide. CO is a product of combustion, and the main source of CO in the SDAB is from motor vehicle exhaust. CO is an odorless, colorless gas. CO affects red blood cells in the body by binding to hemoglobin and reducing the amount of oxygen that can be carried to the body's organs and tissues. CO can cause health effects to those with cardiovascular disease, and can also affect mental alertness and vision.

Volatile Organic Compounds. VOC or ROG. While the EPA has not set ambient air quality standards for VOCs, VOCs are considered ozone precursors as they react in the atmosphere to form O₃. Accordingly, VOCs are regulated through limitations on VOC emissions from solvents, paints, processes, and other sources.

Sulfur dioxide. SO_x is a colorless, reactive gas that is produced from the burning of sulfur-containing fuels such as coal and oil, and by other industrial processes. Generally, the highest concentrations of SO_x are found near large industrial sources. SO_x is a respiratory irritant that can cause narrowing of the airways leading to wheezing and shortness of breath. Long-term exposure to SO_x can cause respiratory illness and aggravate existing cardiovascular disease.

Nitrogen Dioxide. NO_x is also a by-product of fuel combustion, and is formed both directly as a product of combustion and in the atmosphere through the reaction of nitrogen oxide (NO) with oxygen. NO_x is a respiratory irritant and may affect those with existing respiratory illness,

Respirable Particulate Matter and Fine Particulate Matter. Respirable particulate matter, or PM₁₀, refers to particulate matter with an aerodynamic diameter of 10 microns or less. Fine particulate matter, or PM_{2.5}, refers to particulate matter with an aerodynamic diameter of 2.5 microns or less. Particulate matter in this size range has been determined to have the potential to lodge in the lungs and contribute to respiratory problems. PM₁₀ and PM_{2.5} arise from a variety of sources, including road dust, diesel exhaust, combustion, tire and brake wear, construction operations and windblown dust. PM₁₀ and PM_{2.5} can increase susceptibility to respiratory infections and can aggravate existing respiratory diseases such as asthma and chronic bronchitis. PM_{2.5} is considered to have the potential to lodge deeper in the lungs.

The Pollutant Threshold Levels outlined in Table AQ-1 as Pounds per Day are per SDAPCD Rule 1501.

**TABLE AQ-1
SDAPCD SIGNIFICANCE THRESHOLDS**

Pollutant	SDAPCD Thresholds (Pounds per Day)
CO	550
ROG	137
SO _x	250
NO _x	250
PM ₁₀	100
PM _{2.5}	100

Source: SDAPCD Rule 1501, 20.2(d)(2)

SPACD Rule 55 (Fugitive Dust Control) requires that construction does not emit visible dust beyond property boundaries for more than 3 minutes in any 60-minute interval. Although Rule 55 does not explicitly require site watering, this analysis assumes that unpaved construction areas would be sprinkled with water at least two times daily during dust-generating activities. This is a standard practice of the construction industry and would most likely be necessary to comply with Rule 55.

CONSTRUCTION-RELATED EMISSIONS

Construction-related activities are temporary, finite sources of air emissions. Sources of construction-related air emissions include:

- Fugitive dust from demolition and grading activities;
- Construction equipment exhaust; and
- Construction-related trips by workers, delivery trucks, and material-hauling trucks.

Construction-related pollutants result from dust raised during demolition and grading, emissions from construction vehicles, and chemicals used during construction. Fugitive dust emissions vary greatly during construction and are dependent on the amount and type of activity, silt content of the soil, and the weather. Vehicles moving over paved and unpaved surfaces, demolition, excavation, earth movement, grading, and wind erosion from exposed surfaces are all sources of fugitive dust. However, construction operations are subject to the requirements established in Regulation 4, Rules 52, 54, and 55, of the SDAPCD's rules and regulations, which limit or require control measures for fugitive dust.

Heavy-duty construction equipment is usually diesel powered. In general, emissions from diesel-powered equipment contain more nitrogen oxides, sulfur oxides, and particulate matter than gasoline-powered engines. However, diesel-powered engines generally produce less CO and less ROG than do gasoline-powered engines. Standard construction equipment includes dozers, rollers, scrapers, dewatering pumps, backhoes, loaders, paving equipment, delivery/haul trucks, jacking equipment, welding machines, pile drivers, and so on.

Emissions associated with construction of this project were calculated using the CalEEMod program assuming that construction would begin in 2017 and last for approximately 15 months. Primary inputs are the numbers of each piece of equipment and the length of each construction stage. CalEEMod divides construction into six stages: demolition, site preparation, grading, building construction, paving, and architectural coatings. All CalEEMod construction defaults regarding phasing and equipment were used for modeling purposes except for those associated with architectural coatings. It was assumed that the architectural coatings phase of construction would occur simultaneously with the building construction phase. The modeled VOC content of architectural coatings was reduced in accordance with SDAPCD Rule 67.0. Construction would include demolition of the existing on-site building and construction of the buildings detailed in the project description. The existing on-site building is approximately 6,655 SF.

Table AQ-2 shows the total projected construction maximum daily emission levels for each criteria pollutant by construction phase. CalEEMod output files for construction emissions are contained in Attachment 1 of the AQ report (on file with the City).

**TABLE AQ-2
ESTIMATED CONSTRUCTION EMISSIONS**

Emission Source	ROG	NO_x	CO	SO_x	PM₁₀	PM_{2.5}
lbs./day						
Demolition						
Grading - Fugitive Dust	-	-	-	-	0.13	0.02
Offroad Diesel	4.05	42.70	33.89	0.04	2.13	1.98
Haul Trucks	0.03	0.37	0.29	0.00	0.03	0.01
Worker Travel	0.05	0.06	0.61	0.00	0.12	0.03
TOTAL	4.13	43.13	34.79	0.04	2.41	2.04
Significance Criteria	137	250	550	250	100	100
Significant?	No	No	No	No	No	No
Grading						
Grading – Fugitive Dust	-	-	-	-	2.41	1.30
Offroad Diesel	3.46	35.98	25.38	0.03	2.04	1.88
Haul Trucks	0.47	6.37	4.86	0.02	0.53	0.20
Worker Travel	0.05	0.06	0.61	0.00	0.12	0.03
TOTAL	3.98	42.41	3085	0.05	5.10	3.41
Significance Criteria	137	250	550	250	100	100
Significant?	No	No	No	No	No	No
Utilities Installation						
Offroad Diesel	2.31	20.07	14.23	0.02	1.51	1.42
Worker Travel	0.04	0.05	0.53	0.00	0.11	0.03
TOTAL	2.35	20.12	14.76	0.02	1.62	1.45
Significance Criteria	137	250	550	250	100	100
Significant?	No	No	No	No	No	No
Paving						
Offroad Diesel	1.66	16.80	12.48	0.02	1.01	0.93
Worker Travel	0.06	0.07	0.81	0.00	0.17	0.04
TOTAL	1.72	16.87	13.29	0.02	1.18	0.97
Significance Criteria	137	250	550	250	100	100
Significant?	No	No	No	No	No	No
Building Construction						
Offroad Diesel	3.10	26.41	18.13	0.03	1.78	1.67
Vendor Trips	0.05	0.42	0.52	0.00	0.04	0.02
Worker Trips	0.11	0.13	1.38	0.00	0.28	0.09

Emission Source	ROG	NOx	CO	SOx	PM ₁₀	PM _{2.5}
lbs./day						
TOTAL	3.26	26.96	20.03	0.03	2.10	1.78
Significance Criteria	137	250	550	250	100	100
Significant?	No	No	No	No	No	No
Architectural Coatings Application						
Architectural Coatings Offgassing	2.18	-	-	-	-	-
Offroad Diesel	0.33	2.19	1.87	0.00	0.17	0.17
Worker Trips	0.02	0.03	0.28	0.00	0.06	0.02
TOTAL	2.53	2.22	2.15	0.00	0.23	0.19
Significance Criteria	137	250	550	250	100	100
Significant?	No	No	No	No	No	No
Maximum Daily Emissions						
TOTAL	8.14	49.28	36.93	0.06	5.1	3.41
Significance Criteria	137	250	550	250	100	100
Significant?	No	No	No	No	No	No

Source: SRA, 2016 * SDAPCD

1. The threshold for VOCs is based on the Environmental Protection Agency General Conformity Rule, which equates VOC and NOX emissions under the clean air act and applies the same limitation on VOC and NOX emissions in ozone non-attainment areas (Federal Register 2010).
2. PM_{2.5} threshold is equated to PM₁₀ as the SDAPCD does not set a limit on PM_{2.5} and approximately 92 percent of PM₁₀ exhaust is PM_{2.5} and 61 percent of mechanical PM₁₀ is PM_{2.5} (SCAQMD 2006).

The emissions summarized in Table AQ-2 are the maximum emissions for each pollutant that would occur during all phases of construction. For example, the maximum daily emissions of ROG occur during the demolition phase, while the maximum daily emissions of all other pollutants occur during the grading phase. Therefore, the estimated worst-case emissions are used for determining impacts for all phases of construction.

Table AQ-2 provides a summary of the emission estimates for construction of the proposed project, assuming standard measures are implemented to reduce emissions, as calculated with the CalEEMod Model. As shown in Table AQ-2, emissions associated with construction are below the significance thresholds for all construction phases and pollutants. Construction of the project would be short-term and temporary. Therefore, the emissions associated with construction of the proposed project would not result in a significant impact on the ambient air quality.

OPERATION-RELATED EMISSIONS

Mobile and Area Source Emissions

Long-term emissions of regional air pollutants occur from operational sources. As shown in Table AQ-3, project operation would not exceed the applicable regional emissions thresholds. These thresholds are designed to provide limits at which project emissions below the threshold would not significantly change regional air quality. Therefore, as project emissions are well below these limits, project operations would not result in regional emissions that would exceed the NAAQS or CAAQS or contribute to existing violations.

To estimate emissions associated with Project-generated traffic, the CalEEMod Model, Version 2013.2.2, was used. Trip generation rates from the traffic analysis (Chen Ryan 2016) were used in the model. The CalEEMod Model contains emission factors from the EMFAC2011 model, which is the latest version of the Caltrans emission factor model for on-road traffic. Project-related traffic was assumed to be comprised of a mixture of vehicles in accordance with the CalEEMod Model default outputs for traffic. This assumption includes light duty autos and light duty trucks (i.e., small trucks, SUVs, and vans) as well as medium- and heavy-duty vehicles that may be traveling to the facility to make deliveries. For conservative purposes, emission factors representing the vehicle mix for 2019 were used to estimate emissions as 2019 was assumed to be the first year of full operation; based on the results of the EMFAC2011 model for subsequent years, emissions would decrease on an annual basis from 2019 onward due to phase-out of higher polluting vehicles and implementation of more stringent emission standards that are taken into account in the model. Emissions associated with area sources (energy use and landscaping activities) were also estimated using the default assumptions in the CalEEMod Model.

**TABLE AQ-3
ESTIMATED OPERATIONAL EMISSIONS**

Emission Source	ROG	NOx	CO	SOx	PM10	PM2.5
Summer, lbs./day						
Area Sources	2.83	0.05	3.90	0.00	0.08	0.08
Energy Use	0.02	0.16	0.07	0.00	0.01	0.01
Vehicular Emissions	1.18	2.59	12.09	0.03	2.14	0.74
TOTAL	4.03	2.80	16.05	0.03	2.41	0.74
Significance Criteria	137	250	550	250	100	100
Significant?	No	No	No	No	No	No
Winter, lbs./day						
Area Sources	2.83	0.05	3.90	0.00	0.08	0.08
Energy Use	0.02	0.16	0.07	0.00	0.01	0.01
Vehicular Emissions	1.25	2.75	12.66	0.03	2.31	0.64
TOTAL	4.10	2.96	16.63	0.03	2.41	0.74
Significance Criteria	137	250	550	250	100	100
Significant?	No	No	No	No	No	No
Annual, tons/year						
Area Sources	0.49	0.00	0.35	0.00	0.00	0.00
Energy Use	0.00	0.03	0.01	0.00	0.00	0.00
Vehicular Emissions	0.21	0.50	2.24	0.01	0.41	0.11
TOTAL	0.71	0.53	2.61	0.01	0.42	0.12
Significance Criteria	15	40	100	40	15	15
Significant?	No	No	No	No	No	No

Source: SRA, 2016

As indicated in Table AQ-3, the operational vehicular emission levels of the proposed project would not exceed the significance thresholds for any identified pollutant. Based on the anticipated construction operations and traffic levels generated by the proposed project, exceedance of federal and state air quality thresholds would not occur with project implementation; consequently, less than significant impacts would be generated from project implementation.

c. Less Than Significant Impact. A project could result in a cumulatively significant impact if it would generate emissions that constitute a cumulatively considerable net increase of PM₁₀ or exceed quantitative thresholds for O₃ precursors, oxides of nitrogen (NO_x) and volatile organic compounds (VOCs). The project site is in an area that is largely developed, and emissions from existing projects are part of the air quality background.

No specific projects were identified in the immediate vicinity of the project that would be likely to be constructed simultaneously with the project. Furthermore, the impacts associated with the project are below the significance thresholds. Because the Project's emissions are less than significant, the combined emissions during construction and operations would not be expected to result in a cumulatively considerable impact to air quality.

d. Less Than Significant Impact. Projects involving traffic impacts may result in the formation of locally high concentrations of CO, known as CO "hot spots." According to Caltrans guidance (University of California Davis 1998), CO "hot spots" have the possibility of forming at intersections with a level of service (LOS) of E or F. Due to the small size of the project, the project would not generate substantial traffic that would result in a degradation in LOS at nearby intersections. It is therefore anticipated to no CO "hot spots" would result from project-related traffic.

Construction and operations would result in minor emissions of TACs from construction equipment and motor vehicles. The project is a residential development and is not a major source of TACs. The amounts of TACs that would be generated from construction equipment and motor vehicles is negligible and would not result in a significant impact to sensitive receptors.

e. Less Than Significant Impact. During construction, diesel equipment operating at the site may generate some nuisance odors; however, due to the distance of sensitive receptors to the project site and the temporary nature of construction, odors associated with project construction would not be significant.

According to the SCAQMD CEQA Air Quality Handbook, land uses associated with odor complaints include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting activities, refineries, landfills, dairies, and fiberglass molding operations. The Vista Melrose 47 Project is a residential project without any sources of objectionable odors that would affect a substantial number of persons. Odor impacts would not be significant.

IV. Biological Resources <i>Would the project:</i>	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Conflict with the provisions of an adopted Habitat Conservation Plan (HCP), Natural Community Conservation Plan (NCCP), or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

DISCUSSION

a - f. No Impact. The 3.14-acre site has been disturbed and developed having undergone grading and development as part of the existing church and parking lot that remains on-site. There is ornamental landscaping within the site and along the sides of the site perimeter including the slope on the east side of the site adjacent to Live Oak Road. Due to the disturbed nature of the site, no native habitat or species exist on-site. As a result, there are no sensitive habitats (including wetlands, riparian areas or wildlife corridors) or vegetation, or Special-Status or MHCP-Covered Species on-site. Therefore, there would not be any impacts to any biological resources as a result of implementation of the proposed project.

V. Cultural Resources <i>Would the project:</i>	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
a. Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code §21074?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Disturb any human remains, including those interred outside of dedicated cemeteries (see Public Resources Code, Ch. 1.75, § 5097.98, and Health and Safety Code § 7050.5(b))?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The discussion below is summarized and based on the findings contained within the *Cultural Resources Survey, (Cultural Report)* (Helix, August 2016) that was prepared for the proposed project. The report details the methods and results of the cultural resources survey, which included a records search, Sacred Lands File search, Native American outreach, a review of historic maps and aerial photographs, a field survey and procedures followed in compliance with SB 18 and AB 52. The report is on file and available for review in the City’s Planning Division office.

Discussion

a. No Impact. As discussed in the Existing Environmental Setting in Chapter 2 of this document, the project site contains a church, parking lot, and ornamental landscaping, and has been almost entirely disturbed and developed. There are no historic resources on-site and therefore no impacts to historic resources would occur with project implementation.

b - d. Less Than Significant with Mitigation. As stated in the *Cultural Report* (Helix, 2016), the site of the proposed project is located within the west southern-central portion of Vista. The foothills of northern San Diego County, such as those at the base of both the San Marcos and Merriam Mountains, provided a rich environment that was used by Native American populations for thousands of years. Dozens of archaeological sites, evidenced by bedrock milling, flaked stone tools, ground stone implements, and fire-affected rock from hearths, are found at the base of these mountains as well as the valleys that separate the two.

As stated in the *Cultural Report* (Helix, 2016), a records search was received from the South Coastal Information Center (SCIC) for the project site and a one-mile radius. SCIC has a record of 42 cultural resources studies conducted within the records search area, none of which covered the project area. Thirty-five resources have been recorded within the one mile search radius; one of them is mapped just to the southwest of the project site. Thirteen of these sites are bedrock milling features or complexes, four of which had artifacts or ecofacts (marine shell) present. Five are prehistoric isolates, and three are lithic scatters, one of which consists of lithic tools, debitage, and a ground stone metate fragment. A total of seven of the resources contain marine shell scatters or shell middens; of these, two are shell midden sites with lithic scatters, two are marine shell and lithic scatters, one consists of a shell midden with no associated artifacts, and one site is a shell scatter with one fragment of Tizon Brown Ware ceramic. Four of the recorded resources are historic homesteads, one of which also has a prehistoric marine shell scatter. One of the recorded resources is a eucalyptus grove planted in 1888 by local residents in order to provide lumber for the growing community. Two of the recorded resources are historic trails; one of these is mapped to the southwest of the project site. It is recorded as “the traditional Indian trail from Mission San Luis Rey through the San Marcos plains enroute to the Cuyamaca Mountains”.

IMPACTS ON ARCHAEOLOGICAL RESOURCES

One isolate (mono fragment) was observed within the project area during the field survey, as well as one fragment of petrified wood that might be a manuport.² No additional cultural resources were observed within the project area. This isolated find does not meet the criteria for listing in the California Register of Historical Resources: it is not associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage (A); is not associated with the lives of persons important in our past (B); does not embody the distinctive characteristics of a type, period, region, or method of construction, or represent the work of an important creative individual, or possess high artistic values (C); and has not yielded, and is not likely to yield, information important in prehistory or history (D). Therefore, the isolate is not a significant resource under CEQA or the guidelines of the City, and impacts to the isolate would not constitute significant impacts.

Although no significant impacts to cultural resources have been identified according to the *Cultural Report* (Helix, 2016), the ground surface in much of the project area could not be seen. Although much of the project site has been graded to formational soils according to the *Geotech Report* (VME, 2016), there is a potential for cultural material in the areas that have not been cut, as well as in the fill soil (both engineered fills and undocumented fills). Soils are often categorized as “undocumented fill” because they have been subject to past disturbance, although the soil may be from the project site rather than imported. Further, as noted in the *Cultural Report* (Helix, 2016), the surrounding area is rich in cultural resources, both historic and pre-contact. Based on this information, there is a potential for cultural resources to be encountered during grading and construction.

Due to the presence of Native American archaeological/cultural resources, unforeseen archaeological resources could be encountered during ground-disturbing activities, which could result in potentially significant impacts. However, with the implementation of Mitigation Measures CR-1 to CR-6 (below), these impacts would be reduced to less than significant levels.

MITIGATION MEASURES

CR-1 Due to the potential for uncovering unknown sub-surface archaeological resources, cultural resource mitigation monitoring shall be undertaken for any and all on-site and off-site ground disturbing activities (as specified in CR-2). If on-site ground disturbing activities (e.g., exploratory trenching or excavations) are required for any informal or formal solicitation (written or spoken) of construction bids, all applicable requirements identified in the measures CR-2 to CR-7 below shall be undertaken by the Applicant and/or Owner.

² A “manuport” is a natural object that has been moved from its original context by human agency, but otherwise remains unmodified.

CR-2 Cultural resource mitigation monitoring shall be conducted 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 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 imported fill materials (note: all fill materials shall be absent of any and all cultural resources); and related off-site road improvements or utility installations in any existing public or private easements. 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 all applicable pre-construction meetings with the Contractor and/or associated Subcontractors.
- 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 Qualified Archaeologist and/or TCA Native American Monitor may halt or redirect 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, in consultation with the San Luis Rey Band of Mission Indians (San Luis Rey Band). 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.
- 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, a Data Recovery Plan may be authorized by the City as the Lead Agency under CEQA. If data recovery is required, then the San Luis Rey Band shall be notified and consulted in drafting and finalizing any such recovery plan.

CR-3 Prior to the issuance of a Grading Permit, and subject to approval of terms by the City, the Applicant or Owner, and/or Contractor shall enter into a Pre-Excavation Agreement with the San Luis Rey Band. A copy of the signed Agreement shall be forwarded to the City Planner. The purpose of this agreement shall be to formalize protocols and procedures between the Applicant or Owner, and/or Contractor, and the San Luis Rey Band for the protection and treatment of, but not limited to, such items as Native American human remains, funerary objects, cultural and religious landscapes, ceremonial items, traditional gathering areas and cultural items, located and/or discovered through the cultural resource mitigation monitoring program in conjunction with the construction of the proposed project, including additional archaeological surveys and/or studies, excavations, geotechnical investigations, soil surveys, grading, or any other ground disturbing activities.

- CR-4** Prior to the issuance of a Grading Permit, the Applicant or Owner, and/or Contractor shall provide a written and signed letter to the City's Director of Community Development, stating that a Qualified Archaeologist and a TCA Native American Monitor have been retained at the Applicant or Owner and/or Contractor's expense to implement the monitoring program, as described in the pre-excavation agreement. A copy of the letter shall be included in the Grading Plan Submittals for the Grading Permit.
- CR-5** Prior to the release of the Grading Bond, a Monitoring Report and/or Evaluation Report, which describes the results, analysis and conclusions of the cultural resource mitigation monitoring efforts (such as, but not limited to, a Research Design, Data Recovery Program, etc.), shall be submitted by the Qualified Archaeologist, along with the TCA Native American Monitor's notes and comments, to the City's Director of Community Development for review, if deemed necessary.
- CR-6** The landowner shall relinquish ownership of all cultural resources collected during the cultural resource mitigation monitoring conducted during all ground disturbing activities, and from any previous archaeological studies or excavations on the project site to the San Luis Rey Band for respectful and dignified treatment and disposition in accordance with the Tribe's cultural and spiritual traditions. All cultural materials that are associated with burial and/or funerary goods will be repatriated to the Most Likely Descendant as determined by the Native American Heritage Commission (NAHC) per California Public Resources Code Section 5097.98.

IMPACTS ON TRIBAL CULTURAL RESOURCES

According to the *Cultural Report* (Helix, 2016), the NAHC was contacted to conduct a check of its Sacred Lands File, and they indicated that no Native American cultural resources are recorded. As previously noted above, Native American monitors were present during the fieldwork for the survey. As stated in the *Cultural Report* (Helix, 2016), “[i]t must be noted that all Native American archaeological resources are of significance to the Luiseño people, but no Traditional Cultural Resources have been identified within or in the immediate vicinity of the project area.” City staff consulted with California Native American representatives per the requirements of SB 18 and AB 52 on the potential impacts of the project. It was agreed that there could be impacts to unknown tribal cultural resources during project construction (an “*inadvertent discovery*”), which would be a potentially significant impact under CEQA. As a result, it was agreed that because 100 percent of the site was to be developed, Native American monitoring would be required for all ground disturbing activities within the potential Area of Project Effect (APE). Therefore, with the implementation of Mitigation Measures CR-1 to CR-6, above, and CR-7, below, potentially significant impacts to unknown tribal cultural resources would be reduced to less than significant impacts.

IMPACTS ON HUMAN REMAINS

The project site does not contain, and is not adjacent to, any known cemeteries. Although disturbance of human remains is unlikely, it is possible that on-site and/or off-site ground disturbing activities could unearth previously unknown vestiges. This would be considered a potentially significant impact. However, implementation of Mitigation Measure CR-7, below, would ensure that human remains were treated with dignity and as specified by law, and would reduce impacts to less than significant levels.

MITIGATION MEASURE

CR-7 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 NAHC within 24 hours. The NAHC would 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, and the analysis of the remains shall only occur on-site in the presence of a TCA Native American monitor.

VI. Geology and Soils <i>Would the project:</i>	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
a. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
1. 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 known fault? Refer to Division of Mines and Geology Special Pub 42.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2. Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4. Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Result in substantial soil erosion, or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the Project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The discussion below is summarized and based on the findings contained within the Geotechnical Update Compaction Report [Geotechnical Report] (Vinje & Middleton Engineering, Inc. (VME), 2016) prepared for the Vista Melrose 47 Project. The report is on file and available for review in the City’s Planning Division office.

Discussion

a1. No Impact. The purpose of the Alquist-Priolo Earthquake Fault Zoning Act is to mitigate the hazard of surface faulting by preventing the construction of buildings used for human occupancy over an area with known faults. Unlike damage from ground shaking, which can occur at great distances from the fault, impacts from fault rupture are limited to the immediate area of the fault zone where the fault breaks along the grounds surface. The project site does not contain, nor is it adjacent to, an Alquist-Priolo Special Study Zone Area. Therefore, impacts from fault rupture would not be expected to occur within the project area, and no impacts would arise from project development.

a2 - a4. Less than Significant Impact. The project area, like most of southern California, could be subject to such seismic events as strong ground shaking and seismically-induced settlement such as liquefaction, which could potentially expose people and/or structures to substantially adverse effects. The ground motion characteristics of any future earthquakes in the region would depend on the characteristics of the generating fault, the distance to the epicenter, the magnitude of the earthquake, and the site-specific geologic conditions. Major faults in the region could be a source of a strong seismic-related movement at the project site. The Rose Canyon Fault is the closest fault zone to the project site, located approximately 10 miles to the west under the Pacific Ocean. Other faults that could potentially affect the site include the Newport Inglewood (off-shore) fault located approximately 11 miles to the west-northwest; the Julian and Temecula sections of the Elsinore fault located approximately 20 miles to east and north respectively; the Coronado Bank fault located approximately 25 miles away to the southwest; the San Jacinto fault situated roughly 45 miles to the east; and the San Andreas fault located approximately to the east. Due to the dense nature of the underlying soils, and lack of a shallow groundwater table, the potential for seismically-induced settlement such as liquefaction or landslides is considered very low.

Because of the potential of seismic events to impact structures in Vista and southern California in general, the proposed buildings are required to be constructed in compliance with the seismic safety standards set forth in the California Building Code (CBC), as amended.³ Compliance with the CBC would include the incorporation of: 1) seismic safety features to minimize the potential for significant effects as a result of earthquakes; 2) proper building footings and foundations; and 3) construction of the building structure so that it would withstand the effects of strong ground shaking.

According to the *Geotech Report* (VME, 2016) prepared for the project site, the site is underlain by Eocene age siltstone-sandstone rocks commonly designated as the Santiago Formation. Site natural surfaces are mantled by shallow clay-bearing topsoil. Shallow to moderate fill deposits on-site include engineered fills beneath the existing building and undocumented fills which are intact along the south and east portions of the site. The underlying Santiago Formation is known to be locally associated with landslides and instability in both graded and natural slope configurations (VME, 2016). Recent test pits, excavated as part of the geotechnical evaluation for the proposed project, exposed fractured and potentially unstable rocks along the east margin of the site. As exposed, the rocks are characterized by chalky deposits that are highly fractured and chaotic in appearance. The *Geotech Report* (VME 2016) indicates that these marginally stable rocks should be removed and replaced with compacted fill deposits.

As required under the City's Grading Ordinance (Municipal Code Chapter 17.56), the recommendations in the *Geotechnical Report* (VME, 2006) (or a revised geotechnical report if required by the City Engineer) must be followed during all site preparation and grading activities. The City's Building Department will also review the building plans through building plan checks, issuance of a building permit, and inspection of the building during construction, which would ensure that all required CBC seismic safety measures are incorporated into the building. Compliance with the CBC, the geotechnical recommendations of a *Geotechnical Report*, and the Building Department's review process, permit application, and inspection, would result in less than significant impacts; consequently, no mitigation measures are required.

b - d. Less than Significant Impact. Construction of the project would not increase the potential for on-site or off-site soil erosion, landslides, lateral spreading, subsidence, liquefaction, collapse, or shrinking and swelling (due to soil expansion) to occur. Before construction begins, the project applicant or contractor is required to prepare a Storm Water Pollution Prevention Plan (SWPPP) and implement standard erosion control measures and storm water construction BMPs (through the grading permit process) that would minimize potentially significant impacts from soil erosion during construction.

3. The CBC incorporates relevant sections of the Uniform Building Code of the International Conference of Building Officials.

In addition, as noted above, as required under the City's Grading Ordinance, the recommendations in the *Geotech Report* (VME, 2015) (or a revised geotechnical report if required by the City Engineer) must be followed during site preparation and grading activities. In addition, the proposed buildings are required to be constructed in compliance with the seismic safety standards set forth in the CBC. Therefore, potential impacts from soil erosion, seismic instability, or soil structure would be less than significant.

e. No Impact. Development of the proposed project would include capping and removing an existing sewer line, extending a new sewer main to the site and installation of sewer laterals to the new residences. There are no existing or proposed septic tanks or alternative wastewater disposal systems. Therefore, impacts would not occur from development of the project.

f. Less Than Significant Impact with Mitigation. The probability of discovering paleontological resources depends on the geologic formation being excavated and the depth and volume of the excavation. Sedimentary rocks, such as those found in coastal areas, usually contain fossils. Granite rocks, such as those found in inland areas, usually will not contain fossils. According to the *Geotech Report* (VME, 2016) prepared for the proposed project, on-site fieldwork revealed that the underlying geology of the project site (e.g., in the northeastern, eastern and southeastern areas that were not graded when the church was constructed) is comprised of bedrock consisting of Eocene Age rocks, commonly referred to the Santiago Formation. According to the 2011 *GP 2030 PEIR* (Chapter 4.5), Eocene age Santiago Formation bedrocks such as those found beneath the site have a high sensitivity for paleontological resources. The *GP 2030 PEIR* (2011) recommends inclusion of mitigation for any projects with high paleontological sensitivity that also propose substantial trenching or grading at depths greater than ten feet and a total cut amount of more than 1,000 cu. yds. within these areas. It appears that the installation of the new 8-inch sewer line, the swimming pool, and the hydromodification vault may reach excavation depths greater than ten feet, and cut of more than 1,000 cu. yds. of material in areas where Santiago Formation bedrock exists. This would amount to a potentially significant impact to paleontological resources. However, with the implementation of Mitigation Measure GEO-1, below, potential impacts to paleontological resources would be reduced to less than significant levels.

MITIGATION MEASURE

GEO-1 Prior to the issuance of any grading and/or excavation permit, the project Applicant or Owner or General Contractor must provide written proof to the City Planner that a Qualified Paleontologist has been retained to observe all on-site earth disturbing activities during trenching and installation of sewer lines, and/or swimming pool, and/or hydromodification vault and/or similar utilities for the project. All fossil materials recovered during mitigation monitoring shall be cleaned, identified, catalogued and analyzed in accordance with standard professional practices. The results of the field work and laboratory analysis shall be submitted in a technical report, and the entire collection transferred to an approved facility.

VII. Greenhouse Gas Emissions <i>Would the project:</i>	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

The discussion below is summarized and based on the findings contained within the *Greenhouse Gas Analysis for the Vista Melrose 47 Project (GHG Report)* prepared by Scientific Resources Associated June 22, 2016, (SRA, 2016) prepared for the proposed project. This report is on file and available for review in the City’s Planning Division office.

Discussion

a - b. Less than Significant Impact.

BACKGROUND

Global Climate Change (or GCC) refers to changes in the average climatic conditions on Earth as a whole, including changes in temperature, wind patterns, precipitation, and storms. Global warming, a related concept, is the observed increase in average temperature of the Earth’s surface and atmosphere caused by increased greenhouse gas (GHG) emissions, which can contribute to changes in global climate patterns resulting in global climate change.⁴ In response to Executive Order (EO) S-3-05 (June 2005), which declared California’s vulnerability to climate change, the California Global Warming Solutions Act of 2006, Assembly Bill 32 (AB 32) was signed into effect on September 27, 2006. In passing the bill, the California Legislature found that “*Global warming poses a serious threat to the economic well-being, public health, natural resources, and the environment of California...*” (California Health & Safety Code, Division 25.5, Part 1).

General Principles

According to the *GHG Report* (SRA, 2016), global temperatures are moderated by naturally occurring atmospheric gases, including water vapor, CO₂, CH₄ and N₂O, which are known as greenhouse gases (GHGs). These gases allow solar radiation (sunlight) into the Earth’s atmosphere, but prevent radiative heat from escaping, thus warming the Earth’s atmosphere, much like a greenhouse. GHGs are emitted by both natural processes and human activities. Without these natural GHGs, the Earth’s temperature would be about 61 degrees Fahrenheit cooler. Emissions from human activities, such as electricity production and vehicle use, have elevated the concentration of these gases in the atmosphere. For example, data from ice cores indicate that CO₂ concentrations remained steady prior to the current period for approximately 10,000 years; however, concentrations of CO₂ have increased in the atmosphere since the industrial revolution.

GCC and GHGs have been at the center of a widely contested political, economic, and scientific debate. Although the conceptual existence of GCC is generally accepted, the extent to which GHGs generally, and specifically how anthropogenic-induced GHGs (mainly CO₂, CH₄ and N₂O) contribute to it, remains a source of debate. The State of California has been at the forefront of developing solutions to address GCC.

4 . City of Vista Climate Action Plan (CAP), 2012-2013 edition.

The United Nations Intergovernmental Panel on Climate Change (IPCC) constructed several emission trajectories of GHGs needed to stabilize global temperatures and climate change impacts. The IPCC concluded that a stabilization of GHGs at 400 to 450 ppm CO₂ equivalent concentration is required to keep global mean warming below 35.6° Fahrenheit (2° Celsius), which is assumed to be necessary to avoid dangerous climate change (Association of Environmental Professionals 2007).

State law defines greenhouse gases as any of the following compounds: CO₂, CH₄, N₂O, and fluorinated gases (i.e., hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride). CO₂, followed by CH₄ and N₂O, are the most common GHGs that result from human activity. The three primary GHGs discussed in the *GHG Report* (SRA, 2016) are described below. A quantitative analysis of fluorinated gases was not included in the report because the other gases discussed below are more common and generally occur in greater quantities for longer periods of time. The three principal GHGs are described below.

- CO₂ is released into the atmosphere through the burning of fossil fuels (oil, natural gas, and coal), solid waste, trees and wood products, and also as a result of other chemical reactions (e.g., cement production) and deforestation. Carbon dioxide is also removed from the atmosphere (or “sequestered”) when it is absorbed by plants as part of the biological carbon cycle.
- CH₄ is emitted during the production and transport of coal, natural gas, and oil. Methane emissions also result from agricultural practices, such as the raising of livestock, and by the decomposition of organic waste in landfills.
- N₂O is emitted during agricultural and industrial activities, as well as during the burning of fossil fuels and solid waste.

Sources and Global Warming Potentials of GHGs

Anthropogenic sources of CO₂ include combustion of fossil fuels (coal, oil, natural gas, gasoline and wood). CH₄ is the main component of natural gas and also arises naturally from anaerobic decay of organic matter. Accordingly, anthropogenic sources of CH₄ include landfills, fermentation of manure and cattle farming. Anthropogenic sources of N₂O include combustion of fossil fuels and industrial processes such as nylon production and production of nitric acid. Other GHGs are present in trace amounts in the atmosphere and are generated from various industrial or other uses.

According to the *GHG Report* (SRA, 2016), each GHG has a different potential for trapping heat in the atmosphere, called global warming potential (GWP). GWP for a gas is a measure of the total energy that a gas absorbs over a particular period of time (usually 100 years), compared to CO₂. CO₂ is the primary GHG emitted through human activities and is typically used as a baseline in the analysis and reporting of GHGs. GHG emissions are typically reported in metric tons (MT) of carbon dioxide equivalent (CO₂e) units, or in millions of metric tons (MMT). When dealing with an array of emissions, the gases are converted to their carbon dioxide equivalents for comparison purposes. The global warming potential for CH₄ and N₂O is 21 and 310, respectively.⁵

REGULATORY FRAMEWORK

The *GHG Report* (SRA, 2016) identifies a number of international, national, State, and local requirements, regulations, and standards regarding GHG emissions. However, the section below focuses on State and City regulations and standards. See the *GHG Report* (SRA, 2016) for detailed information on international and national GHG emissions standards.

State of California

The following subsections describe regulations and standards that have been adopted by the State of California to address GCC issues.

⁵ U.S. Environmental Protection Agency, September 9, 2013, <http://www.epa.gov/climatechange/ghgemissions/>.

Assembly Bill (AB) 32, the California Global Warming Solutions Act of 2006 - In September 2006, Governor Schwarzenegger signed AB 32 into law. AB 32 required that, by January 1, 2008, the California Air Resources Board (CARB) determine what the statewide GHG emissions level was in 1990, and approve a statewide GHG emissions limit that is equivalent to that level, to be achieved by 2020. The CARB adopted its *AB 32 Scoping Plan* in December 2008 (CARB, 2008a), which provided estimates of the 1990 GHG emissions level and identified sectors for the reduction of GHG emissions. The CARB estimated that the 1990 GHG emissions level was 427 MMT net CO_{2e} (CARB, 2007). The CARB estimates that a reduction of 173 MMT net CO_{2e} emissions below business-as-usual would be required by 2020 to meet the 1990 levels. This amounts to roughly a 28.35 percent reduction from projected business-as-usual levels in 2020. In 2011, the CARB developed a *Supplement to the AB 32 Scoping Plan (Scoping Plan Supplement)* (CARB, 2011). The *Supplement* updated the emissions inventory based on current projections for “business as usual” (BAU) emissions to 506.8 MT of CO_{2e}. The updated projection included adopted measures (Pavley 1 Fuel Efficiency Standards, 20 percent Renewable Portfolio Standard (RPS) requirement, etc.), and estimated that an additional 16 percent reduction below the estimated BAU levels would be necessary to return to 1990 levels by 2020.

In 2014, the CARB published its *First Update to the Climate Change Scoping Plan* (CARB, 2014). This update indicates that the State is on target to meet the goal of reducing GHG emissions to 1990 level by 2020. The *First Update* tracks progress in achieving the goals of AB 32, and lays out a new set of actions that will move the State further along the path to achieving the 2050 goal of reducing emissions to 80 percent below 1990 levels. While the *First Update* discusses setting a mid-term target, the plan does not yet set a quantifiable target toward meeting the 2050 goal.

Senate Bill (SB) 97 - SB 97, enacted in 2007, amends the CEQA statute to clearly establish that GHG emissions and the effects of GHG emissions are appropriate subjects for CEQA analysis. SB 97 directed the Governor’s Office of Planning and Research (OPR) to develop draft CEQA guidelines “for the mitigation of greenhouse gas emissions or the effects of OPR published a technical advisory on CEQA and climate change on June 19, 2008. The guidance did not include a suggested threshold, but stated that the OPR had asked the CARB to “recommend a method for setting thresholds which will encourage consistency and uniformity in the CEQA analysis of greenhouse gas emissions throughout the state.”

The OPR technical advisory does recommend that CEQA analyses include the following components:

- Identification of greenhouse gas emissions;
- Determination of significance; and
- Mitigation of impacts, as needed and as feasible.

On December 31, 2009, the California Natural Resources Agency adopted the proposed amendments to the State CEQA Guidelines. These amendments became effective on March 18, 2010.

Executive Order (EO) S-3-05 - EO S-3-05, signed by Governor Schwarzenegger on June 1, 2005, calls for a reduction in GHG emissions to 1990 levels by 2020 and for an 80 percent reduction in GHG emissions below 1990 levels by 2050. EO S-3-05 also calls for the California EPA (CalEPA) to prepare biennial science reports on the potential impact of continued GCC on certain sectors of the California economy. The first of these reports, “Our Changing Climate: Assessing Risks to California”, and its supporting document “Scenarios of Climate Change in California: An Overview” were published by the California Climate Change Center in 2006.

EO B-30-15 - EO B-30-15 was enacted by the Governor on April 29, 2015. EO B-30-15 establishes an interim GHG emission reduction goal for the state of California to reduce GHG emissions to 40 percent below 1990 levels by the year 2030. This EO directs all state agencies with jurisdiction over GHG-emitting sources to implement measures designed to achieve the new interim 2030 goal, as well as the pre-existing, long-term 2050 goal identified in EO S-3-05 to reduce GHG emissions to 80 percent below 1990 levels by the year 2050. The EO directs CARB to update its Scoping Plan to address the 2030 goal. It is anticipated that the CARB will develop statewide inventory projection data for 2030 and commence efforts to identify reduction strategies capable of securing emission reductions that allow for achievement of the new interim goal for 2030. With regards to the local agencies, the EO does not require local agencies to take any action to meet the new interim GHG reduction threshold as it was not adopted by a public agency through a public review process that requires analysis pursuant to CEQA guidelines section 15064.4. In addition, it has not been subsequently validated by a statute as an official GHG reduction target of the State of California. The EO itself states it is “not intended to create, and does not, create any rights or benefits, whether substantive or procedural, enforceable at law or in equity, against the State of California, its agencies, departments, entities, officers, employees, or any other person.”

EO S-21-09 - EO S-21-09 was enacted by the Governor on September 15, 2009. EO S-21-09 required that the CARB, under its AB 32 authority, adopt a regulation by July 31, 2010 that sets a 33 percent renewable energy target. Under EO S-21-09, the CARB will work with the Public Utilities Commission and California Energy Commission to encourage the creation and use of renewable energy sources, and will regulate all California utilities. The CARB will also consult with the Independent System Operator and other load balancing authorities on the impacts on reliability, renewable integration requirements, and interactions with wholesale power markets in carrying out the provisions of the EO. The order required the CARB to establish highest priority for those resources that provide the greatest environmental benefits with the least environmental costs and impacts on public health.

California Code of Regulations Title 24 - Although not originally intended to reduce greenhouse gas emissions, Title 24 of the California Code of Regulations, Part 6: California’s Energy Efficiency Standards for Residential and Nonresidential Buildings, were first established in 1978 in response to a legislative mandate to reduce California’s energy consumption. The standards are updated periodically to allow for the consideration and possible incorporation of new energy efficiency technologies and methods. Energy efficient buildings require less electricity, natural gas, and other fuels. Electricity production from fossil fuels and on-site fuel combustion (typically for water heating) results in greenhouse gas emissions. Therefore, increased energy efficiency results in decreased greenhouse gas emissions. Accordingly, Title 24 in the CALGreen Building Code is now a part of the statewide strategy for reducing GHG emissions, and is the only statewide plan for reduction of GHG emissions that every local agency must adopt in a public hearing by adopting the state building code. Consistent with CALGreen, the state recognized that GHG reductions would be achieved through buildings that exceed minimum energy-efficiency standards, decrease consumption of potable water, reduce solid waste during construction and operation, and incorporate sustainable materials. CARB projects that an additional 26.3 MMTCO_{2e} could be reduced through expanded green building (CARB 2008). Compliance with Title 24 of the CALGreen Building Code is thus a vehicle to achieve statewide electricity and natural gas efficiency targets, and lower GHG emissions from waste and water transport sectors.

The GHG emission inventory was based on Title 24 standards as of October 2013; however, Title 24 has been updated as of 2016. These updated Title 24 standards will go into effect January 1, 2017. It is estimated that the Title 24 standards as of 2016 will improve energy efficiency in single-family dwellings by 28 percent.

SB 1078, SB 107, and EO S-14-08 - SB 1078 initially set a target of 20 percent (%) of energy to be sold from renewable sources by the year 2017. The schedule for implementation of the RPS was accelerated in 2006 with the Governor's signing of SB 107, which accelerated the 20% RPS goal from 2017 to 2010. On November 17, 2008, the Governor signed EO S-14-08, which requires all retail sellers of electricity to serve 33 percent of their load with renewable energy by 2020. The Governor signed EO S-21-09 on September 15, 2009, which directed CARB to implement a regulation consistent with the 2020 33 percent (%) renewable energy target by July 31, 2010. The 33% RPS was adopted in 2010.

State Standards Addressing Vehicular Emissions - California AB 1493 (Pavley) enacted on July 22, 2002, required the CARB to develop and adopt regulations that reduce greenhouse gases emitted by passenger vehicles and light duty trucks. Regulations adopted by CARB would apply to 2009 and later model year vehicles. CARB estimated that the regulation would reduce climate change emissions from light duty passenger vehicle fleet by an estimated 18 percent in 2020 and by 27 percent in 2030 (AEP 2007). Once implemented, emissions from new light-duty vehicles are expected to be reduced in San Diego County by up to 21 percent by 2020.

The CARB has adopted amendments to the Pavley regulations that reduce GHG emissions in new passenger vehicles from 2009 through 2016. The amendments, approved by the CARB Board on September 24, 2009, are part of California's commitment toward a nation-wide program to reduce new passenger vehicle GHGs from 2012 through 2016, and prepare California to harmonize its rules with the federal rules for passenger vehicles.

EO S-01-07 - EO S-01-07 was enacted by the Governor on January 18, 2007, and mandates that: 1) a statewide goal be established to reduce the carbon intensity of California's transportation fuels by at least 10 percent by 2020; and 2) a Low Carbon Fuel Standard ("LCFS") for transportation fuels be established for California. According to the SDCGHGI, the effects of the LCFS would be a 10 percent reduction in GHG emissions from fuel use by 2020.¹⁴ On April 23, 2009, the CARB adopted regulations to implement the LCFS.

SB 375 - SB 375 finds that GHG from autos and light trucks can be substantially reduced by new vehicle technology, but even so "it will be necessary to achieve significant additional greenhouse gas reductions from changed land use patterns and improved transportation. Without improved land use and transportation policy, California will not be able to achieve the goals of AB 32." Therefore, SB 375 requires that regions with metropolitan planning organizations adopt sustainable communities strategies, as part of their regional transportation plans, which are designed to achieve certain goals for the reduction of GHG emissions from mobile sources.

SB 375 also includes CEQA streamlining provisions for "transit priority projects" that are consistent with an adopted sustainable communities strategy. As defined in SB 375, a "transit priority project" shall: (1) contain at least 50 percent residential use, based on total building square footage and, if the project contains between 26 and 50 percent nonresidential uses, a floor area ratio of not less than 0.75; (2) provide a maximum net density of at least 20 dwelling units per acre; and (3) be within 0.5 mile of a major transit stop or high quality transit corridor.

City of Vista

General Plan 2030 Update - In December 2011, the City adopted GP 2030 (City of Vista, 2011a) and certified the accompanying Program EIR (PEIR) (City of Vista, 2011b). The PEIR included Mitigation Measure MCC1, which required the City to implement a quantified Climate Action Plan (CAP) within 24 months of adoption of GP 2030. GP 2030 includes a Resource Conservation and Sustainability Element, which includes the following: “RCS Goal 2: Reduce GHG emissions from community activities and municipal facilities and operations within the City boundaries to support the State’s efforts under Assembly Bill 32, Senate Bill 375, and other State and federal mandates, and to mitigate the community’s contributions to global climate change.” The GP 2030 policy that applies to the project includes the following:

“RCS Policy 2.7: Through California Environmental Quality Act (CEQA) documents, evaluate and disclose the contribution new projects could have on climate change and require mitigation measures as appropriate.”

Climate Action Plan - The City adopted its CAP in 2013 to reduce GHG emissions in Vista in order to comply with AB 32. The CAP provided an estimate of BAU emissions by the year 2020, and a projection of the amount of reductions needed to meet the City’s requirement to reduce GHG emissions to 1990 levels. The CAP estimated that a reduction of 27,187 metric tons of CO_{2e} would be required. The CAP adopts climate action measures designed to provide the necessary reductions to meet the 2020 target. The measures that would apply to development projects include energy efficiency measures, transportation and land use measures designed to reduce vehicle miles traveled, and solid waste reduction measures.

THRESHOLD OF SIGNIFICANCEThreshold of Significance

According to the California Natural Resources Agency (July, 2009), “*due to the global nature of GHG emissions and their potential effects, GHG emissions will typically be addressed in a cumulative impacts analysis.*” Significance criteria were developed in Appendix G of the CEQA Guidelines.

In the “Draft PEIR for the Vista General Plan 2030 Update” (City of Vista 2011), the following criteria were used to establish the significance of GCC emissions:

The project would have a significant impact if it would:

- Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.
- Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.
- Expose property and persons to the physical effects of climate change, including but not limited to flooding, public health, wildfire risk or other impacts resulting from climate change.

The California Resources Agency adopted an Amendment to the State CEQA Guidelines to assist lead agencies in determining the significance of impact from GHG emissions. State CEQA Guidelines Section 15064.4, CEQA Guidelines for Determining the Significance of Impacts from Greenhouse Gas Emissions, states the following:

- (a) The determination of the significance of greenhouse gas emissions calls for a careful judgment by the lead agency consistent with the provisions in section 15064. A lead agency should make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate the amount of greenhouse gas emissions resulting from a project. A lead agency shall have discretion to determine, in the context of a particular project, whether to:

- (1) Use a model or methodology to quantify greenhouse gas emissions resulting from a project, and which model or methodology to use. The lead agency has discretion to select the model or methodology it considers most appropriate provided it supports its decision with substantial evidence. The lead agency should explain the limitations of the particular model or methodology selected for use; and/or
 - (2) Rely on a qualitative analysis or performance based standards.
- (b) A lead agency should consider the following factors, among others, when assessing the significance of impacts from greenhouse gas emissions on the environment:
- (1) The extent to which the project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting;
 - (2) Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project;
 - (3) The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions. Such requirements must be adopted by the relevant public agency through a public review process and must reduce or mitigate the project's incremental contribution of greenhouse gas emissions. If there is substantial evidence that the possible effects of a particular project are still cumulatively considerable notwithstanding compliance with the adopted regulations or requirements, an EIR must be prepared for the project.

The City of Vista has not established a GHG significance threshold to date. Several lead agencies in California have adopted a screening threshold as recommended by the CAPCOA Report, CEQA and Climate Change – Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act, which proposes a screening-level threshold of 900 metric tons of CO₂e to evaluate whether a project must conduct further analysis.

Pursuant to Section 15064.4(a) of the State CEQA Guidelines, the City has determined in the context of this particular project that there are no cumulatively considerable impacts to GHG where there is substantial evidence that this project is making a “fair share contribution”⁶ to reducing GHG Emissions in a manner that assists in making substantial progress toward meeting 2020 and post-2020 GHG emissions targets either quantitatively or qualitatively.

With regards to whether the proposed project is making a fair share contribution, and therefore substantial progress, towards meeting 2020 GHG emissions targets set forth in the City's CAP, if the total project GHG emissions in its first fully operational is less than a “bright line” threshold of 1,185 metric tons of CO₂e, then the project would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment.⁷ Therefore, the project's emissions were evaluated based on this threshold.⁸

⁶ A project's contribution is less than cumulatively considerable if the project is required to implement...“its fair share of a mitigation measure or measures designed to alleviate the cumulative impact” (State CEQA Guidelines Section 15130(a)(3), emphasis added). Measures to mitigate a project's GHG impacts broadly include “reductions in emissions resulting from a project through implementation of project features, project design, or other measures.” and that such measures must have an “essential nexus” and be “roughly proportionate” to the project (State CEQA Guidelines section 15126.4 (a)(4),(c)(2); emphasis added).

⁷ City's Interim Policy of Greenhouse Gas Emissions Significance Thresholds (April 6, 2016).

⁸ The “Bright Line” threshold is based on a review of projects within the City of Vista, where it was determined that a level of 1,185 metric tons of CO₂e would capture 90 percent of the City's emissions that are attributable to development projects.

With regards to whether the proposed project is making a fair share contribution, and therefore substantial progress, towards meeting post-2020 GHG emissions targets set forth in Executive Order S-3-05, consistent with CARB’s First Update to the Scoping Plan, the City has determined that a fair share is provided if the project does not interfere with the State’s implementation of GHG reduction programs identified for residential and commercial development. Provided the project is consistent with applicable plans, policies, and regulations adopted for the purpose of reducing the emissions of greenhouse gas emissions, it would not result in a significant impact.

GHG IMPACTS

As discussed in the *GHG Report* (SRA, 2016), GHG emissions associated with the proposed project were estimated for six categories of emissions: (1) construction emissions; (2) area sources; (3) energy use, including electricity and natural gas usage; (4) water use, including consumption, use, and treatment; (5) solid waste management, and (6) vehicles. The analysis also includes a baseline estimate that assumes 2005 Title 24-compliant buildings, which is considered business as usual for the project. The complete emissions inventory is included in the Appendix of the *GHG Report* (SRA, 2016).

Existing GHG Emissions

As discussed above, the project site is currently occupied by a 6,665 place of worship. As it exists, the site is a source of GHG emissions. To estimate emissions with the existing church, the CalEEMod model was run. Table GHGE-1 presents a summary of the GHG emissions for the existing use.

**TABLE GHGE-1
ESTIMATED OPERATIONAL GHG EMISSIONS FOR EXISTING CHURCH**

Emission Source	Annual Emissions (Metric tons/year)			
	CO ₂	CH ₄	N ₂ O	CO ₂ e
Operational Emissions				
Area Sources	0	0.0000	0.0000	0
Electricity Use	4	0.0001	0.0001	4
Natural Gas Use	20	0.0008	0.0002	20
Water Use	2	0.0069	0.0002	2
Solid Waste Management	8	0.4561	0.0000	21
Vehicle Emissions	72	0.0033	0.0000	72
Total	106	0.4672	0.0005	119
Global Warming Potential Factor	1	28	265	
CO ₂ Equivalent Emissions	106	13	0	119
TOTAL CO₂ Equivalent Emissions	119			

Construction GHG Emissions

Construction GHG emissions include emissions from heavy construction equipment, truck traffic, and worker trips. Emissions were calculated using the CalEEMod Model, which is the newest land use emissions model developed by Environ and the SCAQMD (ENVIRON 2013), for completed and proposed construction. CalEEMod contains emission factors from the OFFROAD2007 model for heavy construction equipment (ARB 2007), and from the EMFAC2011 model for on-road vehicles. Table GHGE-2 presents the construction-related emissions associated with construction of the project.

**TABLE GHGE-2
ESTIMATED CONSTRUCTION GHG EMISSIONS**

Construction Phase	CO ₂ e Emissions metric tons
Construction	757

Source: SRA, 2016

Per guidance from the SCAQMD (SCAQMD 2008), construction emissions are amortized over a 30-year period to account for the contribution of construction emissions over the lifetime of the project. Amortizing the emissions from construction of the proposed project over a 30-year period would result in an annual contribution of 25 metric tons of CO₂e. These emissions are added to operational emissions to account for the contribution of construction to GHG emissions for the lifetime of the project.

Operational GHG Emissions

The Vista Melrose 47 Project includes development of 47 single-family residential units on a 3.14-acre site. Under the operation of the project, the relevant emissions would include direct emissions from mobile source emissions and indirect emissions from electricity use and other sources. Emissions were estimated using the methodologies described below.

Area Sources - The CalEEMod model assumes that area source emissions associated with residential projects would include use of fireplaces (assumed to be natural gas), as well as minor use of landscaping equipment. GHG emissions were calculated based on use of the fireplaces 30 days per year, 3 hours per day. It was assumed that all of the residences would be equipped with natural gas fireplaces.

Energy Use - As discussed above, the CalEEMod Model assumes a baseline of 2008 Title 24 standards. The baseline energy use provides a conservative estimate of current energy requirements relative to future energy requirements. The Title 24 standards have been updated in 2013, and are scheduled to be updated periodically and will likely improve energy efficiency further. Energy use from appliances was calculated assuming that the residences would use Energy Star appliances.

Water Use - Water usage was estimated based on the CalEEMod Model. The GHG emissions associated with water usage, conveyance, treatment, and wastewater disposal are included within the CalEEMod model calculations. For the purpose of this analysis, it was assumed that residences would be equipped with low-flow fixtures and with irrigation systems that are water-efficient.

Solid Waste Management - The disposal of solid waste produces GHG emissions from anaerobic decomposition in landfills, incineration, transportation of waste, and disposal. Solid waste generation rates were estimated from CalEEMod Model, and GHG emissions from solid waste management were estimated using the model, assuming landfilling of solid waste with flaring.

Vehicles Emissions - Based on the CalEEMod model, the Project will generate 1,072,865 vehicle miles traveled (VMT) annually under business as usual conditions. Emissions were calculated based on the CalEEMod Model, which is based on the EMFAC2011 emission factors.

Operational GHG Emissions Summary for 2020 Targets

The results of the inventory for operational emissions, as shown in the *GHG Report* (SRA, 2016), are presented in Table GHGE-3, below. These include GHG emissions associated with buildings (natural gas, purchased electricity), water consumption (energy embodied in potable water), solid waste management (including transport and landfill gas generation), and vehicles. Table GHGE-2 summarizes projected emissions using the methodologies noted above.

**TABLE GHGE-3
ESTIMATED OPERATIONAL GHG EMISSIONS**

Emission Source	Annual Emissions (Metric tons/year)			
	CO ₂	CH ₄	N ₂ O	CO ₂ e
Operational Emissions				
Area Sources	13	0.0008	0.0002	13
Electricity Use	46	0.0019	0.0004	46
Natural Gas Use	34	0.0006	0.0006	34
Water Use	13	0.0803	0.0020	16
Solid Waste Management	1	0.0648	0.0000	3
Vehicle Emissions	422	0.0165	0.0000	422
Amortized Construction Emissions	25	0.0000	0.0000	25
Total	554	0.1649	0.0032	559
Global Warming Potential Factor	1	28	265	
CO ₂ Equivalent Emissions	554	4	1	559
TOTAL CO₂ Equivalent Emissions	559			
EXISTING CO₂ Equivalent Emissions	119			
NET CO₂ Equivalent Emissions Increase	440			

The net emissions increase associated with the project is below the City of Vista’s “bright line” threshold of 1,185 metric tons of CO₂e. Accordingly, the proposed project would not generate greenhouse gas emissions, either directly or indirectly, that would have a significant impact on the environment. In addition, the project would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing GHG emissions. Since these plans must be adopted in a public hearing, Title 24 of the building code is part of the statewide strategy for reducing GHG emissions. The City of Vista adopted the building code with its Title 24 energy efficiency standards in a public hearing. Therefore, the proposed project is required to comply with the Title 24 building code as a matter of law. Accordingly, it would not conflict with a statewide plan, policy or regulation adopted for the purpose of reducing GHG emissions.

Operational GHG Emissions Summary for Post-2020 Targets

As discussed below, additional analysis addresses whether the proposed project would interfere with the State’s GHG emission reduction policies and programs anticipated to assist California in reaching post-2020 GHG reduction targets for 2030 and 2050, as set forth in Executive Orders S-3-05 and B-30-15.

In the CARB’s Scoping Plan Concept Paper (CARB, 2016), the report identified programs designed to reduce GHG emissions and meet the State’s 2030 target of reducing GHG emissions by 40 percent below 1990 levels. Table GHGE-6 presents a summary of the proposed measures, and a discussion of the proposed project’s consistency with these measures.

**TABLE GHGE-4
PROJECT CONSISTENCY WITH 2016 SCOPING PLAN CONCEPT PAPER**

State Program for Reducing GHG Emissions	Vista Melrose 47 Project Consistency
SB 350 – 50% Renewable Portfolio Standard by 2030.	The project would purchase electricity from San Diego Gas and Electric, which is responsible for meeting the state’s Renewable Portfolio Standard. The project would therefore not interfere with implementation of this program.
Doubling of energy efficiency for existing buildings.	The project would be constructed to applicable Title 24 building energy efficiency standards, which exceed the standards for existing buildings. As Title 24 efficiency standards reach a point where they are twice as effective as existing buildings, new construction at the project after that date would be subject to the increased efficiency standards. Accordingly, the project would not interfere with increasing energy efficiency for existing buildings.
Increase in Low Carbon Fuel Standard to > 10% by 2030.	Project-related vehicles would purchase fuels from local suppliers that would comply with the LCFS. The project would not interfere with implementation of the increased LCFS.
1.5 million zero-emission and plug-in hybrid electric vehicles by 2025.	As zero-emission vehicles become more available consumers will buy them, so some portion of project-related vehicles would include zero-emission and plug-in vehicles. The project would not interfere with increasing market penetration of zero-emissions and plug-in hybrid vehicles into the fleet.
Medium- and Heavy-Duty GHG Phase 2 regulations.	Project-related medium- and heavy-vehicles would be subject to Phase 2 regulations. The project would not interfere with implementation of this program.
Advanced Clean Transit – up to 20% of new urban buses purchased beginning in 2018 will be zero- emission buses, ramping up to 100% of new sales by 2030.	This measure is not directly applicable to the project; the fleet of urban buses serving the project area would be required to comply with this measure.
Last Mile Delivery – Phase-in of zero-emission trucks for class 3-7 last mile delivery trucks starting in 2020. Zero emission vehicles comprise 2.5 percent of new Class 3-7 in local fleets starting in 2020 increasing to 10 percent by 2025 and remaining steady to 2030.	This measure is not directly applicable to the project; delivery vehicles serving the project would be required to comply with this measure as the state program is implemented.
Implementation of currently proposed Short Lived Climate Pollutant Strategy with 40% reduction in methane and hydrofluorocarbon emissions by 2030 and 50% reduction in black carbon emissions by 2030.	This measure is not directly applicable to the project. The project would not interfere with implementation of this program.
Increased stringency of SB 375 Sustainable Communities Strategy – 2035 targets.	The project would be located in an area of mixed uses. The project would therefore be consistent with SB 375 Sustainable Communities Strategy requirements.

State Program for Reducing GHG Emissions	Vista Melrose 47 Project Consistency
Draft California Sustainable Freight Action Plan to deploy over 100,000 freight vehicles and equipment capable of zero emission operation and maximize near- zero emission freight vehicles and equipment powered by renewable energy by 2030.	This measure is not directly applicable to the project; freight vehicles serving the project would be required to comply with this measure.
Cap-and-Trade Program with 4% annual cap decline.	The project is not subject to the California Cap-and-Trade program. The project would not interfere with implementation of this program.
Natural and Working Lands – designed to preserve natural lands and encourage infill development	The project is not subject to the Natural and Working Lands. The project would not interfere with implementation of this program.

Source: Adapted from another GHG Report prepared by SRA for the Vista Palomar Project PC19-076, 8/18/16.

CONCLUSIONS

Emissions of GHGs were quantified for both construction and operation of the proposed Vista Melrose 47 project. Operational emissions were calculated for existing conditions. The net emissions increase associated with the proposed project would be below the City’s “bright line” threshold of 1,185 metric tons of CO₂e through the mobile source emission regulatory framework, Title 24 energy efficiency requirements, and implementation of the RPS. Therefore, the proposed project is providing its fair share toward meeting the City’s Climate Action Plan reduction target for 2020 and would not result in a cumulatively considerable global climate change impact.

With regard to post-2020 GHG impacts, the proposed project would also provide its fair share contribution toward applicable long-term State GHG targets, because qualitatively it is not interfering with the implementation of state programs designed to make substantial progress toward applicable long-term state GHG targets. In addition, the project would be constructed in accordance with Title 24 building code standards. Title 24 of the building code is part of the statewide strategy for reducing GHG emissions. The City adopted the building code with its Title 24 energy efficiency standards in a public hearing. The project is required to comply with the Title 24 building code as a matter of law. The project would not conflict with or obstruct implementation of the statewide vehicle GHG emission programs or the adoption of the Renewable Portfolio Standard. Accordingly, it would not conflict with a statewide plan, policy, or regulation adopted for the purpose of reducing GHG emissions.

Therefore, the Vista Melrose 47 project would not result in a cumulatively considerable global climate change impact before or after 2020.

II. Hazards and Hazardous Materials <i>Would the project:</i>	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
a. Create a significant hazard to the public or the environment through the routine transport, use or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. For a Project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project result in a safety hazard for people residing or working in the Project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. For a Project within the vicinity of a private airstrip, would the Project result in a safety hazard for people residing or working in the Project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h. Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The discussion below is summarized and based on the findings contained within the *A Subsurface Assessment Report (Phase II Report)* prepared by Bureau Veritas North America Inc. (Bureau Veritas), November 2, 2015 (2015) for the project site. The *Phase II Report* included a summary of the findings in the *Phase I Report*. The report is on file and available for review in the City’s Planning Division office.

Discussion

a. No Impact. The project proposes to redevelop the subject property with 47 condominiums and associated improvements, including common outdoor recreation center with a pool, parking, and landscaping. Typically, residential uses do not generate, store, dispose of, or transport quantities of hazardous substances. Operation of the proposed project would not expose on-site users or the surrounding community to any health hazards from hazardous materials, and no impacts would occur.

b-d. Less than Significant Impact. As noted above, operation of the 47 condominium units would not result in the generation, storage, disposal, or transportation of hazardous materials.

The research contained in the *Phase I Report* (Bureau Veritas, 2015) established the historic uses of the subject property since 1893. The project site was unimproved from at least 1893 until sometime prior to 1939, when it was in agricultural use. It remained in agricultural use until sometime prior to 1989. A church building and related improvements were constructed in 1999 and the site has been occupied by the existing church on-site since its development approximately 17 years ago.

According to the *Phase I Report* (Bureau Veritas, 2015), Recognized Environmental Conditions (REC's) were found to occur on-site related primarily to past agricultural use of the site and adjacent and upgradient land uses, including a dry cleaner and a gas station which are on environmental databases. A follow up subsurface assessment was performed (*Phase II Report*) to assess potential impacts from former agricultural use on-site and the nearby properties that were identified as RECs based on their upgradient orientation from the project site.

The *Phase II Report* (Bureau Veritas, 2015) was conducted to conduct soil, soil vapor, and groundwater sampling to address the REC's identified in the *Phase I Report*. The goal of the *Phase II Report* (Bureau Veritas, 2015) was to determine the presence or absence of pesticides and metals in shallow subsurface soil, determine the presence or absence of gasoline related hydrocarbons, dry cleaning related volatile organic compounds and fuel oxygenates in subsurface soil, soil vapor and groundwater.

The subsurface assessment consisted of the collection and laboratory analysis of soil samples from four direct-push soil borings, and the collection and laboratory analysis of soil-vapor samples from four soil vapor probes. Groundwater sampling was attempted: however, samples were not collected since groundwater was not found in a boring drilled to 25 feet below ground surface (bgs).

Although wet soil was found during the drilling on-site, which was advanced to 25 feet bgs at the site, groundwater did not accumulate in the boring after leaving the boring open for two hours and a groundwater sample could not be collected. A geotechnical investigation performed at the site in 1996 by Vinje & Middleton found that groundwater occurs chiefly as seeps that perch atop the siltstone/claystone beds which were found at depths ranging from 4 to 11 feet bgs, depending on the location at the site ((Bureau Veritas, 2015)). However, with recent drought conditions these seeps may not currently be present.

VOCs, OCPs, and TPH-g were not detected in any of the soil samples. Metals in soil samples were either not detected or detected at concentrations that were generally consistent with natural background levels and below OEHHA soil-screening numbers for a residential Site. VOCs and TPH-g were not detected in the four soil vapor samples collected at the site.

Based on the findings and analytical results of this investigation, the potential off-site sources of VOCs and gasoline hydrocarbons identified in the *Phase I Report* (Bureau Veritas, 2015) do not appear to have impacted subsurface soil and soil vapor, and VOC vapor intrusion is not expected to be a concern for future residences at the project site. In addition, past agricultural use of the property does not appear to have impacted shallow soil at the project site with metals above background levels or pesticides (Bureau Veritas, 2015).

Based on the findings and conclusions of the *Phase II Report* (Bureau Veritas, 2015), no further or additional environmental assessment of subsurface soil, groundwater, and soil vapor is recommended or required.

Construction would involve demolition of the existing building and parking lot but based on the age of the existing development, which was built in approximately 1999 according to the *Phase II Report* (Bureau Veritas, 2015), no lead based paints or asbestos containing materials are anticipated to be present on-site.

The proposed project has the potential to release oils, greases, solvents, and other finishing materials through accidental spills. Spill or upset of these materials could have the potential to impact surrounding land uses; however, federal, state, and local controls have been enacted to reduce the effects of such potential hazardous materials spills. The VFD enforces city, state, and federal hazardous materials regulations for the city. City regulations include securing of hazardous materials containers to prevent spills, and spill containment and mitigation. In addition, the State Fire Marshall enforces oil and gas pipeline safety regulations, and the federal government enforces hazardous materials transport pursuant to its interstate commerce regulation authority. Compliance with these requirements is mandatory as standard permitting conditions, and would minimize the potential for the accidental release or upset of hazardous materials, thus ensuring public safety. Therefore, compliance with the above referenced requirements would result in less than significant impacts with respect to the creation of significant hazards to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

The closest public school is the Rancho Buena Vista High School, which is located south and west of the project site across the intersection of S. Melrose Drive and Longhorn Drive. However, as a residential development, the proposed project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste. Consequently, project development would not create any significant impacts to the school.

e-h. No Impact. The McClellan-Palomar Airport is located approximately 2.85 miles to the southwest of the project site. The site is not located within the Airport Influence Area of the airport, and it is sufficiently distant from it such that it would not affect the safe operation of the airport; consequently, development of the proposed project would not create significant health impacts for people residing there. The proposed project would also not require the closure of any public or private streets or roadways, it would not impede access of emergency vehicles to the project or any surrounding areas, and it would provide all required emergency access in accordance with the requirements of the VFD. As a result, no significant impacts to emergency response would occur.

The project site is not located within a Fire Hazard Severity Zone according to the City's Fire Hazard Severity Zones Map. As a result, the proposed project would not be subject to defensible space requirements in Section 4907 in Chapter 49 of the 2013 California Fire Code. The proposed project would, therefore, not be subject to the building construction requirements in Section 4905 in Chapter 49 of the 2013 Fire Code. Accordingly, no significant risk of loss, injury or death would arise to people or structures from wildland fires, where wildlands are adjacent to urbanized areas, or where residences are intermixed with wildlands.

III. Hydrology and Water Quality <i>Would the project:</i>	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
a. Violate any water quality standards or waste discharge requirements, including but not limited to increasing pollutant discharges to receiving waters?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Create or contribute runoff water, which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f. Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g. Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h. Place within a 100-year flood hazard area structures, which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i. Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j. Contribute to inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The discussion below is summarized and based on the findings contained within the *Stormwater Quality Management Plan (SWQMP) prepared for the Vista Melrose 47 Project* by Hunsaker & Associates (April, 2016) and the *Drainage Study* prepared by Hunsaker & Associates for the project (April, 2016). These reports are on file and available for review in the City’s Planning Division office.

Discussion

a - f. Less than Significant Impact. The proposed project consists of the redevelopment of an existing site that contains a 6,665 SF church and related 99-space parking lot, with the development of 47 condominium units, private driveways, landscaping and a common outdoor recreation area on a 3.14 acre site. The site is located just east of S. Melrose Drive between Buena Vista Drive to the north, and Live Oak Road to the south and east. Surrounding land uses include multi-family and single family homes to the east beyond Live Oak Road; retail and commercial to the south and west, and a church to the north.

According to the *Drainage Study* (Hunsaker, 2016), in the existing condition, the site has three drainage areas and three discharge locations. The primary discharge location is located along Live Oak Road at the southeast corner of the property and the secondary discharge location is located at the northeast corner of the site where there two existing outlet points.

The majority of the existing site slopes mildly from the northwest towards the southeast with an approximate slope of 1.3 percent. Storm water runoff from this area is collected by an existing catch basin at the southeast corner of the property parking lot. Flows from the catch basin are conveyed in a 12-inch pvc pipe eastward towards the eastern property line and Live Oak Road. Prior to reaching Live Oak Road, the 12-inch pipe transitions to a brow ditch. This brow ditch connects with two other brow ditches that collect slope runoff. The confluence flow from these brow ditches exits the property and empty onto Live Oak Road via a sidewalk underdrain.

A small area at the northeast corner of the site drains towards the east property line into an existing catch basin and pipe, which outlets about 22 feet east of the existing top of slope. Runoff from this storm drain continues northeasterly and ultimately reaches an existing headwall approximately 160 feet to the northeast along Live Oak Road.

Runoff that flows to the southeast corner of the site is conveyed via curb and gutter west on Live Oak Road then south on S. Melrose Drive until it is collected with an existing inlet. Collected runoff from this inlet is conveyed west in existing storm drain towards the Shadowridge Drive storm drain which empties into a tributary of Agua Hedionda Creek which is located about one-half mile south of Shadowridge Drive. From this junction, runoff from Agua Hedionda Creek is conveyed west about 4.5 miles until it empties into Agua Hedionda Lagoon.

With a few minor exceptions, the general on-site drainage patterns from the site would be consistent with the predeveloped condition. That is, the majority of the site would drain towards the southeast corner of the site, while the remaining area would drain to the northeast corner.

The site will be regraded to allow for more developable area. Topography and overland drainage will be altered which will alter existing drainage areas. However, peak flows discharging from the site will be reduced compared to existing conditions due to inclusion of the proposed pervious paver street areas.

Under existing conditions, approximately 50 percent of the site (1.57 acres of the total 3.14-acre site) is impervious. Under post-development conditions, the proposed project would slightly increase the perviousness of the site, thereby decreasing the amount of impervious surfaces. According to the *SWQMP* (Hunsaker, 2016), about 42 percent of the site (1.32 acres) would be impervious under post-development conditions.

The proposed storm drain system for the site would include two inlets to collect storm water runoff, and an underground storm drain system to convey it to the proposed hydromodification vault, which will mitigate for flow-control hydromodification. The revised acreage tributary to the southeast corner of the site is 3.06 acres and has a peak flow of 7.61 cfs compared with 10.95 cfs in the existing condition (Hunsaker, 2016).

Project impervious features include the following:

- Condominium buildings
- Concrete Driveways and sidewalks
- Asphalt Private Streets Roadways
- Concrete Sidewalks
- Parts of the recreational area.

Project pervious features include the following:

- Landscaped areas
- Pool
- Pervious pavers
- Open spaces
- A portion of the recreational area.

The subject property is located in the Los Monos Hydrologic Subarea of the Agua Hedionda Hydrologic Area within the Carlsbad Watershed. The Beneficial Uses of this hydrologic area, per the San Diego RWQCB Basin Plan, include Municipal and Domestic Supply, Agricultural Supply, Industrial Service Supply, Contact Water Recreation, Non-contact Water Recreation, Biological Habitat, Warm Freshwater Habitat, and Wildlife Habitat.

POLLUTANTS AND CONDITIONS OF CONCERN AND HYDROLOGIC CONDITIONS OF CONCERN

According to the *SWQMP* (Hunsaker, 2016) the pollutants of concern that could be generated by the development of the proposed project would include Sediments, Nutrients, Heavy Metals, Trash & Debris, Oxygen Demanding Substances, Oil & Grease, Bacteria & Viruses and Pesticides.

The conditions of concern would include the potential effects of the pollutants on Agua Hedionda Creek, Agua Hedionda Lagoon, and the Pacific Ocean.

POTENTIAL WATER QUALITY IMPACTS

To address potential water quality impacts due to project development, BMPs would be implemented during construction and post construction activities. Selected BMPs from the City's Standard Urban Stormwater Mitigation Plan (SUSMP), titled *City of Vista Stormwater Standards Manual* (updated February 2011), would be applied to reduce pollutants to maximum levels (see the section on construction activities below for construction BMPs and Table HWQ-1 for post-construction BMPs incorporated into the project's design).

Construction Activities

Short-term erosion impacts during the construction phase of the project would be prevented through implementation of an erosion control plan. A grading and erosion control plan is required in accordance with the City's Grading Ordinance (Development Code Chapter 17.56) and the State General Permit to Discharge Storm Water Associated with Construction Activities (NPDES No. CAS000002) and must be submitted for plan check and approval by the Land Development Engineer, as well as the Planning Division, prior to final approval of the project.

The erosion control plan would include construction BMPs such as:

- Silt Fence, Fiber Rolls, or Gravel Bag
- Street Sweeping and Vacuuming
- Storm Drain Inlet Protection
- Stabilized Construction Entrance/Exit
- Vehicle and Equipment Maintenance, Cleaning, and Fueling
- Hydroseeding
- Material Delivery and Storage
- Stockpile Management
- Spill Prevention and Control
- Solid Waste Management
- Concrete Waste Management

In addition, a Notice of Intent (NOI) filed with the State Water Resources Control Board, and preparation of a Storm Water Pollution Prevention Plan (SWPPP) would also be required before project construction commences.

Post-Construction Activities

In accordance with the City's SUSMP (Municipal Code Chapter 13.18) as detailed in the *City of Vista Stormwater Standards Manual* (updated February 2011) and the requirements of the new Municipal Storm Water Permit (San Diego RWQCB Order R9-2013-0001), all new and significant redevelopment projects that fall into one of 11 categories would be considered "priority" projects. Priority projects are required to incorporate post-construction (or permanent) Low Impact Development (LID) site design, source control, and treatment control BMPs into the project's design. The proposed project meets two of the 11 "priority project" categories - a housing development of 10 or more dwelling units and land disturbance greater than one acre; therefore, the proposed project is classified as a priority project.

Types of Post-Construction BMPs

LID site design BMPs are intended to minimize impervious surfaces and promote infiltration and evaporation of runoff before it can leave the location of origination by mimicking the natural hydrologic function of the site. Source control BMPs are intended to minimize, to the maximum extent practicable, the introduction of pollutants and conditions of concern that may result in significant impacts generated from site runoff to off-site drain systems. Treatment control BMPs are intended to treat storm water runoff before it discharges off-site. According to the City's Stormwater Standards Manual, specific localized treatment control BMPs is more effective at reducing or minimizing pollutants of concern than other types of BMPs. Each type of BMP that would be implemented in the proposed project is shown in Table HWQ-1, below. Prior to designing LID and/or treatment control BMPs into the proposed project, as noted in the table below, the entire site was defined, categorized and tabulated into Drainage Management Areas (DMA).

The project has been designed to limit post-development storm water runoff discharge rates and velocities to maintain or reduce predevelopment erosion, and to reduce sediments, nutrients, heavy metals, trash & debris, oxygen demanding substances, oil & grease, bacteria & viruses, and pesticides by applying concepts such as:

- On-site bio-filtration/modular wetlands
- Minimize impervious areas
- Convey downspout and roof runoff to landscaped areas
- Runoff will infiltrate or surface flow before reaching storm drains for water quality treatment and hydromodification mitigation.

In terms of the efficiency of the Treatment Control BMPs in treating the pollutants of concern, Infiltration Facilities or Practices have a high removal efficiency rating for coarse sediment and trash, pollutants that tend to associate with fine particles during treatment (e.g., sediments, nutrients, heavy metals, oxygen demanding substances, oil and grease, bacteria, and pesticides), and pollutants that tend to dissolve after treatment (e.g., nutrients).

The implementation of all proposed construction and post-construction BMPs would reduce, to the maximum extent feasible, all anticipated primary and secondary pollutants of concern. Therefore, development of the proposed project would have a less than significant impact on water quality standards or waste discharge requirements.

**TABLE HWQ-1
TYPES OF BMPs INCORPORATED INTO PROJECT DESIGN**

TYPE OF BMP	DESCRIPTION OF BMP
Site Design / LID	<i>Conserve Natural Areas, Soils and Vegetation:</i> <ul style="list-style-type: none"> • Conserve natural areas along the site’s exterior where possible
	<i>Minimize Impervious Surfaces:</i> <ul style="list-style-type: none"> • Maximize the amount of open space and landscaping
	<i>Minimize Soil Compaction:</i> <ul style="list-style-type: none"> • Where feasible, use minimum compaction
	<i>Impervious Area Dispersion:</i> <ul style="list-style-type: none"> • Use splash pads at downspout discharge points
	<i>Runoff Collection:</i> <ul style="list-style-type: none"> • Where possible, direct downspout discharge into biofiltration areas
	<i>Landscaping with native or Drought Tolerant Species</i>
Source Control	<i>Prevention of Illicit Discharges into the MS4:</i> <ul style="list-style-type: none"> • Smart irrigation systems
	<i>Storm Drain Stenciling or Signage:</i> <ul style="list-style-type: none"> • Provide prohibitive dumping placards and/or signage. • Maintain legibility of placards and signage.
	<i>Protect Outdoor Storage Areas:</i> <ul style="list-style-type: none"> • Direct roof downspouts away from storage areas
	<i>Protect Trash Storage Areas from Rainfall:</i> <ul style="list-style-type: none"> • Trash storage containers will be required to have lids
	<i>On-Site Storm Drain Inlets:</i> <ul style="list-style-type: none"> • Maintain inlets
	<i>Need for Future Indoor & Structural Pest Control:</i> <ul style="list-style-type: none"> • Provide integrated pest management information to owners
	<i>Landscape/Outdoor Pesticide Use:</i> <ul style="list-style-type: none"> • Maintain landscaping using minimum or no pesticides
	<i>Pools, Spas, Ponds, Decorative Fountains:</i> <ul style="list-style-type: none"> • Maintain on-site pool
<i>Plazas, Sidewalks and Parking Lots</i> <ul style="list-style-type: none"> • Sweep streets regularly 	

Source: Hunsaker, 2016

GROUNDWATER IMPACTS

Groundwater was not encountered during subsurface investigations to a depth of 20 feet below the ground surface according to the *Geotech Report* (VME, 2016) prepared for the project site. Consequently, no significant impacts to groundwater resources are anticipated with development of the proposed project.

HYDROLOGY/DRAINAGE IMPACTS

Pre-Project Site Drainage Patterns

The existing development site is 50 percent impervious with limited landscaping. The existing site has three drainage areas, including two smaller areas at the northeast corner of the lot that drain 0.19 and 0.09 acres of roof and pavement (parking) areas. The peak flow of the existing runoff for these two drainage areas are 0.87 and 0.62 cubic feet per second (cfs), respectively.

The remaining area of the site consists of parking areas, roof, open space, and natural landscaping. This latter area is approximately 2.27 acres and drains runoff towards the southeast corner of the site, where discharges into Live Oak Road via sidewalk underdrain. The peak flow of the runoff from this drainage area under existing conditions is 9.46 cfs.

Post-Project Site Drainage Patterns:

The subject project proposes to redevelop an existing developed site containing a church and parking lot into a 47 condominium unit project. The proposed project will include nine 3-story buildings, covered and uncovered parking, and a common area including a pool, spa, bbq area/fire pit, small turf area and outdoor seating areas.

According to the *SWQMP* (Hunsaker, 2016), the proposed project would modify existing drainage patterns from the existing three drainage areas to two drainage areas which would be 3.06 and 0.3 acres in size. The proposed design would include regrading, which will alter the areas draining towards the two existing discharge points. One of the two existing outlet points at the northeast corner of the site would be removed, while the other will be reduced to about 0.03 cfs and only includes impervious slope drainage from a portion of the site's eastern slope adjacent to Live Oak Road. The grading revisions to the main portion of the development will increase the drainage area tributary to the southeast discharge point along Live Oak Road. However, the site will include pervious pavers throughout the street areas which reduces the imperviousness and runoff coefficient.

With the proposed project, peak runoff flows would be 7.61 and .07 cfs respectively representing a net reduction in peak flows from the site post-development of 3.27 cfs compared to the existing conditions (10.95 cfs) according to the *Drainage Study* (Hunsaker, 2016). Because the reductions are enough to make the peak flow rates become less than the existing condition peak flows, on-site detention is not necessary.

Proposed storm drain improvements would include curbs (wedged) and gutters, curb inlets, proprietary bio-filtration curb inlets, catch basins, shallow ribbon gutters, 18-inch HDPE (high-density polyethylene) and 8-inch and 6-inch PVC underground pipe, pervious pavement, three modular wetlands, and underground hydromodification vault

The site will include two inlets to collect site runoff and storm drain to convey it to the proposed hydromodification vault which will mitigate for flow-control hydromodification. The revised area that would drain to the southeast corner of the site would be 3.06 acres with a peak flow of 7.61 cfs compared with 10.95 cfs in the existing condition.

In summary, the proposed project is not anticipated to have a significant water quality impact since the proposed project will implement various natural and structural construction and post construction BMPs. These proposed BMPs will reduce the anticipated pollutants of concern prior to runoff entering the storm drain system. The proposed project could impact water quality during construction if sediment is allowed to flow off-site untreated. Therefore, potential downstream impacts will be mitigated with the installation of erosion control and post construction BMP measures during construction.

As the development of the project would incorporate construction and permanent BMPs that would reduce, to the maximum extent feasible, all expected project pollutants, the proposed project would not otherwise substantially degrade water quality, and construction of the proposed project would result in less than significant impacts.

g - j. No Impact. The project site is not identified in the City's GP 2030 or on the City's GIS map (City of Vista, 2013) as an area within a 100- year flood plain. Development of the project site would not affect any area mapped as a flood hazard zone by the Federal Emergency Management Agency, or within a flood control basin or a potential inundation area. In addition, the site does not have the potential to produce mudflows due to the relatively flat and moderately sloped topography of the site, and it is not in proximity to the ocean or other water bodies to be affected by a tsunami or seiche. Consequently, significant impacts would not occur.

IV. Land Use and Planning <i>Would the project:</i>	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
a. Disrupt or divide the physical arrangement of an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the Project (including, but not limited to the Comprehensive Plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Be incompatible with existing land use in the vicinity?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

a - c. No Impact. The applicant proposes to construct 47 condominiums on an existing 3.14 acre site. The existing church and parking lot would be demolished as part of the construction of the new residences. The required discretionary approvals are described below:

- **General Plan Amendment:** Per Chapter 18.48.020 of the Vista Development Code, this application is required in order to change the existing GP 2030 Update land use designation from RR (Rural Residential) to MU (Mixed Use);
- **Zone Change:** Per Chapter 18.06.020 of the Vista Development Code, this amendment to the Zoning Map is required to change the existing zoning of the subject property from Commercial (C-1) to M-U (40) (Mixed Use zone with a maximum density not to exceed 40 Dwelling Units per Acre);
- **Tentative Subdivision Map:** Per Chapter 17.12 of the Vista Development Code, this map is required for the development of the condominiums;
- **Special Use Permit:** Per Chapter 18.74 of the Vista Development Code, this permit is required in order to meet certain requirements regarding compatibility with the general plan, existing and planned land uses, etc.
- **Condominium Housing:** Per Chapter 18.60 of the Vista Development Code, this permit is required to be filed and processed with the Tentative Subdivision Map.

The proposed project would not disrupt or divide the physical arrangement of the community, or conflict with any applicable land use policy, or be incompatible with the existing land uses in the project vicinity upon approval of the discretionary approvals listed above which include a General Plan Amendment and Zone Change.

The proposed project’s consistency with the City’s General Plan, Municipal Code, and other land use plans and policies is discussed below.

GENERAL PLAN 2030 UPDATELand Use and Community Identity Element (LUCI)

The project site, although occupied by a church, is currently designated with a Rural Residential (RR) land use designation and the applicant seeks to change it to a MU (Mixed Use) land use designation. A Site Development Plan is required to determine consistency with the General Plan as well as the City's development standards and zoning requirements

The proposed project would be consistent with various elements of the MU designation. For example, as stated in the description of the MU designation in the LUCI Element, *"the primary purpose of the Mixed Use land use designation is to implement the principles of smart growth by applying the designation to certain areas along the City's main transportation corridors..."* Further, *"the Mixed Use land use designation is intended to facilitate redevelopment of underutilized commercial areas."*

As stated in the Existing Environmental Setting section in Chapter 2 of this document, the site of the proposed project is roughly adjacent from S. Melrose Drive, which is a main transportation route (vehicular and bicycle) that extends from Oceanside to the north and Carlsbad to the south. There are both residential and commercial land uses in the immediate vicinity of the site.

As shown in Figure 2 - Aerial of Site and Surrounding Uses, the site is surrounded by existing development on all sides and is bounded by roadways on the west, and east sides. There are multi-family and single-family developments adjacent, or in close proximity, to the site of the proposed project. In addition, commercial developments are located west, south and north of the site as well. Further, as discussed in Chapter 2 of this document, the overall site elevations, landscaping and street side setbacks of the project would buffer and integrate the development into the existing surrounding landscape.

The proposed project would also be consistent with the following policies under the LUCI Element, as noted in Table LU-1, below.

**TABLE LU-1
CONSISTENCY WITH POLICIES IN THE LUCI ELEMENT OF THE GP 2030 UPDATE**

LUCI Policies	Project Description	Consistent (Y/N)?
<p>LUCI Policy 2.5: Ensure that multiple-family residential development is sited and designed to enhance the residential character of Vista; includes amenities such as open space, landscaping, and architectural design that contributes to this character; and minimizes impacts on adjacent residential development that is of a lower density.</p>	<p>As shown on Figure 4, Proposed Site Plan, the project would be buffered on all four sides by a 20 foot wide landscape buffer, plus walkways with additional landscaping and parking areas buffering on the west and east sides of the site. The nine residential buildings would be massed toward the center of the site with four of the buildings centered around the central outdoor common space area; As shown in Figures 8-10, the proposed design of the structures would consist of a variety of building types (with four, five and six units per building) and materials, and elevations in a Modern Spanish architectural style, with a palette of neutral and complimentary colors. This style of design would contribute to the residential character of the project, and surrounding developments. In general, the overall design of the proposed development would be comprised of a relatively flat site with buildings massed around a central common area and the majority of parking being located in two care garages beneath the units, as well as along the eastern and western sides of the site. The condominium units in each building would contain either three or four bedrooms for a total of 47-units. Other notable design elements would include a central common recreation area (including pool, spa, bbq area and fire pits and lounge/seating areas). Two additional, smaller common open space areas are would also be provided along the norther and southern sides of the site, and they would be located between buildings on the periphery of the site.</p>	<p>Y</p>
<p>LUCI Policy 3.1: Require all new development to be designed to minimize impacts on adjoining residential neighborhoods.</p>	<p>See the description under LUCI Policy 2.5, above, regarding the siting of the buildings as well as the landscape buffer on all four sides of the development.</p>	<p>Y</p>
<p>LUCI Policy 3.3: Require visual and acoustic buffering between non-residential and residential land uses and other sensitive receptors by employing techniques such as landscaping, setbacks, sound walls, and sensitive siting of buildings.</p>	<p>See the description under LUCI Policy 2.5, above, regarding the 20-foot wide landscape buffer on all four sides of the development, and the siting of the buildings. In addition, building setbacks from non-residential uses range from approximately 50 to 300 feet or more (see Figure 5, Conceptual Grading Plan).</p>	
<p>LUCI Policy 4.1: Encourage mixed-use projects (including residential/commercial/office and live/work developments) in designated areas, such as close to SPRINTER stations; along high frequency public transportation corridors; in the Downtown Specific Plan; in certain Opportunity Areas; and near jobs, schools, parks, and recreational facilities.</p>	<p>The proposed project would be located along a high frequency transportation corridor and in walking distance to the adjacent commercial and retail centers, schools (including two preschools) and many other commercial land uses (banks, grocery store, pharmacies, etc.) along S. Melrose Drive.</p>	<p>Y</p>
<p>LUCI Policy 4.9: Ensure that new development complies with the California Green Building Standards Code (the CALGreen Code) to promote sustainable design and construction practices and positive environmental impacts in planning and design, energy efficiency, water efficiency and conservation, and material conservation and resource efficiency.</p>	<p>The new residential units would be constructed per the requirements of the CBC that is in effect at the time building plans are submitted for construction permit approvals, which would also include compliance with CALGreen requirements.</p>	<p>Y</p>

As shown in Table LU-1, above, upon project approval the proposed project would be consistent with the applicable goals and policies in the LUCI Element of the *GP 2030 Update*. Therefore, no significant impacts would arise from development of the project.

Circulation Element

The 3.14 acre site of the proposed project is located along S. Melrose Drive between Buena Vista Drive to the north and Live Oak Road/Longhorn Drive to the south. As discussed in the Transportation/Traffic section of this document, the results of the analysis under existing conditions show that all study intersections are currently operating at acceptable levels of service (LOS D or better) during the peak hours.

All intersections in the Existing Plus Approved or Pending Projects Plus Project Conditions are expected to operate at acceptable LOS “D” or better with the exception of one intersection with and without project traffic added which is S. Melrose Drive / Project Driveway 2 which would operate at LOS “E” in the PM peak hour.

However, the project increase in intersection delay will be less than the 2.0 seconds allowed by the Regional Guidelines, so that the project impact will be less than significant and no mitigation is required. As shown in the analysis, there are no significant direct impacts to study intersections in the Existing Plus Approved or Pending Projects Plus Project condition.

According to the *Traffic Study* (Chen Ryan, 2016), as shown in Table TT-3, two out of three of the key study area intersections are projected to operate at substandard LOS under Cumulative Year 2030 Base Plus Project conditions, including:

- S. Melrose Drive / Buena Vista Drive – LOS F during both the AM and PM peak hours; and
- S. Melrose Drive / Project Driveway 2 – LOS F during the PM peak hour.

Based upon the impact significance criteria presented in the *Traffic Study*, the addition of the Proposed Project traffic would result in a significant cumulative impact at the following intersections and mitigation measure T-1 is required:

- S. Melrose Drive / Buena Vista Drive; and
- S. Melrose Drive / Project Driveway.

As a result of the implementation of mitigation measure T-1, the project, as proposed, would be consistent with the Circulation Element of the City’s General Plan.

Housing Element

The 2013-2021 Housing Element of GP 2030 includes a Housing Plan, which outlines adopted goals and policies to achieve the City’s share of affordable housing goals and its share of regional housing growth. The goals and policies that apply to the proposed project are as follows:

Goal 2.0: Encourage Adequate Provision of a Wide Range of Housing by Location, Type of Unit, and Price to Meet the Existing and Future Needs of Vista Residents.

Policy 2.1: Seek to provide a variety of residential development opportunities to meet the City’s share of regional housing needs.

State law requires jurisdictions to provide for their fair share of regional housing needs through income categories to accommodate the forecasted growth in the number of households. The project would provide new housing opportunities within the city in accordance with the goals of the Housing Element. As stated in the 2013-2021 Housing Element, the City has an adopted inclusionary housing ordinance that requires six percent of new units on land zoned for multi-family residential development to be reserved for low income households (80 percent AMI). However, in light of the court decision of *Palmer vs. City of Los Angeles* (2009) invalidating the City of Los Angeles' inclusionary housing policy on rental housing, the City has suspended the rental apartment component of the inclusionary housing ordinance. Therefore, the proposed project would be compatible with the applicable goals and policies in the 2013-2021 Housing Element.

Resource Conservation and Sustainability Element (RCS)

The development and operation of the proposed project would be in compliance with a number of policies in the RCS Element. For example, the GHG Emissions section of this document evaluates and discloses the contribution the proposed project could have on climate change (RCS Policy 2.7); the project proposes to avoid the use of invasive plant species (RCS Policy 3.2 and 5.6); and the project incorporates Low Impact Development (LID) techniques into project design in accordance with current storm water regulations to manage storm water and urban runoff (RCS Policy 4.6). Therefore, development of the proposed project would be consistent with the applicable goals and policies of the RCS Element of GP 2030. As a result, significant impacts would not occur.

Habitat Conservation Plan or Natural Community Preservation Plan

The 3.14 acre site is currently developed with an existing church and related surface parking lot. As a result, there are no sensitive habitats or vegetation, or Special-Status or MHCP-Covered Species on the site, and no significant impacts would occur.

Other General Plan Elements

The proposed project would be conditioned to comply with all applicable noise standards, would be adequately served by existing public services, and would require compliance with the City's building, and fire codes and with the CBC. Consequently, no inconsistencies with the City's Noise Element and Public Safety, Facilities, and Services Element are anticipated as a result of project development; significant impacts would not occur.

ZONING CODE

As noted in the Project Information section of Chapter 3 above, the project site is currently located within a C-1 (Commercial) zone. The applicant seeks a change to M-U (15) (Mixed Use with a maximum density of 15 dwelling units per acre (DU/AC)) zone. This zone is intended for residential land uses, commercial land uses or a combination of residential and commercial land uses. With compliance of the mixed-use development standards discussed below, the proposed project would be consistent with the Mixed-Use zoning designation, and significant impacts would not occur.

Compliance with Mixed-Use Zone Development Standards

The project's proposed development would be consistent with all of the applicable development standards of the M-U Zone found in Section 18.35.080 of the Development Code, as discussed below.

The 3.14 acre site of the proposed project meets the 10,000 SF minimum lot size, and the density of the project, 14.9 DU/AC, is below the maximum 15 DU/AC. In addition, the residential buildings would be three-story buildings with a maximum height of 35 - 40 feet, which would be below the maximum of 60 feet and four-stories.

The City requires minimum parking requirements of 2.0 spaces for three-bedroom units, and 2.5 spaces for four-bedroom units plus residences with three or more bedrooms must also provide 0.25 guest parking spaces per unit. The project would be required to provide a total of 151 spaces for the proposed 47 units. The project is currently designed for 151 parking spaces; therefore, it would meet the required number of parking spaces.

Landscaping for the proposed project would exceed the 10 percent minimum by occupying approximately 51,110 SF (equal to 37.4 percent of the site); rooftop installed HVAC units would be screened from view by the architectural elements of the buildings; and all walkway and parking area lighting would meet the outdoor lighting standards in Section 18.58.260 of the Development Code. The project would also meet the environmental performance standards of GP 2030 for air quality and noise (see related sections in this document).

Approximately four one-bedroom apartment units would not meet the minimum unit size of 700 SF for one-bedroom units required in Section 18.58.550 of the Development Code for multi-dwellings/apartment buildings. However, as stated in Section 18.35.080 (M) of the Development Code, with Planning Commission approval of the Site Development Plan, these 625 SF units would be deemed in compliance with this development standard. In addition, each unit would have laundry facilities and a minimum of 90 SF of storage space.

The minimum outdoor space requirement of 140 SF per dwelling unit for a total of 6,580 SF of required space would be exceeded by the project which includes 19,135 SF of open space (407 SF per unit is provided) through a combination of private balconies and patios, common open space areas including central courtyard with pool and spa, fire pit and BBQ area and two additional open space areas (1,050 SF and 840 SF) located along the northern and southern site perimeters between buildings.

As discussed above, with Planning Commission approval of the Site Development Plan the proposed project would comply with the applicable M-U development standards; therefore, potentially significant impacts would not occur.

SURROUNDING LAND USES

Land uses immediately surrounding the subject property, including their respective general plan land use and zoning designations, are included below in Table LU-2.

**TABLE LU-2
SURROUNDING LAND USES**

Direction	Land Use	General Plan Designation	Zoning Designation
North	Church	Rural Residential (RR)	C-1 (Commercial)
South	Retail/Commercial	General Commercial (GC)	C-1 (Commercial)
East	Residential	High Density Residential (HD) 21 du/ac	SPI (Specific Plan) Shadowridge
West	Retail/Commercial	General Commercial (GC)	C-1 (Commercial)

Source: City of Vista GIS 2016

As indicated in Table LU-2, development of the proposed project would be compatible with the surrounding land uses, which includes a mixture of both residential and commercial uses. Therefore, significant land use impacts would not occur.

V. Mineral Resources <i>Would the project:</i>	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local Comprehensive Plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

a - b. No Impact. The California Department of Conservation’s Division of Mines and Geology (DMG) does not identify the project site as an area with high potential for aggregate or mineral resources (DMG 1993). The City’s GP Update does not identify the project site as a locally important mineral resource recovery site. Therefore, development of the proposed project would not result in the loss of availability of a known mineral resource, and significant impacts would not occur.

VI. Noise <i>Would the project result in:</i>	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
a. Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. For a project located within an airport land use plan, or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. For a project in the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The discussion below is summarized and based on the findings contained within the *Acoustical Site Assessment Report for the Melrose 47 Project, Vista, California (Noise Report)* (Helix Environmental Planning, August 2016) (Helix 2016) prepared for the proposed project. The document is on file and available for review in the City’s Planning Division office.

Discussion

a – d. Less Than Significant with Mitigation. The proposed project involves the demolition of the existing church, grading of the site, and construction of nine residential buildings with a total of 47 condominium units. Three buildings would be located at the northern edge of the site, four in the center, and two along the southern edge. Parking spaces would be available throughout the site. Outdoor space would be provided in three common outdoor areas. The northern outdoor area would be 1,050 SF, the southern outdoor area would be 840 SF, and the central outdoor area would be 10,280 SF. The central recreation area would contain a pool and grass area. Each unit would have a private patio ranging from 99 to 169 SF. Access to the site would be via a single entrance at the western edge of the project site. This entrance would lead to the two existing private driveways that connect to S. Melrose Drive and Buena Vista Drive.

According to the *Noise Report* (Helix, 2016), potential noise impacts associated with the proposed project are primarily related to demolition and construction activities as well as future vehicle related noises coming from Buena Vista Drive and S. Melrose Drive. Noise-sensitive land uses are land uses that may be subject to stress and/or interference from excessive noise, including residences, hospitals, churches, schools, hotels, resorts, libraries, sensitive wildlife habitat, or similar facilities where quiet is an important attribute of the environment. Noise receptors are individual locations that may be affected by noise. Noise sensitive land uses in the project vicinity are multi-family residences, a church, and two preschools. Star Montessori Academy preschool is located in a shopping center 50 feet south of the project site. A church, Palomar Unitarian Universalist Fellowship, is located approximately 200 feet north of the project site, which is also the location of the Big Tree Little Preschool. The nearest multi-family residences are located approximately 75 feet east of the project site, across Live Oak Road.

The project site is located off of the east side of S. Melrose Drive between Buena Vista Drive to the north and Live Oak Road/Longhorn Drive to the south in the west-southern-central portion of the city. The closest noise sensitive receptors to the site are a preschool located in the commercial center immediately south of the site and the Shadowridge Country Club Apartments which are located east of the project site across Live Oak Road. Typical noise associated with operation of the proposed project would include intermittent vehicular traffic entering the site, and the operation of roof-mounted HVAC units, which would be consistent with the existing urban/ commercial noise environment in the area. The applicable significance criteria for each of these issues, as well as the potential impacts, are discussed below.

NOISE THRESHOLDS AND STANDARDS

A decibel (dB) is a unit used to express the intensity of a sound wave. Since the human ear is not equally sensitive to all sound frequencies within the entire auditory spectrum, the dBA descriptor (or A-weighted sound level) is used because it factors sounds more heavily within the range of maximum human sensitivity to sound frequencies. Although the A-weighted sound level may adequately indicate the level of environmental noise at any instant in time, community noise levels vary continuously. Most environmental noise includes a conglomeration of sounds from distant sources that create a relatively steady background noise in which no particular source is identifiable. For this type of noise, a single descriptor called the Leq (or equivalent sound level) is used. For most acoustical studies, the monitoring interval is generally taken as one-hour, and is abbreviated Leq-h. The minimum change in sound level that the human ear can detect is approximately 3-dBA. This increment is commonly accepted under CEQA as representing an impact threshold. This limit is also accepted by the City as the significance threshold to determine a proposed project's impact on the affected (or existing) environment.

Construction Noise

The City has incorporated by reference the provisions of San Diego County Noise Control Ordinance (County of San Diego Municipal Code Sections 36.401 through 36.435). Section 36.408 states that, except for emergency work, it shall be unlawful for any person to operate or cause to be operated, construction equipment between 7 p.m. and 7 a.m. or on a Sunday or holiday. Section 36.409 states that, Except for emergency work, it shall be unlawful for any person to operate construction equipment or cause construction equipment to be operated, that exceeds an average sound level of 75 decibels for an eight-hour period, between 7 a.m. and 7 p.m., when measured at the boundary line of the property where the noise source is located or on any occupied property where the noise is being received. Therefore, for the purposes of analysis in this section, construction operations at the project site would be deemed in compliance if the 75 dBA Leq-8h noise contour does not touch the closest residential property line.

Fixed Operational Noise

Fixed operational noise (such as HVAC or other fixed equipment) are subject to the property line noise limits established in the City's Noise Ordinance (Chapter 8.32 of the City's Municipal Code), which are based on the zoning designation of property and time-of-day. The subject property currently has a zoning designation of C-1 (Commercial). However, the applicant is seeking a zone change to M-U (15). Neighboring parcels are zoned C-1 (Commercial) and SPI (Specific Plan Implementation).

From the standpoint of the City's Noise Ordinance, the M-U zoning designation of the proposed residential development would be equivalent to an R-M zone (multi-residential). Therefore, the exterior property line noise limits would be 55 dBA Leq-h between the hours of 7:00 a.m. to 10:00 p.m., and 50 dBA Leq-h between the hours of 10:00 p.m. to 7:00 a.m.

California Code of Regulations (CCR), Title 24, Noise Insulation Standards

Interior noise levels for dwellings, other than detached single-family dwellings, are regulated by Title 24 of the California Code of Regulations, California Noise Insulation Standards. Title 24, Chapter 12, Section 1207.4, of the California Building Code requires that interior noise levels, attributable to exterior sources, not exceed 45 CNEL in any habitable room within a residential structure. A habitable room in a building is used for living, sleeping, eating, or cooking. Bathrooms, closets, hallways, utility spaces, and similar areas are not considered habitable spaces. (24 California Code of Regulations 1207.4 2015). These noise standards have been adopted by the City and are contained in the Noise Element of the GP 2030. If noise sensitive structures (e.g., residential units) are proposed in an area where the exterior CNEL (Community Noise Equivalent Level) exceeds 60 dBA, the project proponent must obtain an acoustical analysis showing that the proposed design would limit interior noise to less than 45 dBA CNEL.

City Noise Element

Noise associated with traffic and/or other off-site noise generators is regulated under the City's Noise Element, which identifies exterior noise levels that are acceptable for various land uses. Usable outdoor areas (e.g., private yard areas, recreational open space areas, etc.) are subject to a maximum 65 dBA CNEL impact threshold.

If traffic, generated by a project, increases the noise level by more than 3.0 dBA in areas where traffic noise exceeds the 65 dBA CNEL noise level, a project's noise impact would be considered significant.

BASELINE NOISE LEVELS

As discussed in the *Noise Report* (Helix, 2016), the existing noise environment is defined by traffic from nearby roadways. Area noise includes the fast food restaurant parking lot, nearby gas station and car wash, and ambient nature sounds. The project is subject to some aircraft noise, including helicopters, though the site is not located near any active airports. The nearest airports are McClellan-Palomar Airport, located 2.85 miles to the southwest, and Oceanside Municipal Airport, located 6.8 miles to the northwest.

Two locations were measured for the ambient (baseline) noise survey: one within the existing church parking lot near the center of the project site, and one in the Albertsons parking lot across from S. Melrose Drive for existing levels of traffic noise. Traffic volumes for S. Melrose Drive were recorded for automobiles, medium-sized trucks (double-tires/two axles), and heavy trucks (three or more axles).

All noise level or sound level values presented below are expressed in terms of decibels (dB), with A-weighting (dBA) to approximate the hearing sensitivity of people. Time-averaged noise levels are expressed by the symbol L_{EQ} , with a specified duration. Baseline noise levels were measured at 54.1 dBA L_{EQ} at the first location (on-site) and 68.4 dBA L_{EQ} at the second location (off-site).

The following equipment was used to measure existing noise levels: Larson Davis System LxT Integrating Sound Level Meter; Larson Davis Model CA250 Calibrator; Windscreen and tripod for the sound level meter; and Digital camera. The sound level meter was field-calibrated immediately prior to the noise measurements to ensure accuracy. All sound level measurements conducted and presented in this report were made with a sound level meter that conforms to the American National Standards Institute (ANSI) specifications for sound level meters (ANSI SI.4-1983 R2001).

CONSTRUCTION NOISE IMPACTS

Construction would require the use of equipment throughout the site for the full term of construction. Construction activities would include demolition, excavating, loading, and compacting. Construction of the retaining walls would follow excavation. Equipment used on site is assumed to include an excavator, dump trucks, loaders, dozers, a rammer (jumping jack) compactor, and an angle grinder.

Grading of the project site requires 20,864 cu. yds. of cut and 13,627 cu. yds. of fill. Project construction would require the export of 7,237 cu. yds. of material from the site. This would be accomplished via approximately 80 truck trips per day. The most likely source of vibration during project construction would be a vibratory roller, which may be used to achieve soil compaction as part of foundation construction, construction of project private roads, and fill compaction.

Construction noise would be generated by diesel engine-driven construction equipment used for site preparation and grading, removal of existing structures and pavement, loading, unloading, and placing materials and paving. Diesel engine-driven trucks also would bring materials to the site and remove the spoils from excavation. The noise sources on the project site during construction would include construction equipment used for removal of existing structures and pavement, site preparation and grading, loading, unloading, and placing materials, and paving.

Construction of the project would generate elevated noise levels that may disrupt nearby noise sensitive land uses such as nearby residences and preschools. The magnitude of the impact would depend on the type of construction activity, equipment, duration of each construction phase, distance between the noise source and receiver, and any intervening structures. Table N-1, Construction Equipment Noise Levels, provides the noise level for expected construction equipment at their respective distances.

Noise generated by project construction activities was modeled using SoundPLAN. Noise from construction equipment was based on reference levels from the Federal Highway Administration’s (FHWA) Roadway Construction Noise Model User’s Guide (FHWA 2006) and standard noise propagation algorithms. Table N-1 summarizes typical construction equipment noise levels. As shown, construction equipment typically generates maximum noise levels between 80 and 95 dB(A) Lmax at a distance of 50 feet (FHWA 2006). Due to varying load cycles and breaks for the operators and for non-equipment tasks, such as measurement, average equipment noise levels are between 70 and 85 dB(A) Leq at a distance of 50 feet.

**TABLE N-1
CONSTRUCTION EQUIPMENT NOISE LEVELS**

Unit(s)	Percent Operating Time	Hours in Use Per Operating Day	Lmax	dB(A) Leq (Daily)
Excavator and two loaders	40	4	80.7 ¹	74.0 ¹
Dozer and two loaders	40	4	81.7 ¹	74.4 ¹
Loader/compactor/dump truck	40/20/40	4	83.2 ¹	73.1 ¹
Excavator	40	2	86.7 ²	76.7 ²
Dump Truck	40	2	77.4 ³	67.4 ³
Angle Grinder	10	2	90.2 ⁴	74.1 ⁴
Rammer (jumping jack) compactor	10	2	80.5 ⁴	64.6 ⁴

Source: *Noise Report* (Helix, 2016), RCNM, Defra (2005)

Note: 1 = Measured at 75 feet; 2= Measured at 25 feet; 3= Measured at 45 feet; 4=measured at 10 feet

RCNM was used to determine the worst-case construction noise for excavators, loaders, dozers, compactors and dump truck. Smaller equipment such as an angle grinder and rammer compactor would also be used. Noise data for an angle grinder and rammer compactor were provided by a construction noise database (Department for Environment, Food, and Rural Affairs [Defra] 2005) and manufacturer's specifications (Allerdice Rent-All 2016). Construction equipment would not all operate at the same time or location. A dozer and an excavator may be working on the site simultaneously, but would not be working in close proximity to one another at a given time due to the nature of their respective operations.

Construction equipment would not be in constant use during the eight-hour operating day. The model assumes that the excavator, loader, and dump truck would be in operation for 40 percent of a given hour during typical construction day. A compactor would be in operation for 20 percent, and a grinder and rammer compactor would be in operation for 10 percent of a given hour during a typical construction day.

Individual pieces of equipment would be used between 2 and 4 hours per construction day, depending on their location on the site and purpose. TNM software was used to calculate the noise contour distances for construction-related truck trips. The off-site roadway modeling represents a conservative analysis that does not take into account topography or attenuation provided by existing structures. Export of fill material would require up to 80 truck trips per day for approximately 6 working days. Using a conservative estimate of 80 truck trips over an 8-hour period, approximately 10 heavy truck trips per hour would be required. Noise from construction-related truck traffic during a given hour would be less than 65 dBA at the edge of the roadway, and would therefore not exceed the 75 dBA limit for construction-related activity.

The nearest sensitive receptor is the Star Montessori Academy preschool located in the shopping center immediately south of the proposed construction and is adjacent to the project site. Big Tree Little Preschool is located in the church buildings approximately 200 feet north of the project site. Construction equipment is mobile and would be moving across the site throughout the construction period. For modeling purposes, the general construction equipment was assumed to operate at a conservative distance of 75 feet from the project boundary. Noise levels for a dozer and two loaders at this distance would be 74.4 dBA L_{EQ} , which would be under the construction significance threshold of 75.0 dBA L_{EQ} .

According to the *Noise Report* (Helix, 2016), a typical on-site source of vibration during project construction would be a vibratory roller (primarily used to achieve soil compaction as part of the foundation and paving construction). A vibratory roller would likely be used for compaction of fill. The vibratory roller would be used for compaction approximately 50 feet from the nearest sensitive receptors at Star Montessori Academy preschool. A vibratory roller creates approximately 0.210 in/sec PPV at a distance of 25 feet. Using the construction vibration damage criteria from the City of Vista General Plan Update EIR (2011), a vibratory roller would create approximately 0.074 in/sec PPV for non-engineered buildings at 50 feet. This would fall below the 0.2 in/sec PPV threshold. Therefore, although vibration may be perceptible by nearby receptors, temporary impacts associated with the vibratory roller (and other potential equipment) would be less than significant.

Retaining walls would be constructed along the northern, southern, and eastern edges of the project site. Construction of these walls would require the use of equipment between 25 and 45 feet from the project boundaries. This work would require the addition and compaction of fill. Backfill and compaction will likely require the use of a loader and compactor. Some work adjacent to the wall may include use of a rammer (jumping jack) compactor and an angle grinder within approximately 10 feet of the property line. An excavator would likely be used approximately 25 feet from the property boundary. A dump truck would be used approximately 45 feet from the property edge.

For noise impacts at the nearby Star Montessori Academy preschool, an excavator was analyzed in isolation at a 25-foot distance for two hours of operation. The highest impact level for an excavator at 25 feet was modeled at 76.7 dBA L_{EQ} . A dump truck analyzed in isolation at a 45-foot distance for two hours was modeled at 67.4 dBA L_{EQ} . An angle grinder at a 10-foot distance was modeled at approximately 74.1 dBA L_{EQ} for two hours of use, and a rammer compactor was modeled at approximately 64.6 dBA L_{EQ} also for two hours of use. Because noise levels from the excavator would exceed 75 dBA, construction impacts would be potentially significant.

The nearest residential properties to the proposed construction are east of the project site, across Live Oak Road. Construction equipment is mobile and would be moving across the project site throughout the construction period. The nearest residential property line is approximately 75 feet from the project's edge. At this distance, noise produced simultaneously from the loudest pieces of equipment, a dozer and two loaders, would be 74.4 dBA at 75 feet. This would not surpass the construction significance threshold of 75.0 dBA L_{EQ} . Therefore, construction noise impacts to nearby residences would be less than significant.

The Big Tree Little Preschool is located in a building 200 feet north of the project site. At this distance for two hours of use, noise levels from an excavator was modeled at 57.6 dBA L_{EQ} , a dump truck was modeled at 52.7 dBA L_{EQ} , an angle grinder was modeled at 47.6 dBA L_{EQ} , and a rammer compactor was modeled at 38.1 dBA L_{EQ} . As a result, construction noise impacts on Big Tree Little Preschool would be less than significant.

To reduce impacts on the Star Montessori Academy preschool from construction noise, implementation of Mitigation Measure NOI-1 would ensure that the potential impact is reduced to a less than significant level.

MITIGATION MEASURE

N-1 Noise levels from demolition and construction activities shall not exceed the noise limit specified in San Diego County Code Sections 36.408 and 36.409 of 75 dBA (8-hour average). To that end the project contractor shall employ measures to reduce construction/demolition noise including, but not be limited to, the following:

- Construction equipment shall be properly outfitted and maintained with manufacturer-recommended noise-reduction devices.
- Diesel equipment shall be operated with closed engine doors and equipped with factory-recommended mufflers.
- Mobile or fixed “package” equipment (e.g., arc-welders and air compressors) shall be equipped with shrouds and noise control features that are readily available for that type of equipment.
- Electrically powered equipment shall be used instead of pneumatic or internal-combustion powered equipment, where feasible.
- Unnecessary idling of internal combustion engines (e.g., in excess of 5 minutes) shall be prohibited.
- Material stockpiles and mobile equipment staging, parking, and maintenance areas shall be located as far as practicable from noise sensitive receptors.
- The use of noise-producing signals, including horns, whistles, alarms, and bells, shall be for safety warning purposes only.
- No project-related public address or music system shall be audible at any adjacent sensitive receptor.

- Temporary sound barriers or sound blankets shall be installed between construction operations and adjacent noise-sensitive receptors south of the project. The project contractor shall construct a sound wall along the southern property line between the project and the nearby preschool. Sound walls shall be a height of at least 10-feet above grade, and shall be constructed of a material with a minimum weight of two pounds per square foot with no gaps or perforations. The sound wall shall remain in place until the conclusion of construction activities.
- The project contractor shall notify residences within 100 feet of the project's property line in writing one week prior to the start of any construction activity such as demolition, jackhammering, concrete sawing, asphalt removal, and/or heavy grading operations. The notification shall describe the activities anticipated, provide dates and hours, and provide contact information with a description of a complaint and response procedure.
- The on-site construction supervisor shall have the responsibility and authority to receive and resolve noise complaints. A clear appeal process for the affected party shall be established prior to construction commencement to allow for resolution of noise problems that cannot be immediately solved by the site supervisor.

With incorporation of Mitigation Measure N-1, noise levels along the southern property line would not exceed the construction noise level limit of 75 dB(A) L_{EQ} , and construction noise impacts would be less than significant.

TRAFFIC NOISE IMPACTS

Future traffic noise levels presented in this analysis are based on traffic volumes provided by the *Traffic Study* (Chen Ryan, 2016) and from SANDAG's Transportation Forecast Information Center (TFIC). Modeling of the exterior noise environment for this report was accomplished using two computer noise models: Computer Aided Noise Abatement (CadnaA) version 4.2 and Traffic Noise Model (TNM) version 2.5. CadnaA is a model-based computer program developed by DataKustik for predicting noise impacts in a wide variety of conditions. CadnaA assists in the calculation, presentation, assessment, and mitigation of noise exposure. It allows for the input of project related information, such as noise source data, barriers, structures, and topography to create a detailed CadnaA model, and uses the most up-to-date calculation standards to predict outdoor noise impacts. CadnaA traffic noise prediction is based on the data and methodology used in the TNM. The TNM was released in February 2004 by the U.S. Department of Transportation (USDOT), and calculates the daytime average hourly L_{EQ} from three-dimensional model inputs and traffic data (California Department of Transportation [Caltrans] 2004). The TNM used in this analysis was developed from Computer Aided Design (CAD) plans provided by the Project applicant. Input variables included road alignment, elevation, lane configuration, area topography, existing and planned noise control features, projected traffic volumes, estimated truck composition percentages, and vehicle speeds.

Because the highest traffic volumes were estimated under the Existing + Cumulative + Project scenario, this scenario was used to conservatively estimate on-site traffic noise impacts. Nineteen receiver locations of exterior use areas (e.g., private outdoor patios or the three common outdoor open spaces) for proposed on-site residences were modeled (Receivers R1 to R19). Seven receiver locations for the proposed second-story balconies nearest to S. Melrose Drive were modeled (Receivers B1 to B7) at 13 feet (eight feet for the second story height plus a 5-foot height for the receiver).

**TABLE N-2
PREDICTED FUTURE EXTERIOR ON-SITE TRAFFIC NOISE LEVELS (CNEL)**

Receiver	Location	Noise Level (CNEL)
R1	Private Patio	54.0
R2	Private Patio	49.9
R3	Common Area	41.7
R4	Private Patio	48.6
R5	Private Patio	51.0
R6	Private Patio	59.2
R7	Common Area	59.4
R8	Common Area	55.0
R9	Common Area	51.8
R10	Private Patio	49.7
R11	Private Patio	58.1
R12	Private Patio	53.3
R13	Private Patio	62.7
R14	Private Patio	61.5
R15	Private Patio	59.6
R16	Common Area	58.5
R17	Common Area	57.3
R18	Private Patio	57.3
B1	Private Patio	57.2
B2	Common Area	60.5
B3	Common Area	56.7
B4	Common Area	65.0
B5	Common Area	63.8
B6	Common Area	62.7
B7	Common Area	61.3

Source: Helix, 2016

Note: Noise levels are for Existing + Project + Cumulative Condition.

The results of this modeling are shown in Table N-2, Future Exterior On-site Noise Levels and the location of these receivers can be seen in Figure 5, Exterior Use Area and Balcony Receiver Locations of the *Noise Report* (Helix, 2016). As seen in Table N-2, noise levels would not exceed the 65 CNEL maximum allowable noise level for multi-family residences for the receivers modeled. Therefore, exterior use area noise impacts would be less than significant.

As required by Title 24 of the California Code of Regulations interior noise studies shall be prepared for the affected units demonstrating that interior noise levels due to exterior sources do not exceed 45 CNEL in habitable rooms. As shown with the noise levels in Table N-2, building façade noise levels may exceed 60 CNEL at the proposed residences facing S. Melrose Drive. Although traditional architectural materials are normally able to reduce exterior-to-interior noise by up to 15 dBA, interior noise levels may exceed the 45 CNEL interior noise standard, resulting in a potentially significant impact. To reduce noise impacts to residence interiors implementation of Mitigation Measure N-2, below, would ensure that the potential impacts are reduced to less than significant levels.

MITIGATION MEASURE

N-2 Exterior-to-Interior Noise Level Limit: Interior noise levels resulting from exterior noise sources for the proposed residences shall not exceed 45 CNEL. Once specific building plan information is available, additional exterior-to-interior noise analysis shall be conducted for the residences facing South Melrose Avenue where exterior noise levels are expected to exceed 60 CNEL to demonstrate that interior levels will not exceed 45 CNEL. The information in the analysis shall include wall heights and lengths, room volumes, window and door tables typical for a building plan, as well as information on any other openings in the building shell. With this specific building plan information, the analysis shall determine the predicted interior noise levels at the planned on-site buildings. If predicted noise levels are found to be in excess of 45 CNEL, the report shall identify architectural materials or techniques that could be included to reduce noise levels to 45 CNEL in habitable rooms. Standard measures such as glazing with Sound Transmission Class (STC) ratings from a STC 22 to STC 60, as well as walls with appropriate STC ratings (34 to 60), should be considered.

Appropriate means of air circulation and provision of fresh air shall be provided to allow windows to remain closed for extended intervals of time so that acceptable interior noise levels can be maintained. The mechanical ventilation system shall meet the criteria of the International Building Code (Chapter 12, Section 1203.3 of the 2001 California Building Code).

OPERATIONAL NOISE IMPACTS

The operational noise sources on the project site after completion of construction are anticipated to be those that would be typical of any residential complex, such as vehicles arriving and leaving, children at play, and landscape maintenance machinery, and operation of on-site HVAC units. None of these noise sources are anticipated to violate the City's Noise Ordinance limits.

Mechanical Equipment Noise

The known or anticipated project stationary noise sources include the residential HVAC systems. The project includes the outdoor installation of rooftop HVAC condenser units. For modeling purposes, it was assumed that the air conditioning condenser would be a Carrier 38HDR060 split system. This unit typically generates a noise level of 56 dBA at a distance of seven feet. Based on the site plan, the closest building to the property line would be the northwestern building. HVAC units would likely be placed on the building's southwest and southeast corners. A maximum of three HVAC units would be clustered together at each corner. A cluster of HVAC units would be located approximately 55 feet from the northern property line. At this distance, a single condenser would generate a noise level of 38 dBA. Three condensers together would generate a noise level of approximately 43 dBA, which does not exceed the County's nighttime allowable hourly limit of 45 dBA. Therefore, anticipated impacts would be less than significant.

OPERATIONAL OFF-SITE NOISE IMPACTS

TNM software was used to calculate the noise contour distances for Existing and Existing + Project conditions. The off-site roadway modeling represents a conservative analysis that does not take into account topography or attenuation provided by existing structures. The results of this analysis for the CNEL at 100 feet are shown below in Table N-3, Off-site Traffic Noise Levels. A significant impact would occur if existing conditions approach or exceed City standards and the project more than doubles (increases by more than 3 CNEL) the existing noise level. However, as shown in the table, the project would not increase any of the noise levels by more than 3 CNEL. Therefore, exterior off-site direct transportation noise impacts would be less than significant.

**TABLE N-3
OFF-SITE TRAFFIC NOISE LEVELS**

Roadway Segment	CNEL @ 100 Feet			
	Existing	Existing+ Project	Change from Existing	Direct Impact ¹
S. Melrose Drive				
• North of Buena Vista Drive	68.7	68.7	0.0	No
• Buena Vista Drive to Driveway 2	68.8	68.8	0.0	No
• Driveway 2 to Longhorn Drive	68.9	68.9	0.0	No
Buena Vista Drive				
• S. Melrose Drive to Driveway 2	56.7	56.9	0.2	No
• North of Driveway 2	55.7	55.8	0.1	No
Live Oak Road				
• East of S. Melrose Drive	51.4	51.4	0.0	No

Note: ¹ = A direct impact to off-site uses would occur if the project more than doubles (increases by 3 CNEL) the existing noise level.

As shown in Table N-3 above, direct and cumulative noise level increases due to the project would be less than 1 dB. Therefore, direct and cumulative off-site traffic noise impacts associated with the project would be less than significant and no mitigation is required.

e - f. No Impact. As stated in the Land Use section of this document, the project is subject to some distant aircraft noise, though it is not located near any active airports. The closest airports are McClellan-Palomar Airport, located 2.85 miles to the southwest, and Oceanside Municipal Airport, located 6.8 miles to the northwest. Furthermore, no private airstrips are located in the vicinity of the project site. Accordingly, the project would not expose people shopping, working or residing at the project site to excessive noise levels; therefore, no significant noise impacts would occur.

VII. Population and Housing <i>Would the project:</i>	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
a. Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through an extension of roads or other infra-structure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

a - c. No Impact. The proposed project involves the redevelopment of a site containing an existing church and parking lot with the construction and operation of 47 condominium units, and associated improvements, on a 3.14 acre site. Approval and development of this project is not expected to significantly increase population growth in the area because the proposed project would be consistent with the City’s *GP 2030 Update* regarding population growth and the need for new housing in the city. The existing land use designation is Rural Residential (RR) and the underlying zoning designation is C-1 (Commercial). The proposed project includes a General Plan Amendment and Zone change to Mixed Use (M-U) (15) allowing up to 15 dwelling units per acre.

According to the Vista Municipal Code Chapter 18.35.10, the purpose of the Mixed Use (M-U) Zone is applied to areas appropriately suited to developments that contain either stand-alone residential or commercial or a combination of residential and commercial activities in conformance with the General Plan. The GP 2030 and the associated PEIR anticipated 14,775 additional persons and up to an additional 4,532 residential units under the city’s population and growth buildout scenario.

Furthermore, the project would be constructed on a site that would be redeveloped and within an area that is fully urbanized and served by existing infrastructure, public services and utilities. As a result, development of the project would not result in potentially growth-inducing effects by extending utilities into an undeveloped area. The project site does not currently contain any housing; therefore, development of the project would not displace any people or necessitate the construction of replacement housing. Consequently, substantial direct or indirect population growth, or the displacement of people or housing would not occur with project development; as a result, significant impacts would not occur.

VIII. Public Services <i>a. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the following public services:</i>	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
1. Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4. Maintenance of public facilities including roads?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5. Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion

a1 –a2. Less than Significant Impact. The proposed project would result in less than significant impacts to fire protective services, police services, roads and other public facilities, and less than significant with mitigation to schools. The proposed project involves the construction and operation of 47 new condominiums on a 3.14-acre site in the west-southern-central portion of the city.

The site is currently developed with a church and parking lot, and is serviced by police and fire protection, as needed. Potential impacts on each public service are discussed below.

FIRE PROTECTION SERVICES

The proposed 47-unit residential community would be constructed in accordance with all applicable fire codes set forth by the state Fire Marshall, the Vista Fire Department (VFD), and the City’s building code. Development of the proposed project may result in an incremental increase in the demand for emergency services; however, the size and location of the project would not place an undue hardship on the fire department since they are presently servicing the area.

First responders for fire protection services would primarily be available from the closest fire station which is Vista Fire Station No. 5 located at 2009 S. Melrose Drive just south of the project site. In addition, VFD has reviewed the site and architectural plans, and identified recommendations to reduce potential impacts to fire protective services. These recommendations are included in the Conditions of Approval for the project. In addition, prior to final project approval, the City Fire Marshall would verify that the project has been designed to conform to code. Therefore, development of the proposed facility would not exceed the capacity of the VFD to serve the site or other areas with existing fire protection services and resources, and would result in less than significant impacts.

POLICE PROTECTIVE SERVICES

The proposed project would not result in significant impacts on police protective services. The development would occur within an area of existing commercial and residential uses, which is regularly patrolled by the San Diego County Sheriff’s Department. In addition, the Sheriff’s Department has reviewed the site and architectural plan submittals and provided recommendations to reduce potential security impacts. The design of the project has incorporated appropriate security considerations including site lighting and an electronically operated vehicular gate. Therefore, the project would not exceed the capacity of the San Diego County Sheriff’s Department to provide police protective services to the project site, and impacts would be less than significant.

a3. Less than Significant Impact

SCHOOLS

The proposed project consists of the construction and operation of 47 residential units. The area schools within the Vista Unified School District (VUSD) that would serve the project include Breeze Hill Elementary School, Madison Middle School, and Rancho Buena Vista High School. Approval and development of this project is not expected to significantly increase population growth in the area. This is due in part to the proposed project's compliance with the policies and goals of the Land Use and Community Identify Element and the Housing Element of the City's *GP 2030 Update*. As stated in previous communications from the Vista Unified School District on similar projects, the applicant of the proposed project would be subject to paying the District's *statutory fees* pursuant to Government Code Section 65995 et seq. (currently \$3.20 per SF, for residential projects), which would offset any potentially significant impacts to school facilities. Consequently, impacts on schools would be less than significant.

a4 – a5. Less than Significant Impact.

MAINTENANCE OF ROADS AND OTHER PUBLIC FACILITIES

The proposed project may result in an incremental increase in the use of libraries, senior centers, and other public facilities. However, with a projected total of approximately 154 people occupying the residences at full build out, project development is not expected to substantially increase the demand of these services such that construction of new or expanded facilities is required.⁹ Maintenance of public roads in the vicinity of the site (e.g., S. Melrose Drive and Buena Vista Drive) is provided by the City. Due to the size and scope of the proposed project and associated vehicular traffic and required street improvements, project development is not anticipated to increase roadway maintenance on local roads above normal levels. As a result, less than significant impacts on maintenance of public facilities would occur with project construction and operation.

9. Projected total occupancy is based on 3.26 persons per household (City of Vista *GP 2030 Update*, Chapter 7 – Growth Inducement, 2011).

IX. Recreation <i>Would the project:</i>	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

a. Less than Significant Impact. The proposed project involves the construction and operation of 47 new condominium units on a 3.14 acre site. The project site is adjacent to a commercial center located along S. Melrose Drive. In addition to the housing units and parking areas, project design includes three common outdoor areas and private patios and balconies.

In compliance with open space requirements in the development standards for the M-U zoning designation, the units would have private patios at the ground level and private balconies/decks on the second floor of the residence, which would contribute to the required 140 SF of open space per unit for a total required amount of 6,580 SF of open space (see Figure 4 - Proposed Site Plan). The proposed project includes approximately 19,135 SF of common useable open space (equal to approximately 407 SF per unit).

Common open space with amenities is approximately 12,170 SF which includes an 10,280 SF central common recreation area and a 1,050 SF common open space area along the northern site boundary and an 840 SF common open space area along the southern site boundary. Private open space (private patios/decks) is approximately 6,965 SF

A demand on existing recreational resources can be anticipated with any residential development within the city, since residents may utilize city parks and other public recreational facilities for additional leisure time activities. However, impacts from the proposed land use are anticipated to be minimal given the availability of the on-site recreational amenities discussed above. Therefore, it is anticipated that the use of existing recreational facilities by residents of the project would not lead to a substantial physical deterioration of them. Therefore, impacts to recreational resources would be less than significant.

b. No Impact. As stated above, the proposed project design includes indoor and outdoor recreational facilities such as a pool and spa, and other amenities. As noted above, a demand on existing recreational resources may be anticipated with any residential development within the city. Although the residents of the project may result in an incremental increase on existing recreational resources within the city, the impact is anticipated to be insignificant given the availability of recreational amenities discussed above. Therefore, the expansion of existing recreational facilities or the construction of new recreational facilities is not anticipated, and significant impacts would not occur with project development.

X. Transportation/Traffic <i>Would the project:</i>	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
a. Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Conflict with adopted policies plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The discussion below is summarized and based on the findings contained within *Traffic Impact Study, 3.14 (Traffic Study)* prepared by Chen Ryan Associates, Inc. on January 19, 2016 (Chen Ryan, 2016) for the proposed project. This report is on file and available for review with the City’s Planning Division.

Discussion

a. Less than Significant Impact. The proposed project consists of the construction and operation of a 47-unit residential community on a 3.14-acre site in the west-southern-central portion of the city. The project site is located on the east side of S. Melrose Drive between Buena Vista Drive to the north and Live Oak Road to the south. Once construction is complete, and the residential community is at full-capacity, the project is expected to generate 400 average daily trips (ADT) ¹⁰ with 32 AM peak hour trips (6 inbound / 26 outbound) and 40 PM peak hours trips (28 inbound / 12 outbound).

There would be two egress / ingress points into the development including a direct access point from S. Melrose Drive and Buena Vista Drive. Emergency vehicle access would be accommodated at the two access points into the project site (Figure 4 – Proposed Site Plan). The *Traffic Study* (Chen Ryan, 2016) analyzed potential project impacts to roadway segments and intersections in the city; however, as noted below only the potential impacts on intersections are summarized. The addition of project traffic to Cumulative Year 2030 Conditions would not result in significant cumulative impacts to any intersections.

¹⁰ The *Traffic Study* evaluated potential traffic impacts from a 50-unit project. However, the project has been reduced in size to 47 units. Therefore, the Traffic Study evaluated a larger project, which results in a conservative analysis for purposes of CEQA.

CITY OF VISTA THRESHOLD OF SIGNIFICANCE

The City's threshold of significance relies upon peak hour traffic operations at intersections rather than roadway segment analyses. Roadway segment Level of Service (LOS) standards are generally used as long-range planning guidelines to determine the functional classification of roadways, and are not always accurate indicators of roadway performance. Typically, the performance and LOS of a roadway segment is heavily influenced by the ability of intersections to accommodate peak hour volumes. Therefore, peak hour signalized and unsignalized intersections within the study area are the focus of the project traffic analysis summarized in this section since intersections control the movement of vehicles along road segments. Further information on the roadway segment analysis can be found in the *Traffic Study* (Chen Ryan, 2016).

LOS is the term used to denote the different operating conditions that occur under various traffic volume loads. LOS designations range from A to F, with LOS A representing the best operating conditions and LOS F representing the worst operating conditions. A significant traffic impact in the city of Vista would include the following: (1) the addition of project traffic results in an LOS at an intersection dropping from LOS D or better to LOS E or F; or (2) if an intersection is operating at LOS E or F under existing conditions and the project adds more than an additional two seconds of average vehicle delay. In addition, in the longer-range Cumulative (or build-out) Condition, if the addition of project traffic results in an LOS dropping from LOS D or better to LOS E or F, or if an intersection is predicted to operate at LOS E or F without the project and the project contributes to the average vehicle delay (regardless of time), the project is determined to have a cumulatively significant impact.

PROJECT STUDY AREA AND EXISTING CONDITIONS

The regional Congestion Management Program (CMP) guidelines indicate that all signalized intersections where 50 or more project generated trips are forecast to be added should be included in the traffic impact study. S. Melrose Drive is a CMP designated arterial. The proposed project would not contribute more than 50 peak hour trips on SR-78; therefore, freeway impact analyses were not conducted.

Based on CMP guidelines and discussions with City staff, the following three study intersections were identified for inclusion in the *Traffic Study*:

Intersections

- S. Melrose Drive / Buena Vista Drive
- Project Driveway 1 / Buena Vista Drive
- S. Melrose Drive / Project Driveway 2

Existing Levels of Service

Traffic counts were collected in November 2015 at study area intersections during the AM and PM peak hours. Levels of service were evaluated for Existing Conditions. Table TT-1 summarizes the existing a.m. and p.m. peak hour LOS of the study intersections based on the existing peak hour intersection volumes and existing intersection geometry.

Table TT-1 shows that all intersections under Existing Conditions operate at acceptable LOS "D" or better with the exception of the intersection of:

- S. Melrose Drive / Project Driveway 2 - LOS "E" in the PM peak hour.

**TABLE TT-1
EXISTING STUDY INTERSECTION PEAK HOUR LOS**

Intersection	AM Peak Hour		PM Peak Hour	
	Avg. Delay (sec.)	LOS	Avg. Delay (sec.)	LOS
S. Melrose Drive / Buena Vista Drive (signalized)	49.0	D	29.7	C
Project Driveway 1 / Buena Vista Drive (Side street stop controlled)	22.7	C	17.3	C
S. Melrose Drive / Project Driveway 2 (Side street stop controlled)	21.0	C	35.7	E

Source: Chen Ryan, 2016

Existing Transit Service

The North County Transit District’s (NCTD) BREEZE bus line No. 332, runs on this road between the Vista Transit Station and the Buena Creek Station on the SPRINTER line. There is a northbound bus stop near the intersection with Live Oak Road, and a southbound stop near the intersection with Buena Vista Drive. Implementation of the proposed project would not have an effect on existing transit service.

Existing Pedestrian and Bicycle Access

Sidewalks and Class II bicycle lanes are provided on both sides of S. Melrose Drive, and on-street parking is prohibited along this section of the road. This roadway is classified as a 6-Lane Prime Arterial in the Circulation Element of the City’s GP 2030 Update (2011). Implementation of the proposed project would not have an effect on existing pedestrian or bicycle access.

Proposed Project Trip Generation and Distribution

Trip generation rates for the proposed project were developed utilizing SANDAG’s *Guide to Vehicular Traffic Generation Rates for the San Diego Region* (SANDAG, April 2002). Table TT-2 summarizes the project trip generation rates. The project trip distributions were developed via a computer generated “Select Zone” analysis utilizing the City of Vista/SANDAG 2030 sub-area traffic model.

**TABLE TT-2
PROPOSED PROJECT TRIP GENERATION**

Land Use	Units	Trip Rate	Daily Trips	AM Peak Hour		PM Peak Hour	
				%	Trips	%	Trips
Condominium	50 DU	8 / DU	400	8	32 (6-in / 26-out)	10	40 (28-in / 12-out)

Source: SANDAG Trip Generation Manual, Chen Ryan 2016

Note: The Traffic Study was based on a previous and larger 50-unit version of the project

SUMMARY OF POTENTIAL CONSTRUCTION IMPACTS

Short-term construction traffic impacts would result from hauling demolition material away from the project site, export roughly 7,237 cu. yds. of material from the site, delivering construction materials and supplies to the site, and transporting construction personnel to and from the site. It is assumed that construction traffic would arrive and depart from the project site via S. Melrose Drive and SR-78. During peak hauling periods associated with exporting material from the site and bringing building materials to the site, there is the potential for significant impacts to roadway segments and intersections along the truck route from the project site to SR-78, if substantial truck trips occur during the AM and PM peak hours. However, as stated in Chapter 2, Project Description, the applicant (or its contractor) would be required to prepare and implement a construction Traffic Management Plan to the satisfaction of the City Traffic Engineer to avoid significant construction-related impacts to nearby streets and intersections. Therefore, impacts to traffic during the construction period of the project would not be significant.

SUMMARY OF POTENTIAL OPERATIONAL TRAFFIC INTERSECTION IMPACTS

A significant project impact would only occur to intersections operating at LOS “E” or “F”, and if the increase in delay due to the project is greater than 2.0 seconds. If an intersection is considered significant, mitigation is required by the project. The following summarizes the intersection analyses as shown in Table TT-3, below.

Existing Plus Project Conditions

Roadway and intersection geometrics under the Existing Plus Project Conditions were assumed to be identical to existing geometrics. Existing Plus Project traffic volumes were derived by combining the existing traffic volumes and the project trip assignment volumes. Project peak hour traffic was then added to the existing peak hour traffic volumes to derive the Existing With Project peak hour volumes. Table TT-3 shows all Existing With Project intersections operate at acceptable LOS “D” or better with the exception of one intersection:

- S. Melrose Drive / Project Driveway 2 - LOS “E” in the PM peak hour

However, according to SANTEC/ITE Regional Guidelines on significance determination, a project would have a significant impact at an intersection if the project causes an increase in delay of more than 2.0 seconds. When comparing the Existing With Project Conditions with the Existing Conditions at the intersection of S. Melrose Drive and Project Driveway 2, the increase in delay is only 1.3 seconds and therefore not considered significant. Since this intersection is not significant, no mitigation is necessary or recommended.

Existing Plus Approved / Pending Projects + Project

To evaluate near-term future conditions, an examination of the immediate area surrounding the project to include projects that are approved, pending approval, or planned in the area and assumed to be constructed and occupied at the project’s opening day (2017) were evaluated. Approved or pending projects list was obtained from the City’s Planning Division. The list includes three projects within the project study area that are expected to add traffic at or near the same time as the proposed project. The pending projects include:

- Avalon Vista Apartments – The Avalon Apartments project proposes to develop 221 apartment units on 7.0 acres of land on the south side of Breeze Hill Road, west of S. Melrose Drive in the City of Vista.
- Breeze Hill Apartments – The Breeze Hill Apartments project proposes to develop 88 apartment units on 3.1 acres of land. The proposed project is located at 631 S. Melrose Drive in the City of Vista.

- Presidio Vista Annexation – The Presidio Vista Annexation project proposes to develop 31 single-family residential lots, with a minimum of 10,000 SF on 11.4 acres of land. The proposed project is located at 1405 Ridge Road in the City of Vista.

The traffic generated from the projects listed above were included in the Near-Term Year 2017 Base scenario.

The trip generation from these projects was estimated and assigned to the nearby study area. Table TT-3 shows other Approved or Pending Projects AM and PM peak hour intersection level of service without the proposed project. Table TT-3 also shows AM and PM peak hour levels of service at intersections resulting from adding the project traffic to Existing Plus Approved or Pending Projects volumes. All intersections in the Existing Plus Approved or Pending Projects Plus Project Conditions are expected to operate at acceptable LOS “D” or better with the exception of one intersection with and without project traffic added:

- S. Melrose Drive / Project Driveway 2 LOS “E” in the PM peak hour.

However, the project increase in intersection delay will be within the 2.0 seconds allowed by the Regional Guidelines, so that the project impact will be less than significant and no mitigation will be needed. As shown in the analysis, there are no significant direct impacts to study intersections in the Existing Plus Approved or Pending Projects Plus Project condition.

Horizon Year (Buildout) With and Without Project Conditions

The Traffic Impact Analysis Report prepared for the City’s GP 2030 Update, dated March 23, 2010, was used as the source for Horizon Year roadway segment and peak hour traffic volumes at the study area locations. Intersection and roadway segment improvements in that report assumed S. Melrose Drive as a 6-lane Urban Major. The analysis in this study also assumes S. Melrose Drive as a 6-lane Urban Major in the Horizon Year With and Without Project Conditions. Table TT-3 shows the Horizon Year intersection AM/PM peak hour intersection levels of service without and with project traffic.

**TABLE TT-3
SUMMARY OF INTERSECTION PEAK HOUR LOS RESULTS**

Intersection	Existing		Existing Plus Project		Existing Plus Project Plus Other Projects		2030 Horizon Base		2030 Base Plus Project	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
S. Melrose Drive / Buena Vista Drive	D	C	D	C	D	D	E	E	E	E
Project Driveway 1 / Buena Vista Drive	C	C	D	C	D	C	C	C	C	C
S. Melrose Drive / Project Driveway 2	C	E	C	E	C	E	D	E	D	F

Source: Chen Ryan, 2016
 Note: 1 = With project traffic added, delay increases no more than 2.0 seconds. Therefore, project impact is less than significant, per Santec/ITE guidelines.

As shown in Table TT-3, two out of three of the key study area intersections are projected to operate at substandard LOS under Cumulative Year 2030 Base Conditions, including:

- S. Melrose Drive / Buena Vista Drive – LOS E during both the AM and PM peak hours; and
- S. Melrose Drive / Project Driveway 2 – LOS E during the PM peak hour.

According to the *Traffic Study* (Chen Ryan, 2016), as shown in Table TT-3, two out of three of the key study area intersections are projected to operate at substandard LOS under Cumulative Year 2030 Base Plus Project conditions, including:

- S. Melrose Drive / Buena Vista Drive – LOS F during both the AM and PM peak hours; and
- S. Melrose Drive / Project Driveway 2 – LOS F during the PM peak hour.

Based upon the impact significance criteria presented in the *Traffic Study* (Chen Ryan, 2016), the addition of the Proposed

Project traffic would result in a significant cumulative impact at the following intersections and mitigation is required:

- S. Melrose Drive / Buena Vista Drive; and
- S. Melrose Drive / Project Driveway.

MITIGATION MEASURE

T-1 Prior to the issuance of an occupancy permit, the Applicant and/or Owner shall be responsible for paying the project's fair share contribution to the City of Vista's Impact Fees for Arterials Streets and Traffic Signals program.

With implementation of this mitigation measure, the significant cumulative impact would be reduced to a less than significant level.

c - f. No Impact. Development of the proposed project would not result in a change in air traffic patterns, including either an increase in traffic levels or a change in location, which would result in substantial safety risks. The closest airport, the McClellan-Palomar Airport Municipal Airport, is located approximately 2.85 miles to the southwest of the project site. Project traffic would not cause an increase in air traffic levels, or create a physical impediment that would necessitate an alteration of flight patterns. Significant impacts would not occur with project development.

Development of the proposed project does not involve any potentially dangerous traffic or transportation hazards, nor does it propose any incompatible uses that could affect existing traffic or circulation in the project areas. As a result, significant impacts would not occur with project development.

The proposed project would not result in impacts to emergency access. The project has been designed to incorporate all required VFD standards to ensure that its implementation would not result in hazardous design features, or inadequate emergency access to the site or areas surrounding the site. Consequently, significant impacts would not occur with project development.

The project would not conflict with any adopted policies, plans, or programs supporting alternative transportation. Development of the project would include the provision of bicycle racks as required by City Municipal Code Section 18.54.080. As a result, no significant impacts would occur with project implementation.

XI. Utilities and Service Systems <i>Would the project:</i>	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g. Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion

a. Less than Significant Impact. Existing sewer lines of the Vista Sanitation District (VSD) extend to project site from existing lines in S. Melrose Drive and Buena Vista Drive. Wastewater is treated at the Encina Water Pollution Control Facility, which is a conventional activated sludge wastewater treatment plant with a treatment capacity of 36 million gallons per day (mgd). The sanitation district and wastewater treatment facility operate in accordance with applicable wastewater treatment requirements of the San Diego Regional Water Quality Control Board, and the project's wastewater system has been designed to comply with these treatment requirements. Therefore, upon development, the proposed development would tie into existing wastewater/sewer lines and would adhere to all wastewater treatment requirements specified by the City and the San Diego Regional Water Quality Control Board so that significant impacts would not occur.

b. Less than Significant Impact. Based on the City's Sewer Master Plan Update (January 2008), the proposed project would be expected to generate approximately 8,243 gallons per day (gpd) of wastewater (3.14 acres x 2,625 gpd per acre). An existing sewer main serving the existing building will be capped and removed. The project's 8-inch private sewer mains would connect with an existing Vista Sanitation District (VSD) 8-inch sewer main within S. Melrose Drive. New 6-inch sewer laterals would extend from the private sewer mains to the new buildings and each unit will have its own lateral line. The VSD system serves roughly 16,000

parcels and has an average flow of 5.57 mgd.¹¹ As stated above, wastewater from the project would be treated by the Encina Water Pollution Control Facility. Wastewater generation from the proposed project would not exceed the capacity of the Encina facility to treat it. Therefore, the project's contribution of wastewater would not require new water/wastewater facilities to be built or existing facilities to expand; therefore, impacts would be less than significant.

c. Less than Significant Impact. As discussed in the Hydrology and Water Quality section of this document, under the existing conditions, approximately 50 percent of the site (1.57 acres of the total 3.14-acre site) is impervious. Under post-development conditions, the proposed project would slightly increase the perviousness of the site, thereby decreasing the amount of impervious surfaces. According to the *SWQMP* (Hunsaker, 2016), about 42 percent of the site (1.32 acres) would be impervious under post-development conditions. Proposed storm drain improvements would include curbs (wedged) and gutters, curb inlets, proprietary bio-filtration curb inlets, catch basins, shallow ribbon gutters, 18-inch HDPE (high-density polyethylene) and 8-inch and 6-inch PVC underground pipe, pervious pavement, three modular wetlands, and an underground hydromodification vault. According to the *SWQMP* (Hunsaker, 2016), the proposed project would modify existing drainage patterns. The existing site has three discharge points, including two smaller areas at the northeast corner of the lot that drain 0.19 and 0.09 acres of roof and pavement (parking) areas. The remaining area of the site consists of parking areas, roof, open space, and natural landscaping. This latter area is approximately 2.27 acres, and drains towards the southeast corner of the site where discharges into Live Oak Road via sidewalk underdrain.

The proposed project will include regrading, which would alter the areas draining towards the existing discharge points. One of the two existing outlet points at the northeast corner of the site will be removed while the other will be reduced to about 0.03 cfs and only includes impervious slope drainage from a portion of the site's eastern slope adjacent to Live Oak Road. The grading revisions to the main portion of the development will increase the drainage area tributary to the southeast discharge point along Live Oak Road. However, the site will include pervious pavers throughout the street areas, which reduces the imperviousness and runoff coefficient. These reductions would decrease the peak flow rates to less than the peak flows under existing conditions. Therefore, on-site detention is not necessary.

The proposed storm drain system for the site would include two inlets to collect storm water runoff, and an underground storm drain system to convey it to the proposed hydromodification vault, which will mitigate for flow-control hydromodification. The revised area that would drain to the southeast corner of the site would be 3.06 acres with a peak flow of 7.61 cfs compared with 10.95 cfs in the existing condition. Therefore, while new storm drain infrastructure has been incorporated into project design, no impacts would be significant.

d - f. Less than Significant Impact. Construction of the proposed project would result in less than significant impacts to water supplies, wastewater capacity, and permitted landfill capacity. Potential impacts on each utility service are discussed below.

11. The combined average measured flow total (including 3.17 mgd from Buena Sanitation District) is 8.75 mgd (City's Sewer Master Plan Update 2008).

SUFFICIENT WATER SUPPLY

Development of the 3.14-acre project site, which currently contains a 6,665 SF church, would increase the demand for potable water that would be needed to serve the proposed 47-unit residential project. Water service for the proposed project would be provided by the Vista Irrigation District (VID) from a main in Buena Vista Drive. The District is a member agency of the San Diego County Water Authority. VID imports approximately 70 percent of its potable water supply from the Water Authority, who in turn buys it from the Metropolitan Water District of Southern California (MWD). The remaining 30 percent of VID's supply is from Lake Henshaw, which is fed through precipitation from the San Luis Rey watershed. The average daily demand of potable water for the proposed project would be approximately 12,874 gpd (3.14 acres x 4,100 gpd per acre).¹²

Water supplies necessary to serve the demands of the proposed project, along with existing and other projected future users, and the actions necessary to develop these supplies (e.g., conservation via Senate Bill 7 of the Seventh Extraordinary Session (or SBX 7-7), efficiency standards, etc.) have been identified in the Urban Water Management Plans (UWMPs) of VID, the SDCWA, and the MWD. California's urban water suppliers are required to prepare UWMPs in compliance with the Urban Water Management Planning Act (California Water Code §10610 et seq.) and the Water Conservation Bill of 2009 (SBX 7-7). UWMPs are prepared every five years by urban water suppliers to support their long-term resource planning, and ensure adequate water supplies are available to meet existing and future water demands over a 20-year planning horizon, including the consideration of various drought scenarios and Demand Management Measures. The passage of SBX 7-7 in 2009 was enacted to require retail urban water agencies within California to achieve a 20 percent reduction in urban per capita water use by December 31, 2020 (Water Code Section 10608.20). As a result, SBX 7-7 also requires that UWMPs report base daily per capita water use (baseline), urban water use target, interim urban water use target, and compliance daily per capita water use. VID, SDCWA, and MWD calculate future demands within their respective service areas based on SANDAG's projected population and growth rate projections; SANDAG's projections are based on the land use policies in the general plans of the jurisdictions within San Diego County. These projections provide consistency between retail and wholesale agencies' water demand projections, thereby ensuring that adequate supplies are being planned for existing and future water users.

According to VID's 2010 Urban Water Management Plan (VID's UWMP) (June 2011), VID will use local water resources whenever possible; however, if there is a shortfall they would rely on SDCWA supplies. In the analysis of a normal water supply year, as described in VID's UWMP (June 2011), if SDCWA, MWD, and VID supplies are developed as planned and SBX 7-7 conservation targets are achieved, no shortages are anticipated within VID's service area in a normal year through 2035.¹³ That would mean that the District's entire projected potable water supply would meet the entire projected SBX 7-7 water demand of 25,411 Acre Feet in 2035.¹⁴ In the analysis of a single-dry year through 2035, VID's UWMP (June 2011) the findings indicated that if SDCWA, MWD and VID supplies are developed as planned and SBX 7-7 conservation targets are achieved, no shortages are anticipated within VID's service area. However, for multiple-dry year reliability analyses, the conservative planning assumption used in VID's UWMP (June 2011) expects that MWD would be allocating supplies to its member agencies. As a result, some level of shortage could be potentially experienced. As stated above, when shortages occur in VID's resources, the SDCWA would use various measures to cover the shortfall, as described below.

¹² Based on unit demand factors for multi-family residential land uses in VID's Potable Water Master Plan, December 2000, which is a more conservative estimate of demand than the mixed-use category in the Plan.

¹³ Section 7.1, page 61, VID 2010 Urban Water Management Plan, adopted June 28, 2011.

¹⁴ An "acre foot" is a quantity or volume of water covering one acre to a depth of one foot; equal to 43,560 cubic feet or 325,851 gallons. As a rule of thumb, one acre foot is taken to be roughly the amount of water used annually by between one and three suburban family households of four, per year.

The SDCWA was established pursuant to legislation adopted by the California State Legislature in 1943 for the primary purpose of supplying imported water to San Diego County for wholesale distribution to its member agencies. These imported water supplies consist of water purchases from MWD, core water transfers from Imperial Irrigation District (IID) and canal lining projects that are wheeled through MWD's conveyance facilities to the SDCWA's pipelines (or aqueducts), and spot water transfers that are pursued on an as-needed basis to offset reductions in supplies from MWD. Following the major drought in California of 1987 - 1992, which led to severe water supply shortages throughout the state, the SDCWA and its member agencies vigorously developed plans to minimize the impact of potential shortages by diversifying its supplies and strengthening its conservation programs. SDCWA's *UWMP* (June 2011) identifies a diverse mix of water resources projected to be developed over the next 25 years to ensure long-term water supply reliability for the region. For example, existing and planned supplies from the Imperial Irrigation District transfer, canal lining projects are considered "verifiable" sources, and planned supplies from the seawater desalination project in Carlsbad (now in operation) would be considered a "drought proof" supply.¹⁵ The SDCWA, as a wholesale supplier, is also required by law to support its retail member agencies' efforts to comply with SBX 7-7 through a combination of regionally and locally administered active and passive water conservation measures, programs, and policies, as well as the use of recycled water. Examples of active measures and programs include residential and commercial water use surveys and education programs. Examples of passive measures include programs that encourage long-term behavior change towards measurable reductions in outdoor water use; increase the landscape industry's basic knowledge regarding the interdependency between water efficiency design, irrigation design, and maintenance; and participation on statewide, national, and industrial committees to advance behavior-based conservation strategies. Additional passive programs and policies include outreach activities, plumbing code changes, legislation, and conservation-based rate structures.

According to the SDCWA's *UWMP* (June 2011) section on water supply reliability, under a single dry-year assessment it was assumed that MWD would have adequate supplies in storage and would not be allocating supplies.¹⁶ With the previous years leading up to the single dry year being wet or average hydrologic conditions, MWD should have adequate supplies in storage to cover potential shortfalls in core supplies and would not need to allocate. It is anticipated that the SDCWA would be able to meet VID's increased demands during a single-dry water year. During multiple-dry water years (such as the current four-year drought), there is a potential for shortages, if MWD allocates its supplies. If a shortage occurs, the SDCWA plans to utilize action measures in its Water Shortage and Drought Response Plan. These actions include dry-year supplies, carryover storage, and regional shortage management measures to fill the shortfall.¹⁷ The SDCWA's dry-year supplies and carryover storage are components of managing potential shortages within the region and for increasing supply reliability for the region. The dry-year supplies assist in minimizing or reducing potential supply shortages from MWD. Over the last five years the SDCWA has developed a carryover storage program to more effectively manage supplies. This includes in-region surface storage currently in member agency reservoirs and increasing capacity through the raising of San Vicente Dam, which was completed in June 2014. The SDCWA also has an out-of-region groundwater banking program in the California central valley. Through these efforts, SDCWA can store water available during wet periods for use during times of shortage. In years where shortages may still occur, after utilization of carryover storage, additional regional shortage management measures, such as securing dry-year transfers and extraordinary conservation achieved through voluntary or mandatory water-use restrictions would also be undertaken.

¹⁵ Section 4.7, page 4-7, SDCWA's 2010 UWMP, adopted June 23, 2011.

¹⁶ Section 9.3, page 9-3, SDCWA's 2010 UWMP, adopted June 23, 2011.

¹⁷ Section 11, SDCWA's 2010 UWMP, adopted June 23, 2011.

On the local level, additional water conservation for new developments in Vista would be achieved through compliance with the Water Efficient Landscaping Ordinance in the City's Development Code, Chapter 18.56. An Estimated Total Water Use Worksheet for the proposed project would be required to be submitted in the application for a Grading Permit, which would have to be under the Maximum Applied Water Allowance. Accordingly, staff review of the worksheet would require the proposed project to be in compliance with the Vista Water Efficient Landscaping Ordinance.

In addition to the noted UWMP's described above, other regional and/or State entities may also enact other measures during multiple-dry water years as well, including emergency regulations. For example, on April 1, 2015, Governor Jerry Brown issued the fourth in a series of Executive Orders on actions necessary to address California's current severe four-year drought conditions. The April 1 Executive Order requires, for the first time in the State's history, mandatory conservation of potable urban water use. In response to this order, the State Water Resources Control Board released draft emergency regulations to restrict overall potable urban water usage across the state by 25 percent. These regulations include such prohibitions as irrigating landscapes outside of newly constructed homes and buildings in a manner inconsistent with California Building Standards Code (e.g., CALGreen requirements for automatic irrigation systems with weather or soil moisture-based controllers and sensors, etc.). Implementation of these prohibitions will be promulgated through VID's regulations. As part of the Conditions of Approval for this project, compliance with any applicable VID emergency drought regulations regarding new development would be conducted by appropriate staff during review of project plans and various inspections prior to the approval of a Certificate of Occupancy. Therefore, as discussed in the above analysis the development of the project would not require new or expanded water entitlements from VID, or require new water resources be found.

WASTEWATER CAPACITY

As previously discussed above, the proposed project would be expected to generate approximately 8,243 gpd of wastewater. The VSD system has an average sewage flow of 5.57 mgd, which is part of the total 36 mgd wastewater treated at the Encina Wastewater Authority's facility. The VSD, through its Sewer Master Plan Update prepared in collaboration with the City of Vista's Sanitation Division, is restoring and upgrading the capacity and condition of the existing sanitary sewer conveyance system over a 20-year period. The additional wastewater contribution from the proposed project would be considered negligible in relation to the current or future treatment capacities at the Encina Facility and the conveyance capacity of VSD's system. Therefore, project-related impacts would be considered less than significant.

PERMITTED LANDFILL CAPACITY

Development of the project would result in a slight increase in domestic municipal solid waste generation because of the proposed land use. The project would comply with AB 939, which requires cities to divert 50 percent of solid waste to recycling programs and away from landfills. Solid waste generated by the proposed project would either be hauled to Sycamore Landfill in San Diego, which has a permitted capacity of 2,500 tons per day (tpd) and an average daily intake of 900 tpd, or disposed of at the Palomar Waste Transfer Station in Carlsbad, which has a permitted daily capacity of 2,250 tons per day. Either of these solid waste facilities is capable of accommodating the solid waste generated by the proposed project including demolition debris associated with the existing church and parking lot on-site that will be removed to allow site redevelopment. Because the project's contribution would be negligible in terms of the remaining capacity of these available landfills, impacts would be less than significant. No mitigation measures are required.

g. No Impact. The proposed project would comply with all regulations related to solid waste such as the California Integrated Waste Management Act and city recycling programs; therefore, significant impacts would not occur.

XII. Mandatory Findings of Significance <i>Would the project:</i>	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate plant or animal community, reduce the number or restrict the range of rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Does the project have impacts that are individually limited, but cumulatively considerable (<i>"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?</i>)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion

a. Less than Significant with Mitigation. The project site has undergone extensive grading and development in constructing the existing church, and therefore does not support any sensitive habitat that would be suitable for any rare, threatened, or endangered plant or animal species that is likely to occur in the region. Development of the proposed project would not reduce the habitat of fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, or reduce the number or restrict the range of rare or endangered plants or animals. The proposed on-site grading and earthwork does has the potential to uncover unknown archaeological and paleontological resources including human remains. However, implementation of Mitigation Measures CR-1 through CR-7 and Geo-1 would reduce these potentially significant impacts to less than significant levels.

b. Less than Significant with Mitigation. Implementation of the proposed project would not result in individually limited, but cumulatively considerable significant impacts. All resource topics associated with the project have been analyzed in accordance with CEQA and the State CEQA Guidelines and were found to pose no impacts, less-than-significant impacts, or less than significant impacts with mitigation. With implementation of Mitigation Measures N-1 and N-2, potentially significant construction-related noise impacts and building interior noise impacts would be reduced to less than significant levels. Implementation of the proposed project would not result in individually limited, or cumulatively considerable significant impacts. All resource topics associated with the project have been analyzed in accordance with CEQA and the State CEQA Guidelines and were found to pose no impacts, less-than-significant impacts, or less than significant impacts with mitigation. Implementation of the proposed project would not result in individually limited, but cumulatively considerable significant impacts.

c. Less than Significant Impact. The project proposes the development and operation of 47 residential condominiums on a 3.14-acre site. The project would not consist of any land use or any activities that would negatively affect any persons in the vicinity over the long-term. All resource topics associated with the proposed project have been analyzed in accordance with CEQA and the State CEQA Guidelines and were found to pose no impacts, less-than-significant impacts, or less than significant impacts with mitigation. Consequently, the project would not result in any environmental effects that would cause substantial adverse effects on human beings directly or indirectly.

Chapter 4

REFERENCES AND LIST OF PREPARERS

References

Section 15150 of the State CEQA Guidelines permits an environmental document to incorporate by reference other documents that provide relevant data. The documents listed below are hereby incorporated by reference. The pertinent material is summarized throughout this Initial Study where that information is relevant to the analysis of impacts of the proposed project. All referenced documents that are starred * are on file and available for review at the City of Vista Planning Division office located at 200 Civic Center Drive, Vista.

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Individuals and Organizations Consulted

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Jason Christman, P.E. - Senior Engineer, Land Development Division, City of Vista

John Conley, AICP - Director, Community Development/Engineering Departments, City of Vista

Patsy Chow - Deputy Director/City Planner, Community Development Department, City of Vista

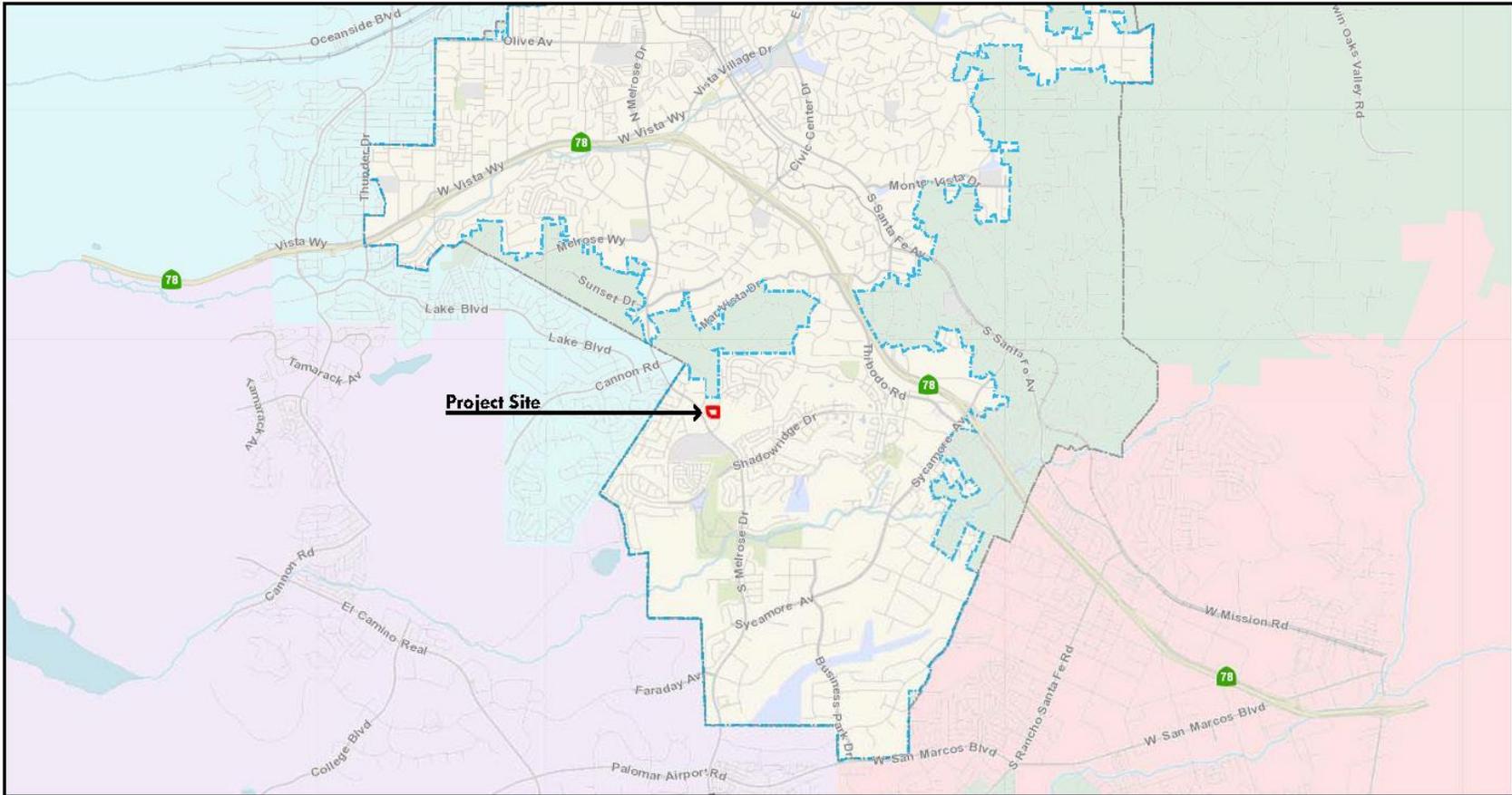
Preparers

John Hamilton, AICP - Environmental Planner, Community Development Department, City of Vista

Leslea Meyerhoff, AICP, Principal, Summit Environmental Group, Inc.

ATTACHMENT A
Figures

MELROSE VISTA 47 PROJECT



	Project Site Location Is Approximate	No Scale
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FIGURE 1
LOCATION MAP

MELROSE VISTA 47 PROJECT



Source: City of Vista GIS, 2016- Aerial Photo 2014

	Project Site Location is Approximate	No Scale
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FIGURE 2
AERIAL OF SITE AND SURROUNDING USES

MELROSE VISTA 47 PROJECT

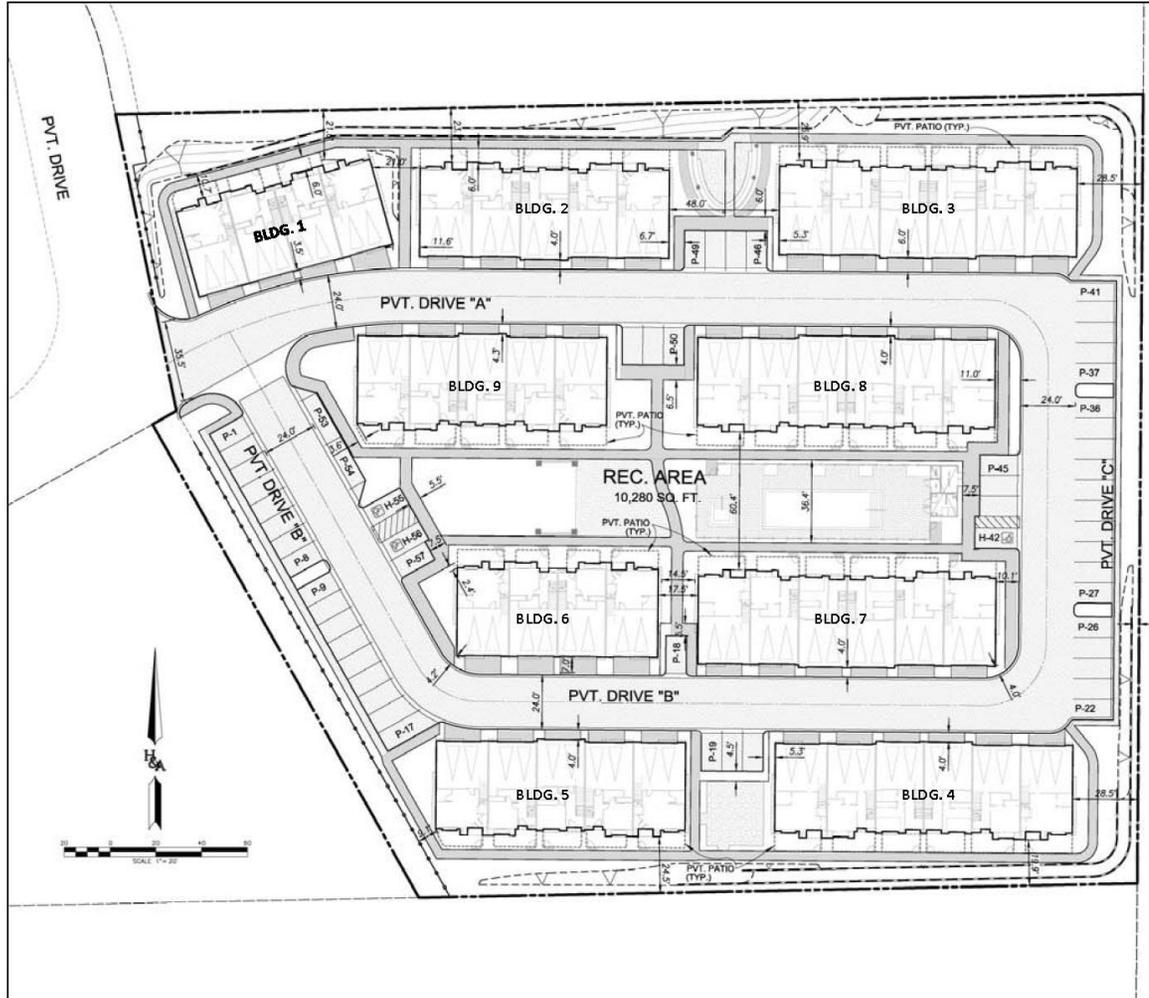


Source: City of Vista GIS, 2016- Aerial Photo 2014

	Project Site Location is Approximate	No Scale
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FIGURE 3
AERIAL OF EXISTING SITE

MELROSE VISTA 47 PROJECT



SITE DEVELOPMENT PLAN, CONDO HOUSING PERMIT, VESTING TENTATIVE MAP FOR MAJOR SUBDIVISION, ZONE CHANGE AND GENERAL PLAN AMENDMENT

LIVE OAK ROAD

PREPARED BY:	#	REVISIONS	DATE	B																																																																																																																																													
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**FIGURE 4
PROPOSED SITE PLAN**

MELROSE VISTA 47 PROJECT

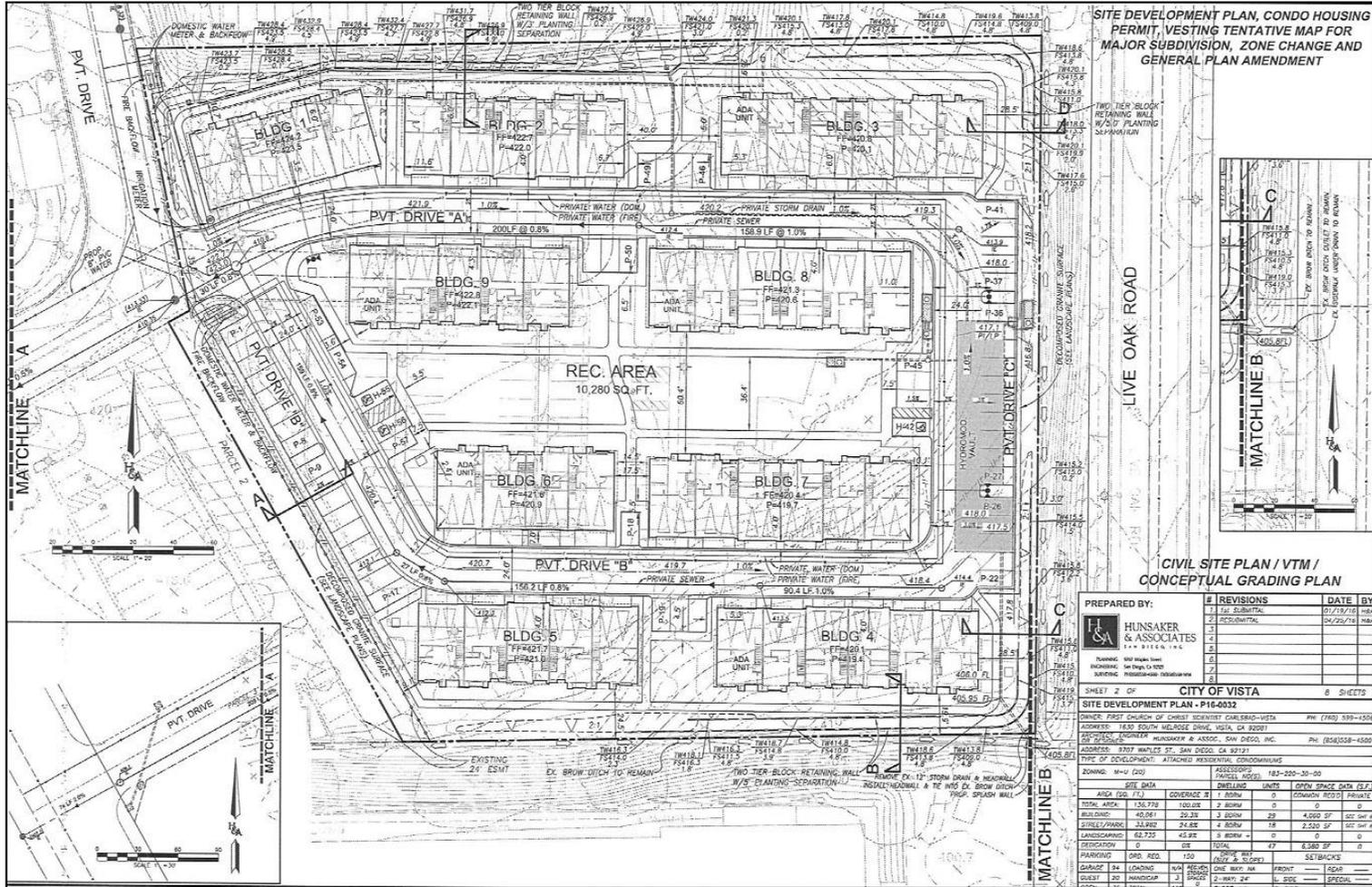


FIGURE 5
CONCEPTUAL GRADING PLAN

MELROSE VISTA 47 PROJECT

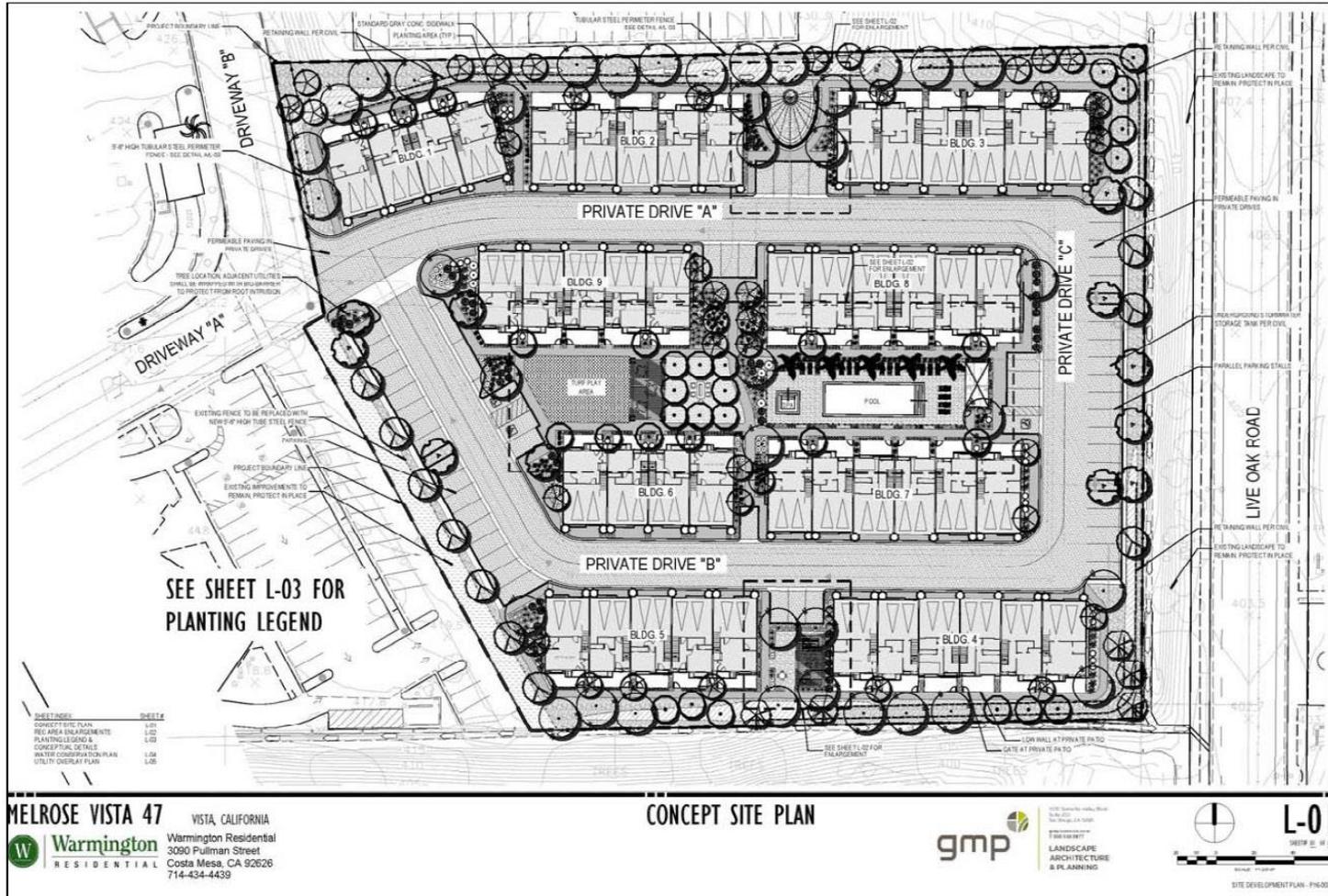


FIGURE 6
 CONCEPTUAL LANDSCAPE PLAN

MELROSE VISTA 47 PROJECT

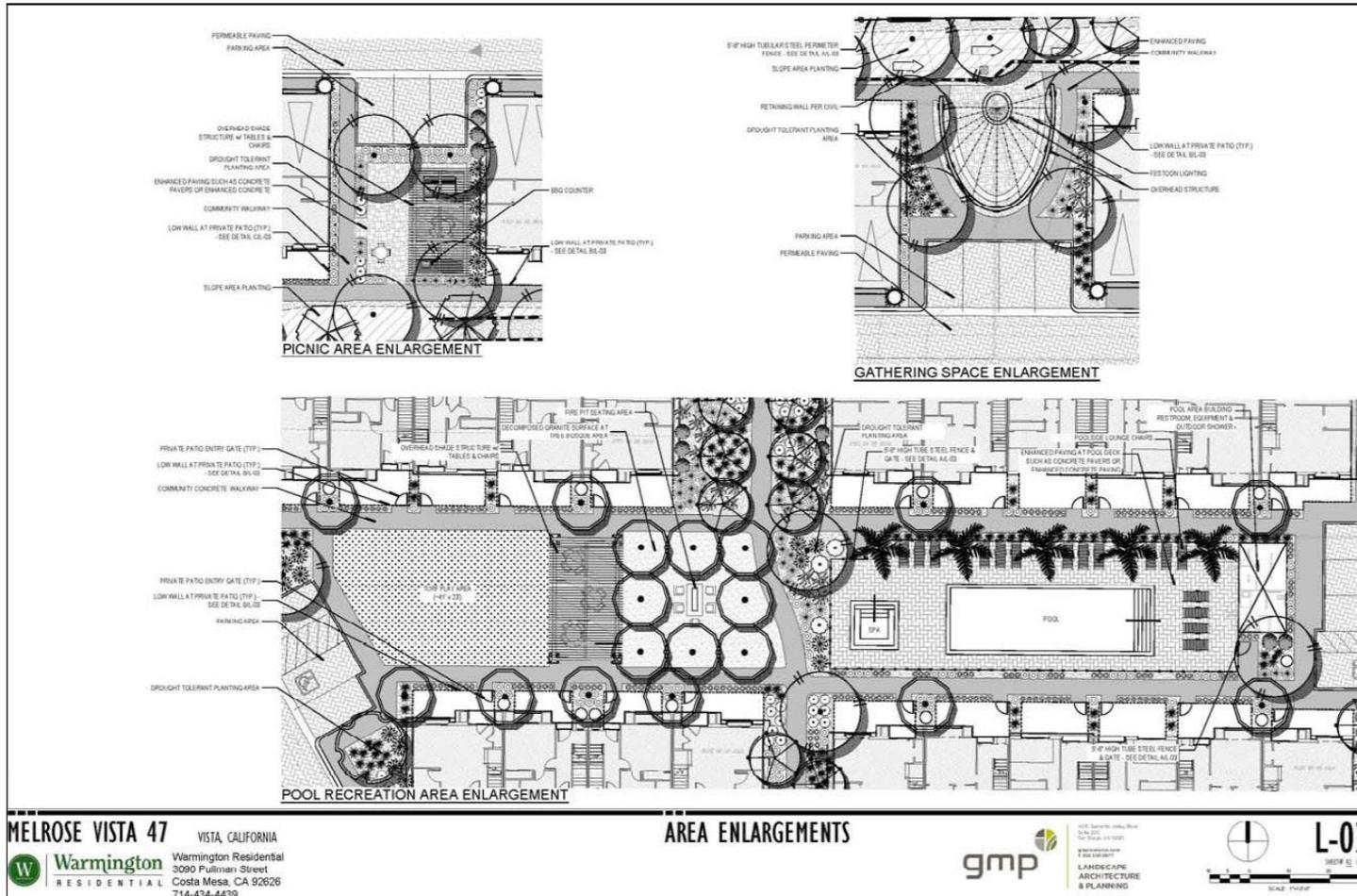


FIGURE 7

AREA ENLARGEMENTS - CONCEPTUAL LANDSCAPE PLAN

MELROSE VISTA 47 PROJECT



MELROSE VISTA 47



Warmington
RESIDENTIAL

Warmington Residential
3090 Pullman Street
Costa Mesa, CA 92626
714-434-4439

4-PLEX PERSPECTIVE

VISTA, CALIFORNIA
REV. # 2016-0301
P16-0032

10/21/2016

KTGY Group, Inc.
Architecture+Planning
17911 Von Karman Ave., Suite 200
Irvine, CA 92614
949.851.2133
ktgy.com



A2.2

FIGURE 8

EXAMPLE OF BUILDING - PERSPECTIVE

MELROSE VISTA 47 PROJECT



FIGURE 9
EXAMPLE OF BUILDING - ELEVATIONS

MELROSE VISTA 47 PROJECT



MELROSE VISTA 47



Warmington
RESIDENTIAL

Warmington Residential
3090 Pullman Street
Costa Mesa, CA 92626
714-434-4439

6-PLEX PERSPECTIVE

VISTA, CALIFORNIA
REV # 2016-092
P16-0032

04/21/2016

KTGY Group, Inc.
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17311 Von Karman Ave., Suite 200
Irvine, CA 92614
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A4.2

FIGURE 10
EXAMPLE OF BUILDING - PERSPECTIVE

ATTACHMENT B
MMRP

CITY OF VISTA
MITIGATION MONITORING AND REPORTING PROGRAM FOR
MITIGATED NEGATIVE DECLARATION PC16-0032

September 2016

Project Name: Vista Melrose 47 Project

Description: The applicant seeks approval a General Plan Amendment, a Specific Plan Amendment, a Tentative Subdivision Map, a Special Use Permit, and a Condominium Housing Permit for the development of a for the development of 47 condominium units on a 3.14-acre site.

Location: The subject property (APN: 183-220-30) is located at 1630 S. Melrose Drive, between Buena Vista Drive to the north and Live Oak Road to the south, in the city of Vista, California.

The following Mitigation Measures have been incorporated into the project design or are to be implemented before or during construction in accordance with the Conditions of Project Approval, thereby reducing all identified impacts to a less than significant level.

MITIGATION MEASURES	STAFF MONITOR	TIMING OF COMPLIANCE	DATE OF COMPLIANCE
<p>CR-1 Due to the potential for uncovering unknown sub-surface archaeological resources, cultural resource mitigation monitoring shall be undertaken for any and all on-site and off-site ground disturbing activities (as specified in CR-2). If on-site ground disturbing activities (e.g., exploratory trenching or excavations) are required for any informal or formal solicitation (written or spoken) of construction bids, all applicable requirements identified in the measures CR-2 to CR-7 below shall be undertaken by the Applicant and/or Owner.</p>	City Planner	Submitted with Grading Permit Application	
<p>CR-2 Cultural resource mitigation monitoring shall be conducted 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 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 imported fill materials (note: all fill materials shall be absent of any and all cultural resources); and related off-site road improvements or utility installations in any existing public or private easements. Other tasks of the monitoring program shall include the following:</p> <ul style="list-style-type: none"> • 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 all applicable pre-construction meetings with the Contractor and/or associated Subcontractors. • 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 Qualified Archaeologist and/or TCA Native American Monitor may halt or redirect 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, in consultation with the San Luis Rey Band of Mission Indians (San Luis Rey Band). 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. • 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, a Data Recovery Plan may be authorized by the City as the Lead Agency under CEQA. If data recovery is required, then the San Luis Rey Band shall be notified and consulted in drafting and finalizing any such recovery plan. 	City Planner	Ongoing during Construction	

MITIGATION MEASURES	STAFF MONITOR	TIMING OF COMPLIANCE	DATE OF COMPLIANCE
<p>CR-3 Prior to the issuance of a Grading Permit, and subject to approval of terms by the City, the Applicant or Owner, and/or Contractor shall enter into a Pre-Excavation Agreement with the San Luis Rey Band. A copy of the signed Agreement shall be forwarded to the City Planner. The purpose of this agreement shall be to formalize protocols and procedures between the Applicant or Owner, and/or Contractor, and the San Luis Rey Band for the protection and treatment of, but not limited to, such items as Native American human remains, funerary objects, cultural and religious landscapes, ceremonial items, traditional gathering areas and cultural items, located and/or discovered through the cultural resource mitigation monitoring program in conjunction with the construction of the proposed project, including additional archaeological surveys and/or studies, excavations, geotechnical investigations, soil surveys, grading, or any other ground disturbing activities.</p>	City Planner	Prior to issuance of a Demolition or Grading Permit	
<p>CR-4 Prior to the issuance of a Grading Permit, the Applicant or Owner, and/or Contractor shall provide a written and signed letter to the City's Director of Community Development, stating that a Qualified Archaeologist and a TCA Native American Monitor have been retained at the Applicant or Owner and/or Contractor's expense to implement the monitoring program, as described in the pre-excavation agreement. A copy of the letter shall be included in the Grading Plan Submittals for the Grading Permit.</p>	City Planner	Prior to issuance of a Demolition or Grading Permit	
<p>CR-5 Prior to the release of the Grading Bond, a Monitoring Report and/or Evaluation Report, which describes the results, analysis and conclusions of the cultural resource mitigation monitoring efforts (such as, but not limited to, a Research Design, Data Recovery Program, etc.), shall be submitted by the Qualified Archaeologist, along with the TCA Native American Monitor's notes and comments, to the City's Director of Community Development for review, if deemed necessary.</p>	City Planner	Prior to release of the Grading Bond	
<p>CR-6 The landowner shall relinquish ownership of all cultural resources collected during the cultural resource mitigation monitoring conducted during all ground disturbing activities, and from any previous archaeological studies or excavations on the project site to the San Luis Rey Band for respectful and dignified treatment and disposition in accordance with the Tribe's cultural and spiritual traditions. All cultural materials that are associated with burial and/or funerary goods will be repatriated to the Most Likely Descendant as determined by the Native American Heritage Commission (NAHC) per California Public Resources Code Section 5097.98.</p>	City Planner	Prior to the issuance of a Building Permit	

MITIGATION MEASURES	STAFF MONITOR	TIMING OF COMPLIANCE	DATE OF COMPLIANCE
<p>CR-7 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 NAHC within 24 hours. The NAHC would 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, and the analysis of the remains shall only occur on-site in the presence of a TCA Native American monitor.</p>	City Planner	Ongoing during construction	
<p>GEO-1 Prior to the issuance of any grading and/or excavation permit, the project Applicant or Owner or General Contractor must provide written proof to the City Planner that a Qualified Paleontologist has been retained to observe all on-site earth disturbing activities during trenching and installation of sewer lines, and/or swimming pool, and/or hydromodification vault and/or similar utilities for the project. All fossil materials recovered during mitigation monitoring shall be cleaned, identified, catalogued and analyzed in accordance with standard professional practices. The results of the field work and laboratory analysis shall be submitted</p>	City Planner	Prior to issuance of the Grading Permit	

MITIGATION MEASURES	STAFF MONITOR	TIMING OF COMPLIANCE	DATE OF COMPLIANCE
<p>N-1 Noise levels from demolition and construction activities shall not exceed the noise limit specified in San Diego County Code Sections 36.408 and 36.409 of 75 dBA (8-hour average). To that end the project contractor shall employ measures to reduce construction/demolition noise including, but not be limited to, the following:</p> <ul style="list-style-type: none"> • Construction equipment shall be properly outfitted and maintained with manufacturer-recommended noise-reduction devices. • Diesel equipment shall be operated with closed engine doors and equipped with factory-recommended mufflers. • Mobile or fixed “package” equipment (e.g., arc-welders and air compressors) shall be equipped with shrouds and noise control features that are readily available for that type of equipment. • Electrically powered equipment shall be used instead of pneumatic or internal-combustion powered equipment, where feasible. • Unnecessary idling of internal combustion engines (e.g., in excess of 5 minutes) shall be prohibited. • Material stockpiles and mobile equipment staging, parking, and maintenance areas shall be located as far as practicable from noise sensitive receptors. • The use of noise-producing signals, including horns, whistles, alarms, and bells, shall be for safety warning purposes only. • No project-related public address or music system shall be audible at any adjacent sensitive receptor. • Temporary sound barriers or sound blankets shall be installed between construction operations and adjacent noise-sensitive receptors south of the project. The project contractor shall construct a sound wall along the southern property line between the project and the nearby preschool. Sound walls shall be a height of at least 10-feet above grade, and shall be constructed of a material with a minimum weight of two pounds per square foot with no gaps or perforations. The sound wall shall remain in place until the conclusion of construction activities. • The project contractor shall notify residences within 100 feet of the project’s property line in writing one week prior to the start of any construction activity such as demolition, jackhammering, concrete sawing, asphalt removal, and/or heavy grading operations. The notification shall describe the activities anticipated, provide dates and hours, and provide contact information with a description of a complaint and response procedure. • The on-site construction supervisor shall have the responsibility and authority to receive and resolve noise complaints. A clear appeal process for the affected party shall be established prior to construction commencement to allow for resolution of noise problems that cannot be immediately solved by the site supervisor. 	<p>City Planner and/or City Engineer</p>	<p>Ongoing during construction</p>	

MITIGATION MEASURES	STAFF MONITOR	TIMING OF COMPLIANCE	DATE OF COMPLIANCE
<p>N-2 Exterior-to-Interior Noise Level Limit: Interior noise levels resulting from exterior noise sources for the proposed residences shall not exceed 45 CNEL. Once specific building plan information is available, additional exterior-to-interior noise analysis shall be conducted for the residences facing South Melrose Avenue where exterior noise levels are expected to exceed 60 CNEL to demonstrate that interior levels will not exceed 45 CNEL. The information in the analysis shall include wall heights and lengths, room volumes, window and door tables typical for a building plan, as well as information on any other openings in the building shell. With this specific building plan information, the analysis shall determine the predicted interior noise levels at the planned on-site buildings. If predicted noise levels are found to be in excess of 45 CNEL, the report shall identify architectural materials or techniques that could be included to reduce noise levels to 45 CNEL in habitable rooms. Standard measures such as glazing with Sound Transmission Class (STC) ratings from a STC 22 to STC 60, as well as walls with appropriate STC ratings (34 to 60), should be considered.</p> <p>Appropriate means of air circulation and provision of fresh air shall be provided to allow windows to remain closed for extended intervals of time so that acceptable interior noise levels can be maintained. The mechanical ventilation system shall meet the criteria of the International Building Code (Chapter 12, Section 1203.3 of the 2001 California Building Code).</p>	City Planner	Prior to issuance of an Occupancy Permit	
<p>T-1 Prior to the issuance of an occupancy permit, the Applicant and/or Owner shall be responsible for paying the project's fair share contribution to the City of Vista's Impact Fees for Arterials Streets and Traffic Signals program.</p>	Director of Community Development	Prior to issuance of an Occupancy Permit	