



200 North Las Posas Road Project

Initial Study – Mitigated Negative Declaration

prepared by

City of San Marcos
Planning Division
1 Civic Center Drive
San Marcos, California 92069
Contact: Art Piñon, Senior Planner

prepared with the assistance of

Rincon Consultants, Inc.
2215 Faraday Avenue, Suite A
Carlsbad, California 92008

October 2022



RINCON CONSULTANTS, INC.

Environmental Scientists | Planners | Engineers

rinconconsultants.com

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Table of Contents

Initial Study	1
1. Project Title	1
2. Lead Agency Name and Address.....	1
3. Contact Person and Phone Number	1
4. Project Location	1
5. Project Sponsor’s Name and Address	1
6. General Plan Designation.....	1
7. Zoning.....	1
8. Description of Project	5
9. Surrounding Land Uses and Setting	11
10. Other Public Agencies Whose Approval is Required	11
11. Have California Native American Tribes Traditionally and Culturally Affiliated with the Project Area Requested Consultation Pursuant to Public Resources Code Section 21080.3.1?	12
Environmental Factors Potentially Affected.....	13
Determination	13
Environmental Checklist	15
1 Aesthetics.....	15
2 Agriculture and Forestry Resources.....	19
3 Air Quality	21
4 Biological Resources.....	31
5 Cultural Resources	35
6 Energy	41
7 Geology and Soils	45
8 Greenhouse Gas Emissions	51
9 Hazards and Hazardous Materials	59
10 Hydrology and Water Quality	65
11 Land Use and Planning.....	71
12 Mineral Resources	73
13 Noise	75
14 Population and Housing.....	87
15 Public Services.....	89
16 Recreation	93
17 Transportation	95
18 Tribal Cultural Resources	101
19 Utilities and Service Systems	103

20	Wildfire	109
21	Mandatory Findings of Significance	113
References		117
	Bibliography	117
	List of Preparers	121

Tables

Table 1	Health Effects Associated with Non-Attainment Criteria Pollutants.....	23
Table 2	Air Quality Thresholds of Significance	24
Table 3	Construction Emissions.....	26
Table 4	Operational Emissions	26
Table 5	2020 Electricity and Natural Gas Consumption.....	41
Table 6	2020 Annual Gasoline and Diesel Consumption.....	42
Table 7	Estimated Fuel Consumption during Construction	43
Table 8	Estimated Project Annual Operational Energy Consumption	43
Table 9	Project Total Annual GHG Emissions	55
Table 10	AASHTO Maximum Vibration Levels for Preventing Damage	78
Table 11	Vibration Annoyance Potential Criteria.....	78
Table 12	Project Site Vicinity Sound Level Monitoring Results.....	79
Table 13	Sound Level Monitoring Traffic Counts	79
Table 14	Noise and Land Use Compatibility Guidelines for Exterior Noise	81
Table 15	Exterior Noise Standards by Zone	82
Table 16	Operational Noise Levels at Off-site Receivers	84
Table 17	Estimated Wastewater Generation	104
Table 18	Wastewater Treatment Plant Capacity	104
Table 19	Normal Year Supply and Demand (million gallons).....	106
Table 20	Single Dry Year Supply and Demand (million gallons).....	106
Table 21	Multiple Dry Years Supply and Demand (million gallons)	106

Figures

Figure 1	Regional Project Location	2
Figure 2	Project Site Location	3
Figure 3	City of San Marcos General Plan Land Use Designations	4
Figure 4	Project Site Plan.....	7
Figure 5	Food Mart Elevation Site Plan	8
Figure 6	Car Wash Elevation Site Plan	9
Figure 7	Gas Station Canopy Elevation Site Plan	10
Figure 8	Geologic Units and Paleontological Sensitivity of the Project Site.....	49
Figure 9	Noise Measurement Locations.....	80
Figure 10	Modeled Receivers and Noise Contours	85

Appendices

Appendix A Air Quality and Greenhouse Gas Technical Study

Appendix B Biological Resources Assessment

Appendix C Cultural Resources Assessment

Appendix D Energy Calculations

Appendix E Noise and Vibration Study

Appendix F Transportation Impact Analysis & Local Transportation Analysis

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Initial Study

1. Project Title

200 North Las Posas Road Project

2. Lead Agency Name and Address

City of San Marcos
1 Civic Center Drive
San Marcos, California 92069

3. Contact Person and Phone Number

Sean del Solar, Senior Planner
(760) 744-1050, ext. 3223
sdelsolar@san-marcos.net

4. Project Location

The project site is located in the City of San Marcos in northern San Diego County in southern California. The regional location of the project site is shown in Figure 1. The 1.8-acre project site (Assessor's Parcel Number 219-122-03-00) is located at the southwestern corner of North Las Posas Road and West Mission Road in the central portion of San Marcos, approximately 0.2 mile north of State Route 78. The project location is depicted in Figure 2. Surrounding land uses include industrial land uses to the south and to the west, commercial land uses to the north, and the Palomar Station Specific Plan Area to the east. The Palomar Station Specific Plan Area includes commercial, retail, and residential development.

5. Project Sponsor's Name and Address

Ahmad Ghaderi
A & S Engineering, Inc.
28405 Sand Canyon Road, Suite B
Canyon Country, California 91387
(661)-250-9300

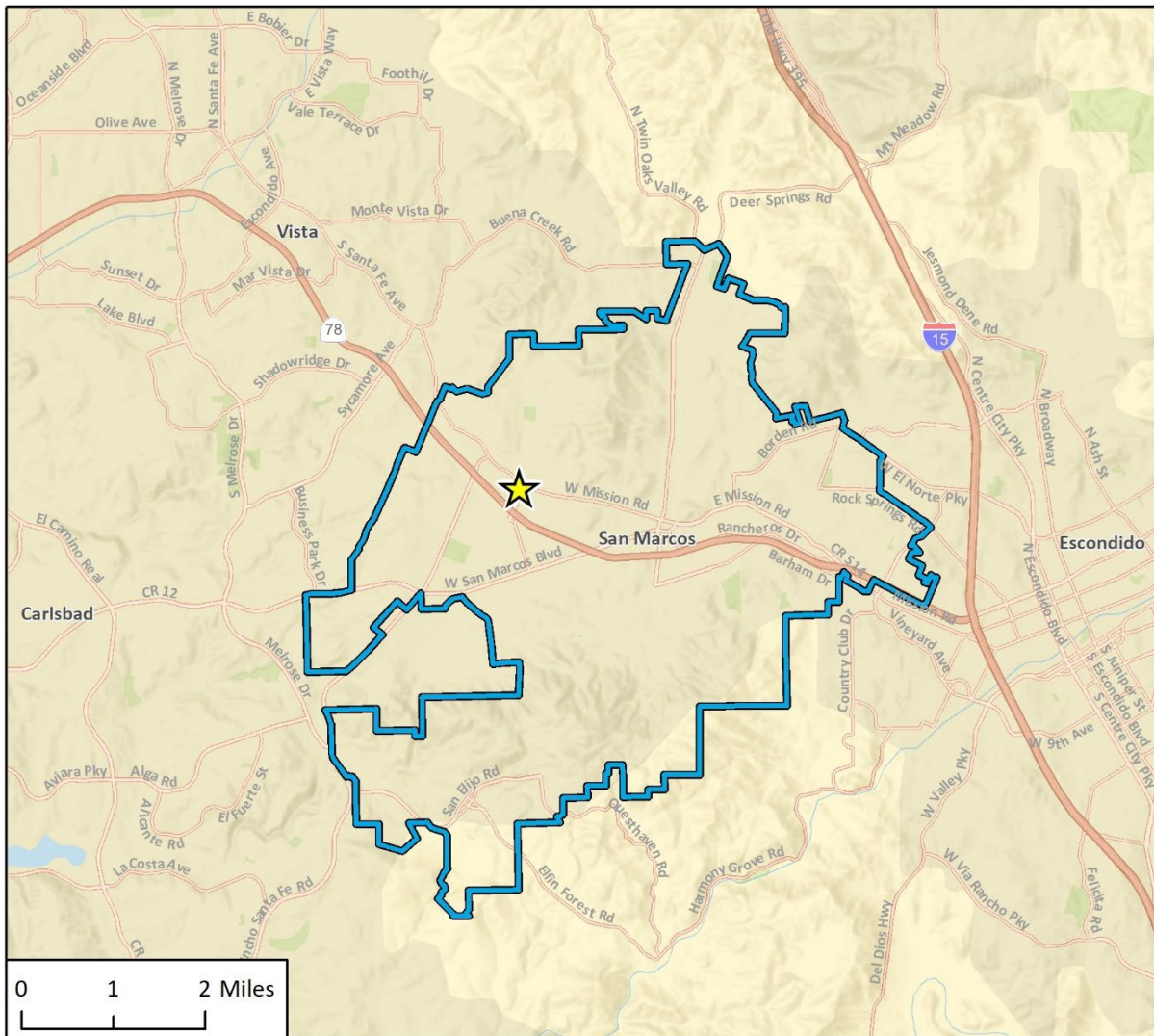
6. General Plan Designation

The project site is designated as Mixed Use 3 (MU3) in the City's General Plan. Figure 3 shows the land use designation of the site and of surrounding land uses.

7. Zoning

The project site is zoned MU3 in the City's Zoning Code.

Figure 1 Regional Project Location



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- ★ Project Site
- ▭ City of San Marcos

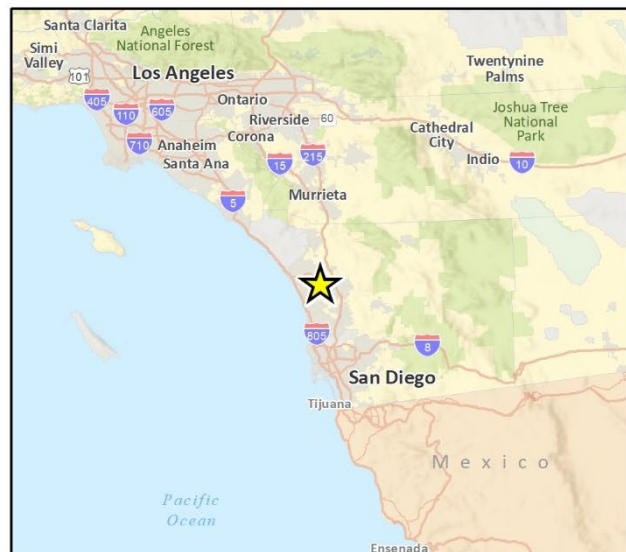


Fig 1 Project Location

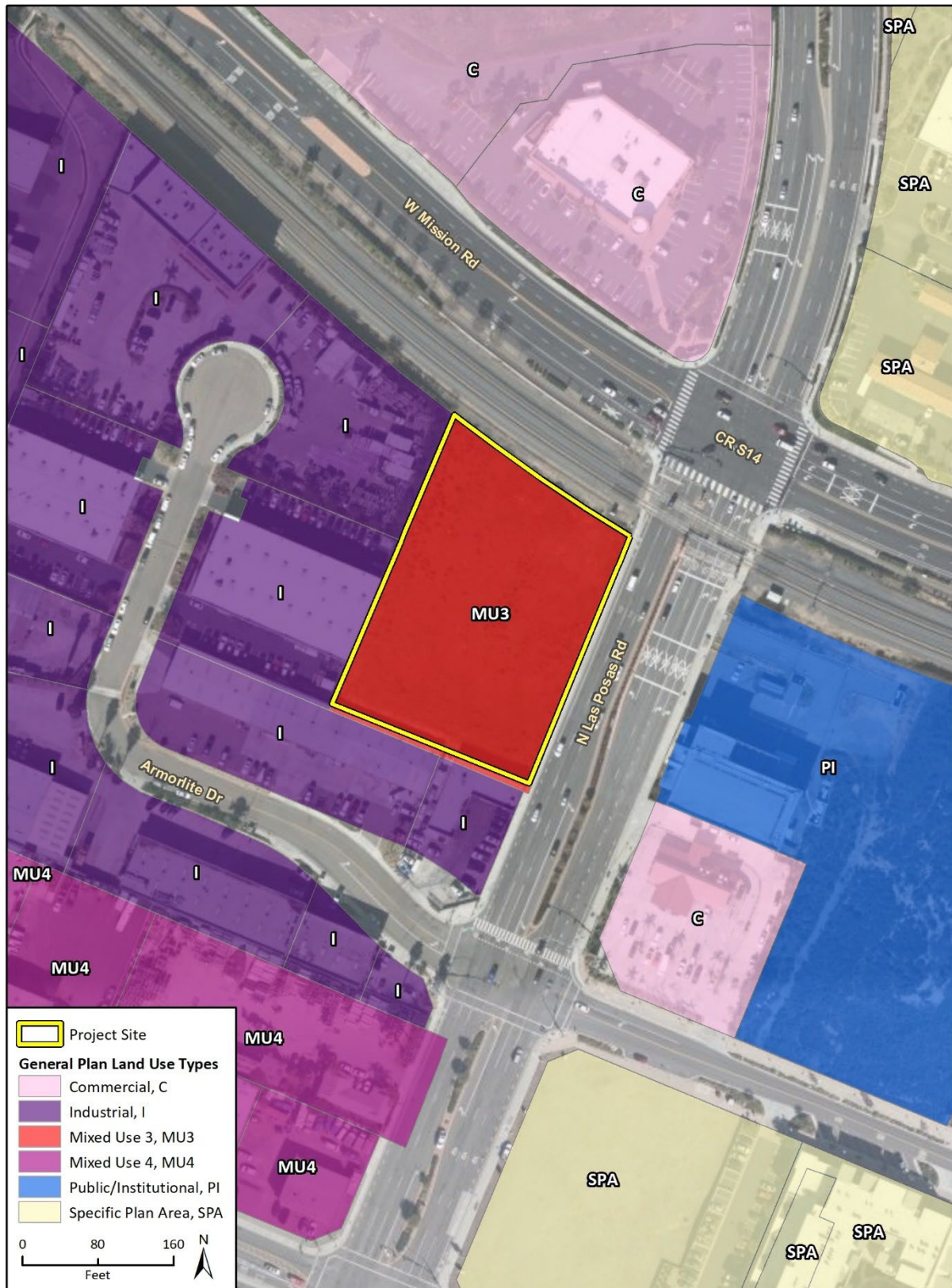
Figure 2 Project Site Location



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Fig. 2 Project Site Overview

Figure 3 City of San Marcos General Plan Land Use Designations



Imagery provided by Microsoft Bing and its licensors © 2020.
Additional data provided by City of San Marcos General Plan Land Use, 2018.

Fig. 2 Surrounding Land Use

8. Description of Project

The project would include development of a 5,000 square foot food mart with a drive thru (3,800 square foot food mart and 1,200 square feet of retail), a 2,000 square foot car wash with a 1,000 square foot equipment room, and a 6,192 square foot gas station canopy with nine fuel dispensing stations (i.e., 18 fuel pumps). A total of 59 parking spaces would be provided with three being electric vehicle (EV) charging spaces, one being a vanpool EV parking space, and two being future clean air parking spaces. The chargers would be Level 2 chargers or better. Three of the 59 parking spaces would also be designated as accessible parking spaces. The proposed project would be developed on a currently vacant parcel of land with a current land use designation of MU3. The MU3 zone does not permit gas station, car wash, or food mart uses. Instead, the zone is intended for job-based mixed-use developments. Job-based mixed-use developments include commercial retail, business support services, offices, government uses, and restaurants (City of San Marcos 2012a). Therefore, the development of the project would require a General Plan Amendment and Rezone to Commercial (C) to allow for these uses. The project is requesting a Conditional Use Permit for the gas station use, drive through restaurant, and car wash. The City of San Marcos Municipal Code states that minimum spacing be 500 feet between gas stations. Portions of the proposed gas station property are closer than 500 feet to the existing gas station on the northeast corner of Mission Boulevard and Las Posas Road. The project includes a request for a variance to these spacing requirements. See Figure 4 for the project site plan.

Construction

Construction of the proposed project is anticipated to begin as early as April 2023. Construction would include site preparation, grading, building construction, paving, and architectural coating activities. There would be no demolition since the existing site is vacant. During grading activities, 128 cubic yards of soil material would be cut and 8,089 cubic yards of soil material would be needed as fill. Construction of the project would require a net import of 7,961 cubic yards of soil material hauled onsite. Development of the project would also include 55,501 square feet of impervious area (e.g., hardscape and pavement) and 14,716 square feet of pervious area (e.g., landscaping).

Operation

Operational hours for the car wash would be between 7:00 a.m. to 10:00 p.m., while the food mart drive thru would operate from 5:00 a.m. to 12:00 a.m. The gas station would operate daily for 24 hours. The gas station is estimated to have a monthly throughput of 400,000 gallons per month or 4.8 million gallons per year. The project is anticipated to have approximately 20 employees. Access to the site would be provided via a singular driveway off North Las Posas Road.

Project Design Features

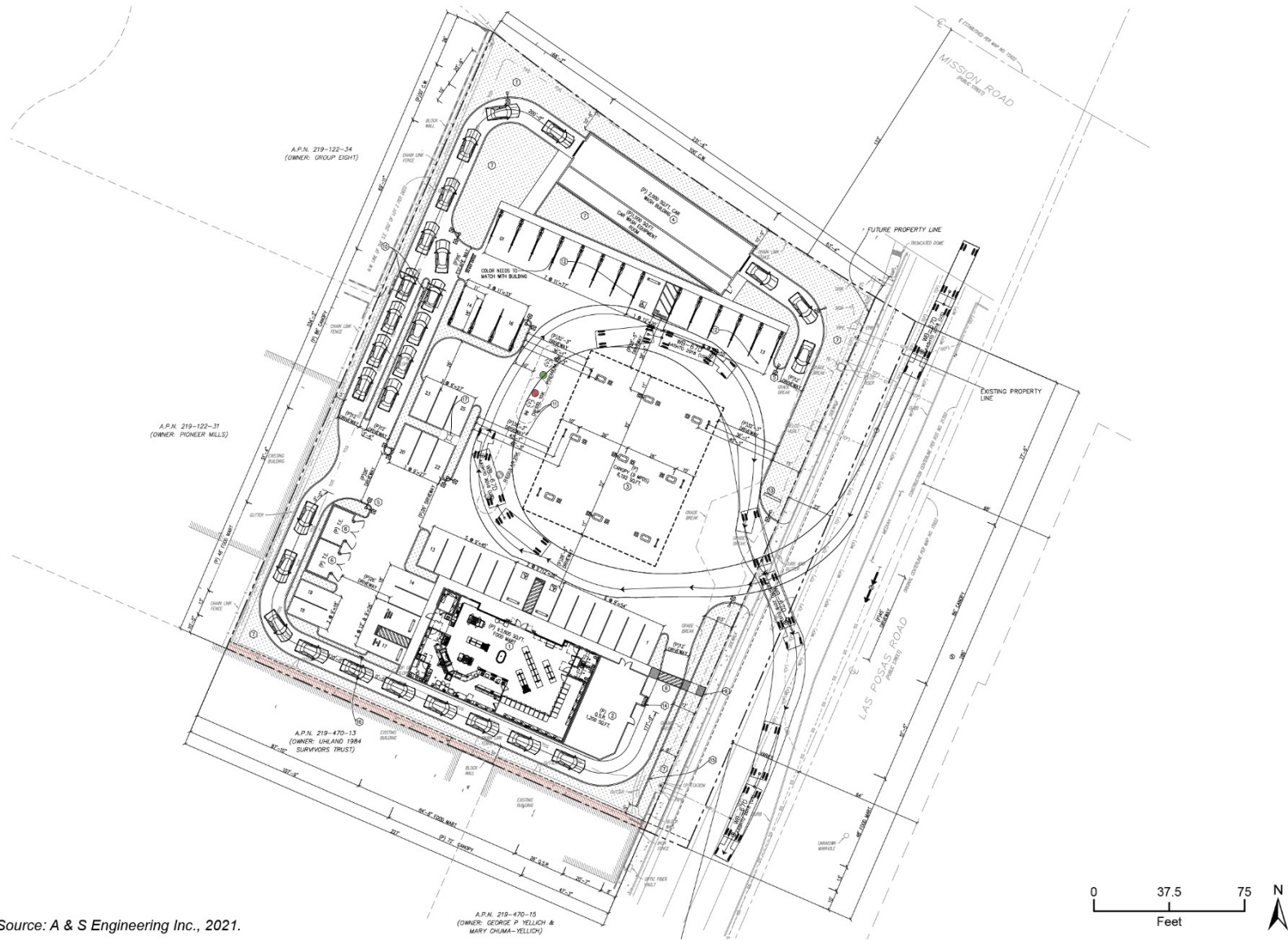
The proposed project would include multiple design features intended to demonstrate compliance with the City's Climate Action Plan (CAP; 2020) and provide onsite sustainability. These features include:

- The provision of three electric vehicle charging stations;
- The inclusion of a photovoltaic system with a rated capacity of approximately 10 kilowatts (kW);
- The compliance with the City's Water Efficient Landscape Ordinance;
- The addition of three biofiltration basins to reduce runoff; and

200 North Las Posas Road Project

- The planting of 49 trees and 261 shrubs and perennials vegetation around the site perimeter and around the parking lots. Proposed trees include 14 Art's Seedless Dessert Willows, 12 Shoestring Acacias, 9 Engelmann Oaks, 6 Desert Museum Palo Verde, 4 Guadalupe Palms, and 4 Cootamurda Wattles.

Figure 4 Project Site Plan



Source: A & S Engineering Inc., 2021.

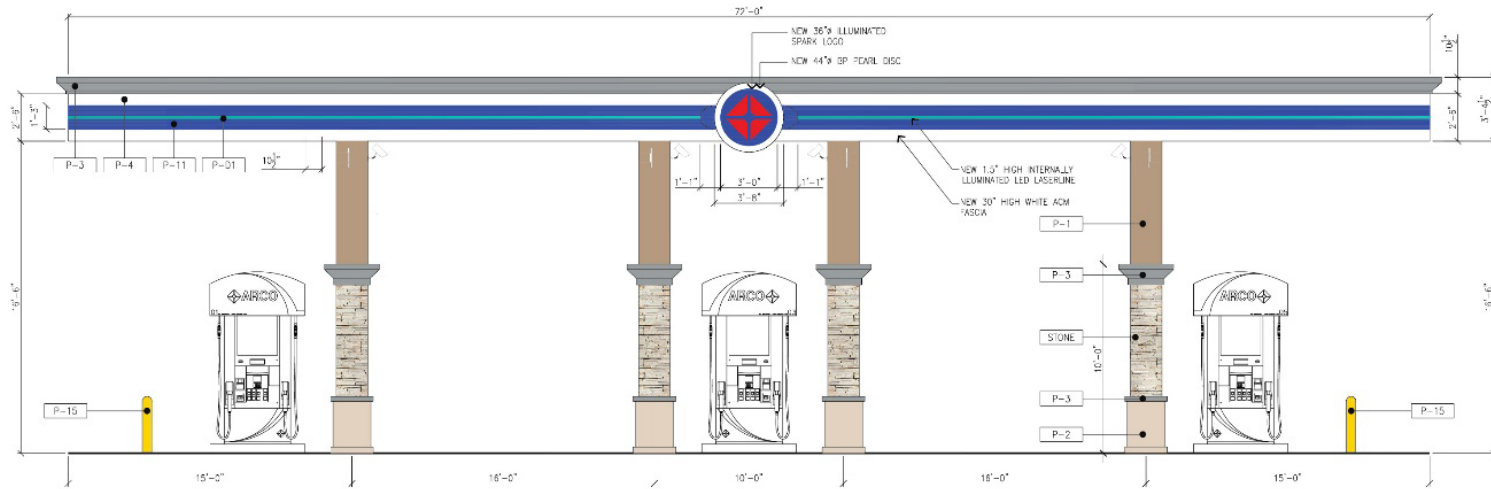
Figure 5 Food Mart Elevation Site Plan



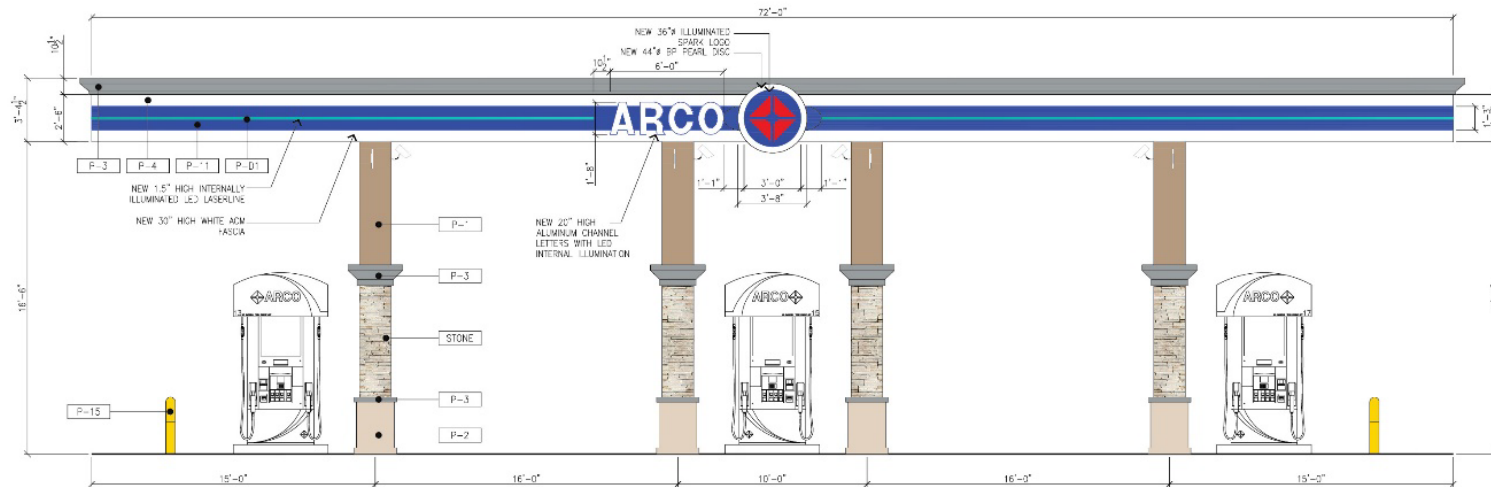
Figure 6 Car Wash Elevation Site Plan



Figure 7 Gas Station Canopy Elevation Site Plan



NORTH ELEVATION



SOUTH ELEVATION

9. Surrounding Land Uses and Setting

The project site is undeveloped land in San Marcos in northern San Diego County. The project site is relatively flat with elevation ranging from 565 to 570 feet above mean sea level. Vegetation on the project site includes non-native grassland and sparse patches of sage brush scrub.

As shown in Figure 2, the project site is bordered by commercial industrial uses to the west and south of the project site boundaries. West Mission Road borders the site to the north and North Las Posas Road is east of the project site. Surrounding General Plan land use designations include Industrial (I), Commercial (C), Public/Institutional (PI), and Specific Plan Area (SPA) as shown in Figure 3. Additionally, there is a rail line immediately north of the project site for the Palomar San Marcos SPRINTER Hybrid Rail, which is overseen by the North County Transit District. The Palomar College Station is approximately 0.2-mile east of the project site. The hybrid rail travels over 22 miles with 15 stations along the State Route 78 corridor connecting the cities of Oceanside, Vista, San Marcos, and Escondido (North County Transit District 2021a). There is also a bus stop (approximately 300 feet northwest of the northern project boundary) at the intersection of West Mission Road and North Las Posas Road that serve bus lines 304, 305, 347, and 445 for the BREEZE bus system (North County Transit District 2021b). These routes provide service to locations through Encinitas to Carlsbad.

10. Other Public Agencies Whose Approval is Required

The City of San Marcos is the sole agency with the authority to approve the proposed project's land use entitlements, including:

- General Plan land use amendment from MU3 to C
- Zoning code amendment from MU3 to C
- Conditional Use Permit for operation of a fuel station, car wash, and convenience store
- Design Review
- Additional permits required for project construction including Grading Permits, Improvement Plans, landscape Plans, and Building Permits.

The following service districts require their own permits to approve various aspects of project construction and various project-serving utilities:

- **San Marcos Fire Department** will determine compliance with local fire code requirements for emergency access, life safety systems (e.g., fire sprinklers), and Wildland Urban Interface (WUI) building standards.
- **Vallecitos Water District (VWD)** is the domestic and recycled water provider at the site in addition to the wastewater utility at the fuel facility site. New domestic and recycled water connections will need to be designed to VWD standards and approved by VWD. VWD will review the project design and construction of new wastewater infrastructure associated with the project.

The following regional, state, and federal agencies may require their own permits, inspections, reporting and/or certifications prior to construction and/or completion of the project:

- San Diego Air Pollution Control District (SDAPCD): A gas station permit would be required.

11. Have California Native American Tribes Traditionally and Culturally Affiliated with the Project Area Requested Consultation Pursuant to Public Resources Code Section 21080.3.1?

On February 25, 2021, the City of San Marcos emailed consultation letters to 17 Native American tribes under the provisions of Assembly Bill 52 (AB 52) and Senate Bill 18 (SB 18). The City received three responses for consultation. Consultation with local tribes is further detailed in Section 18, *Tribal Cultural Resources*.

Environmental Factors Potentially Affected

This project would potentially affect the environmental factors checked below, involving at least one impact that is “Potentially Significant” or “Less than Significant with Mitigation Incorporated” as indicated by the checklist on the following pages.

- | | | |
|--|---|--|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Agriculture and Forestry Resources | <input type="checkbox"/> Air Quality |
| <input checked="" type="checkbox"/> Biological Resources | <input checked="" type="checkbox"/> Cultural Resources | <input type="checkbox"/> Energy |
| <input type="checkbox"/> Geology/Soils | <input type="checkbox"/> Greenhouse Gas Emissions | <input type="checkbox"/> Hazards & Hazardous Materials |
| <input type="checkbox"/> Hydrology/Water Quality | <input type="checkbox"/> Land Use/Planning | <input type="checkbox"/> Mineral Resources |
| <input type="checkbox"/> Noise | <input type="checkbox"/> Population/Housing | <input checked="" type="checkbox"/> Public Services |
| <input type="checkbox"/> Recreation | <input type="checkbox"/> Transportation | <input checked="" type="checkbox"/> Tribal Cultural Resources |
| <input type="checkbox"/> Utilities/Service Systems | <input type="checkbox"/> Wildfire | <input checked="" type="checkbox"/> Mandatory Findings of Significance |

Determination

Based on this initial evaluation:

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

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


Digitally signed by Sean del Solar
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Marcos, ou=Planning Division,
email=sdelsolar@san-marcos.net, c=US
Date: 2022.10.06 15:00:46 -07'00'

Signature

10/6/2022

Date

Sean del Solar

Printed Name

Senior Planner

Title

Environmental Checklist

1 Aesthetics

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
--	--------------------------------	--	------------------------------	-----------

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

a. Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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

A scenic vista can generally be defined as a public viewpoint that provides expansive views of a highly valued landscape for the benefit of the public. The City of San Marcos General Plan identifies hillsides, prominent landforms, creek corridors, eucalyptus stands, rock outcroppings, landmark or historic buildings, and ocean views as scenic resources that generally enhance the community’s visual character. Prominent landforms include Mount Whitney, Double Peak, Owens Peak, San Marcos Mountains, Merriam Mountains, Cerro de Las Posas, Franks Peak, and canyon areas. To minimize physical impacts to ridgelines and protect natural viewsheds, the City has a Ridgeline Protection and Management Overlay Zone (City of San Marcos 2021a).

The nearest scenic resource are ridgelines located in the College Area Community Plan and Twin Oaks Valley Community Plan, approximately 0.9 mile northeast of the northern project site boundary. This area includes a portion of “P” Mountain and Owens Peak. Based on the San Marcos

Municipal Code Section 20.260.020 (Figure 20.260-1), these ridgelines are part of the North City Area and subject to the Ridgeline Protection and Management Overlay Zone.

The proposed project would involve construction of a new fuel station, foot mart, and car wash on a historically vacant site that is been previously disturbed and occupied with a building onsite. The project is in an urban area of the City and surrounded by North Las Posas Road to the east, West Mission Road to the north, and industrial, commercial buildings along the west and south. The project site is not located within a scenic resource nor is it part of a Ridgeline Protection and Management Overlay Zone. Furthermore, the scale and massing for the proposed fuel facility is similar to the existing commercial uses in the area. The food mart would have a maximum height of 30 feet, the car wash would have a maximum height of 22 feet, and canopy would have a maximum height of 20 feet. The developments would not alter or obscure views of the ridgelines. The project would not have an adverse effect on an identified scenic resource, nor would the project improvements substantially block views of the surrounding hillsides and ridgelines. Therefore, impacts to scenic vistas would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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

There are no State scenic highways located in or near the project area (California Department of Transportation [Caltrans] 2021). State Route 78 (Ronald Packard Parkway) bisects San Marcos. The City of San Marcos General Plan designates State Route 78 as a view corridor and is eligible as a State scenic highway (City of San Marcos 2012b). The mainline of State Route 78 is located approximately 1,115 feet or 0.2 mile south of the project site. Due to existing vegetation and development, the project site would not be visible from State Route 78 and would not directly damage or block the view of the scenic resources visible from State Route 78. Therefore, the proposed project would not affect scenic resources within a State scenic highway.

NO IMPACT

- c. Would the project, in non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?*

The project site is in an urbanized area with industrial development bordering the western and southern site boundaries and major roadways (West Mission Road and North Las Posas Road) to the north and east. The project would change the visual character of the site from undeveloped open space to a commercial development that would include a gas station, food mart, and car wash. In addition, the project would require a zoning amendment from MU3 to C. However, a change in landscape does not necessarily create a substantial degradation of the visual quality on the site. The proposed design for the project is aligned with the definition of a commercial land use and commercial zoning label in the General Plan and zoning code, respectively.

Furthermore, the surrounding area consists of existing commercial and industrial uses as shown in Figure 3. There is also an existing fuel station at the northeast corner of the North Las Posas and West Mission Road intersection approximately 240 feet northwest of the proposed site. Therefore,

the proposed design for the project is similar to developments in proximity. Additionally, design review during the permitting process would ensure impacts would be less than significant.

While the project would change the visual character of the site from relatively undeveloped open space to a commercial development with a gas station, food mart, and car wash, this change would not substantially degrade the visual character of the site or its surroundings. With adherence to the height standards and regulations set forth in the San Marcos Municipal Code, development of the project would not degrade the visual quality on the site substantially. Therefore, there is a less than significant impact on scenic quality.

LESS THAN SIGNIFICANT IMPACT

- d. *Would the project create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?*

For purposes of this analysis, light refers to light emissions (brightness) generated by a source of light. Stationary sources of light include exterior parking lot and building security lighting, and interior lights emanating through windows. Moving sources of light include the headlights of vehicles driving on roadways within the project site. Streetlights and other security lighting also serve as sources of light in the evening hours.

Glare is defined as focused, intense light emanated directly from a source or indirectly when light reflects from a surface. Daytime glare is caused in large part by sunlight shining on highly reflective surfaces at or above eye level. Reflective surfaces area associated with buildings that have expanses of polished or glass surfaces, light-colored pavement, and the windshields of parked cars.

The project site is in a developed area with high levels of existing lighting and currently include standard exterior parking lot lighting and street lighting, respectively. Existing light sources also include lighting from adjacent commercial buildings and parking areas, as well as headlights from the SPRINTER hybrid rail, and vehicles traveling on West Mission Road and North Las Posas Road. The primary source of glare in the project area is the sun's reflection off light colored and reflective building materials and finishes, and from metallic and glass surfaces of parked vehicles.

The proposed project would generate new light sources from the convenience store, fuel station canopy, and vehicles entering and exiting the property. These light sources would be comparable to the surrounding residential developments, commercial buildings, and light industrial infrastructure. Vehicles traveling to and from the project site would generate glare from reflected sunlight during certain times of the day. Such glare currently exists from vehicles traveling to commercial developments in the surrounding area. The proposed project would not utilize reflective materials that would create a significant amount of glare. The proposed project would also be required to comply with the light and glare guidelines set by Section 20.300.080, *Light and Glare Standards*, of the San Marcos Municipal Code.

The project would include at least nine tresses onsite, as well as shrub or groundcover vegetation onsite. The addition of this landscaping would soften the appearance of the project site and contribute to the reduction of light and glare from vehicles and building lights. Therefore, the proposed building materials and landscaping, along with compliance with the San Marcos Municipal Code, would result in a less than significant impact related to light and glare.

LESS THAN SIGNIFICANT IMPACT

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2 Agriculture and Forestry Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
--	--------------------------------	--	------------------------------	-----------

Would the project:

- | | | | | |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b. Conflict with existing zoning for agricultural use or a Williamson Act contract? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)); timberland (as defined by Public Resources Code Section 4526); or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d. Result in the loss of forest land or conversion of forest land to non-forest use? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

-
- a. *Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?*
- b. *Would the project conflict with existing zoning for agricultural use or a Williamson Act contract?*
- c. *Would the conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)); timberland (as defined by Public Resources Code Section 4526); or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?*
- d. *Would the project result in the loss of forest land or conversion of forest land to non-forest use?*

200 North Las Posas Road Project

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

The project site is in an urbanized area of San Marcos not labeled as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (California Department of Conservation 2021). According to Figure 4-4 of the City of San Marcos General Plan *Open Space and Conservation* Element, the project site is not located in a farmland designation and as the site is identified as urbanized (City of San Marcos 2012b). The site is not labeled as forestland or farmland and is not currently used for agricultural purposes or outlined within a Williamson Act contract. The proposed project would not involve any conversion of farmland or forestland to non-agricultural, non-forest use. Therefore, the proposed project would have no impact on forestland agricultural uses.

NO IMPACT

3 Air Quality

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
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. 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Rincon Consultants, Inc. prepared an Air Quality and Greenhouse Gas Emissions Study to analyze the project’s air quality emissions and impacts on surrounding sensitive land uses. The analysis considered temporary construction impacts and long-term operation air quality impacts associated with the project. The results of the Air Quality and Greenhouse Gas Emissions Study are used in the analysis and are included as Appendix A.

Overview of Air Pollution

The federal and State Clean Air Acts (CAA) mandate the control and reduction of certain air pollutants. Under these laws, the U.S. Environmental Protection Agency (USEPA) and the California Air Resources Board (CARB) have established the National Ambient Air Quality Standards (NAAQS) and the California Ambient Air Quality Standards (CAAQS) for “criteria pollutants” and other pollutants. Some pollutants are emitted directly from a source (e.g., vehicle tailpipe, an exhaust stack of a factory, etc.) into the atmosphere, including carbon monoxide, volatile organic compounds (VOC)/reactive organic gases (ROG),¹ nitrogen oxides (NO_x), particulate matter with diameters of ten microns or less (PM₁₀) and 2.5 microns or less (PM_{2.5}), sulfur dioxide, and lead. Other pollutants are created indirectly through chemical reactions in the atmosphere, such as ozone, which is created by atmospheric chemical and photochemical reactions primarily between ROG and NO_x. Secondary pollutants include oxidants, ozone, and sulfate and nitrate particulates (smog).

¹ CARB defines VOC and ROG similarly as, “any compound of carbon excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate,” with the exception that VOC are compounds that participate in atmospheric photochemical reactions. For the purposes of this analysis, ROG and VOC are considered comparable in terms of mass emissions, and the term ROG is used in this IS-MND.

Air pollutant emissions are generated primarily by stationary and mobile sources. Stationary sources can be divided into two major subcategories:

- Point sources occur at a specific location and are often identified by an exhaust vent or stack. Examples include boilers or combustion equipment that produce electricity or generate heat.
- Area sources are widely distributed and include such sources as residential and commercial water heaters, painting operations, lawn mowers, agricultural fields, landfills, and some consumer products.

Mobile sources refer to emissions from motor vehicles, including tailpipe and evaporative emissions, and can also be divided into two major subcategories:

- On-road sources that may be legally operated on roadways and highways.
- Off-road sources include aircraft, ships, trains, and self-propelled construction equipment.

Air pollutants can also be generated by the natural environment, such as when high winds suspend fine dust particles.

Air Quality Standards and Attainment

The project site is located in the San Diego Air Basin (SDAB), which is bordered by the South Coast Air Basin to the north, the Salton Sea Air Basin to the east, the United States/Mexico border to the south, and the Pacific Ocean to the west. The project site lies approximately eight miles inland from the coast in an interior valley. The SBAB is under the jurisdiction of the SDAPCD.

As the local air quality management agency, the SDAPCD is required to monitor air pollutant levels to ensure that the NAAQS and CAAQS are met and, if they are not met, to develop strategies to meet the standards. Depending on whether the standards are met or exceeded, the SDAB is classified as being in “attainment” or “nonattainment.” In areas designated as non-attainment for one or more air pollutants, a cumulative air quality impact exists for those air pollutants, and the human health impacts associated with these criteria pollutants, presented in Table 1, are already occurring in that area as part of the environmental baseline condition. Under state law, air districts are required to prepare a plan for air quality improvement for pollutants for which the district is in non-compliance. The SDAB is designated a nonattainment area for the federal and State eight-hour ozone standards, State one-hour ozone standards, and for State PM₁₀ and PM_{2.5}. The SDAB is designated unclassifiable or in attainment for all other federal and State standards (San Diego Air Pollution Control District [SDAPCD] 2021).

Table 1 Health Effects Associated with Non-Attainment Criteria Pollutants

Pollutant	Adverse Effects
Ozone	(1) Short-term exposures: (a) pulmonary function decrements and localized lung edema in humans and animals and (b) risk to public health implied by alterations in pulmonary morphology and host defense in animals; (2) long-term exposures: risk to public health implied by altered connective tissue metabolism and altered pulmonary morphology in animals after long-term exposures and pulmonary function decrements in chronically exposed humans; (3) vegetation damage; and (4) property damage.
Suspended particulate matter (PM ₁₀)	(1) Excess deaths from short-term and long-term exposures; (2) excess seasonal declines in pulmonary function, especially in children; (3) asthma exacerbation and possibly induction; (4) adverse birth outcomes including low birth weight; (5) increased infant mortality; (6) increased respiratory symptoms in children such as cough and bronchitis; and (7) increased hospitalization for both cardiovascular and respiratory disease (including asthma). ¹
Suspended particulate matter (PM _{2.5})	(1) Excess deaths from short- and long-term exposures; (2) excess seasonal declines in pulmonary function, especially in children; (3) asthma exacerbation and possibly induction; (4) adverse birth outcomes, including low birth weight; (5) increased infant mortality; (6) increased respiratory symptoms in children, such as cough and bronchitis; and (7) increased hospitalization for both cardiovascular and respiratory disease, including asthma.

Source: USEPA 2021a

Air Quality Management

Because the SDAB currently exceeds the ozone NAAQS and the ozone, PM₁₀, and PM_{2.5} CAAQS, the SDAPCD is required to implement strategies to reduce pollutant levels to achieve attainment of the NAAQS and CAAQS.

The SDAPCD developed the San Diego Regional Air Quality Strategy (RAQS) pursuant to CCAA requirements. The RAQS was initially adopted in 1991 and updated in 1995, 1998, 2001, 2004, 2009, 2016, and 2020 (SDAPCD 2020). The RAQS identifies feasible emission control measures to provide progress in San Diego County toward attaining the State ozone standard. The pollutants addressed in the RAQS are ROG and NO_x, precursors to the photochemical formation of ozone (the primary component of smog). The RAQS was initially adopted by the SDAPCD Board on June 30, 1992, and amended on March 2, 1993, in response to CARB comments. At present, no attainment plan for PM₁₀ or PM_{2.5} is required by the state regulations. However, SDAPCD has adopted measures to reduce PM₁₀ and PM_{2.5} in San Diego County. These measures range from regulation against open burning to incentive programs that introduce cleaner technology. These measures can be found in a report titled *Measures to Reduce Particulate Matter in San Diego County* (2005).

The RAQS relies on information from CARB and San Diego Association of Governments (SANDAG), including mobile and area source emissions, as well as information regarding projected growth in the County, to project future emissions and then determine from that the strategies necessary for the reduction of emissions through regulatory controls.

Air Emission Thresholds

The SDAPCD has adopted numerical air quality impact analysis trigger levels to determine whether an air pollution source could contribute individually or cumulatively to the worsening local or regional air quality. These trigger levels are also used by planning agencies and local jurisdictions as screening level thresholds for comparative purposes when evaluating projects under the California

Environmental Quality Act (CEQA). Thus, a project that does not exceed these SDAPCD screening level thresholds would have a less than significant impact in regard to the second air quality impact criteria. The screening level thresholds for temporary construction and long-term operational emissions in the SDAB are shown in Table 2.

Table 2 Air Quality Thresholds of Significance

Pollutant	Emissions (lbs/day)
ROG/VOCs	250
NO _x	250
CO	550
SO _x	250
PM ₁₀	100
PM _{2.5}	67

Notes: lbs/day = pounds per day; ROG = reactive organic gases; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM₁₀ = respirable particulate matter with an aerodynamic resistance diameter of 10 micrometers or less; PM_{2.5} = fine particulate matter with an aerodynamic resistance diameter of 2.5 micrometers or less

Source: SDAPCD Rule 20.2

The SDAPCD does not have a specified threshold for health risk impacts from toxic air contaminants (TACs). Rule 1200 for the SDAPCD is related to review of new sources for TACs. The rule states that new sources with a maximum incremental cancer risk greater than 10 in one million shall conduct the following to obtain an Authority to Construct or Permit to Operate: implementation of Toxics Best Available Control Technology and a report in support of approving an Authority to Construct the project, which includes methods to reduce cancer risk. As the maximum incremental cancer risk greater than 10 in one million is used by SDAPCD to determine projects that must meet a high standard for Authority to Construct, that limit is used for the determination of impacts in this analysis.

Methodology

Air pollutant emissions generated by project construction and operation were estimated using the California Emissions Estimator Model (CalEEMod), version 2020.4.0. CalEEMod uses project-specific information, including the project’s land uses, square footages for different uses (e.g., convenience market with gas pumps, automobile care center, parking lot, asphalt surfaces, and non-asphalt surfaces), and location, to model a project’s construction and operational emissions. The analysis reflects the construction and operation of the project as described under *Description of Project*.

Construction emissions modeled include emissions generated by construction equipment used onsite and emissions generated by vehicle trips associated with construction, such as worker and vendor trips. CalEEMod estimates construction emissions by multiplying the amount of time equipment is in operation by emission factors. Construction of the proposed project was analyzed based on the default construction schedule and construction equipment list. A start date of April 2023 was provided by the applicant. Construction would occur over approximately 11 months and approximately 7,961 cubic yards of material would be imported to the site. It is assumed that all construction equipment used would be diesel-powered. A demolition phase was not included in the model since the site is vacant. This analysis assumes that the project would comply with all applicable regulatory standards. In particular, the project would comply with SDAPCD Rule 67.0.1.

Operational emissions modeled include mobile source emissions (i.e., vehicle emissions), energy emissions, and area source emissions. Mobile source emissions are generated by vehicle trips to and from the project site. The traffic consultant, Linscott, Law & Greenspan, provided project-specific trip generations based on SANDAG rates for a “Gas Station with Food Mart and Car Wash” in the Transportation Impact Analysis and Local Transportation Analysis (Appendix E). Emissions attributed to energy use include natural gas consumption by appliances as well as for space and water heating. For the car wash, data from professional car wash industry surveys were used to estimate the total annual natural gas use to be approximately 1,329,132 kilo British thermal units (kBtu). Area source emissions are generated by landscape maintenance equipment, consumer products and architectural coatings.

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

The SDAPCD is required, pursuant to the federal Clean Air Act, to reduce emissions of criteria pollutants for which the SDAB is in nonattainment. Strategies to achieve these emissions reductions are developed in the RAQS, prepared by the SDAPCD for the region. Forecasts used in the RAQS are developed by SANDAG. SANDAG forecasts are based on local general plans and other related documents that are used to develop population, employment, and traffic projections. Consistency with the RAQS is determined by analyzing a project with the assumptions in the RAQS. As such, projects that propose development that is consistent with the growth anticipated by the local land use plan would be consistent with the SANDAG’s growth projections and the RAQS emissions estimates. In the event that a project would propose development that is less dense than anticipated by the growth projections, the project would likewise be consistent with the RAQS. In the event a project proposes development that is greater than anticipated in the growth projections, further analysis would be warranted to determine if the project would exceed the growth projections used in the RAQS for the specific subregional area.

The project would be zoned C, but the General Plan land use designation for the project site is MU3. A MU3 land use designation allows for non-residential, commercial, and office uses that can be mixed vertically (i.e., located on separate floors in the same building) or horizontally (i.e., located in separate buildings on the same site). The project proposes development of a food mart, a gas station, and an automated car wash. Since the project would not include MU3 land uses, then a GPA would be needed. As described in Section 8, *Greenhouse Gas Emissions*, the project’s proposed use would result in a less intensive project regarding GHG emissions than the current designated use, mostly due to a reduction in vehicle trips from the proposed use. This would also have the effect of the project resulting in lower criteria pollutant emissions than the current designated use. With a less intensive use than the existing designation, the proposed project would be consistent with RAQS growth projections. In addition, the project is in compliance with the SDAPCD air quality standards as shown in Table 3 and Table 4 for construction and operation emissions. The project would not result in a cumulatively considerable net increase of any criteria air pollutants. Given the aforementioned, the project would not interfere with the SDAPCD’s goal of reducing air pollutant emissions for ozone within the region. Impacts to the San Diego RAQS would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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

Construction Emissions

Table 3 summarizes maximum daily and annual emissions of pollutants throughout the construction period of the project. Emissions would not exceed SDAPCD screening level thresholds during project construction. Therefore, project construction would not result in a cumulatively considerable net increase of a criteria pollutant, and impacts would be less than significant. Detailed modeling results are provided in Appendix A.

Table 3 Construction Emissions

Construction Year	Maximum Emissions (lbs/day)					
	ROG	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
2022	2	48	18	<1	9	4
2023	25	12	14	<1	1	1
Maximum Emissions	25	48	18	<1	9	4
SDAPCD Regional Thresholds	250	250	550	250	100	67
Threshold Exceeded?	No	No	No	No	No	No

See Appendix A for CalEEMod worksheets.

Operation Emissions

Table 4 summarizes emissions associated with operation of the project. The majority of operational emissions generated would be due to mobile emissions from vehicle trips to and from the project site. As shown in Table 4, emissions generated during the operation of project would not exceed SDAPCD screening level thresholds. Therefore, the project would not result in a cumulatively considerable net increase of a criteria pollutant, and impacts would be less than significant.

Table 4 Operational Emissions

Emission Source	Maximum Daily Emissions (lbs/day)					
	ROG	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
Area	<1	<1	<1	<1	<1	<1
Energy	<1	<1	<1	<1	<1	<1
Mobile	3	2	16	<1	2	1
Project Emissions	3	2	16	<1	2	1
SDAPCD Regional Thresholds	250	250	550	250	100	67
Threshold Exceeded?	No	No	No	No	No	No

See Appendix A for CalEEMod worksheets.

LESS THAN SIGNIFICANT IMPACT

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

The term sensitive receptor refers to a person in the population who is more susceptible to health effects due to exposure to TACs than the population at large or to a land use that may reasonably be associated with such a person. Examples of such land uses include residences, schools, playgrounds, childcare centers, churches, athletic facilities, retirement homes, and long-term health care facilities. Sensitive receptors that may be affected by air quality impacts associated with the proposed project construction and operation include apartments and townhomes at the Palomar Station development to the southeast (approximately 500-600 feet), single-family residences to the north (approximately 800 feet), and Palomar College to the northeast (approximately 700 feet).

Construction TAC

Construction-related activities would result in short-term, project-generated emissions of diesel particulate matter (DPM) exhaust emissions from off-road, heavy-duty diesel equipment for site preparation grading, building construction, and other construction activities. DPM was identified as a TAC by CARB in 1998. The potential cancer risk from the inhalation of DPM (discussed in the following paragraphs) outweighs the potential non-cancer health impacts (CARB 2020). At this time, SDAPCD has not adopted a methodology for analyzing such impacts.

Generation of DPM from construction projects typically occurs in a single area for a short period. Construction of the proposed project would occur over approximately 11 months. The dose to which the receptors are exposed is the primary factor used to determine health risk. Dose is a function of the concentration of a substance or substances in the environment and the extent of exposure that person has with the substance. Dose is positively correlated with time, meaning that a longer exposure period would result in a higher exposure level for the Maximally Exposed Individual. The risks estimated for a Maximally Exposed Individual are higher if a fixed exposure occurs over a longer period. According to the Office of Environmental Health Hazard Assessment (OEHHA), health risk assessments, which determine the exposure of sensitive receptors to toxic emissions, should be based on a 30-year exposure period (assumed to be the approximate time that a person spends in a household). OEHHA recommends this risk be bracketed with 9-year and 70-year exposure periods. Health risk assessments (HRAs) should be limited to the period/duration of activities associated with the project.

The maximum PM_{2.5} emissions, which is used to represent DPM emissions for this analysis, would occur during grading and building construction activities. While grading and building construction emissions represent the worst-case condition, such activities would only occur for five months, less than five percent for a 9-year health risk calculation period and less than one percent for a 30-year and 70-year health risk calculation period. PM_{2.5} emissions would decrease for the remaining construction period because construction activities such as architectural coating and paving would require less construction equipment. Therefore, given the aforementioned, DPM generated by project construction is not expected to create conditions where the probability that the Maximally Exposed Individual would contract cancer is greater than 10 in one million. This impact would be less than significant.

Operational TAC

The automotive fueling station would require Authority to Construct and Permit to Operate approval from the SDAPCD, which would review the facility design and location for compliance with applicable air quality standards. All tanks and dispensers would be equipped with the latest Phase I and Phase II Enhanced Vapor Recovery (EVR) air pollution control equipment technology per CARB

regulations and associated Executive Orders. The Phase I EVR equipment controls the vapors in the return path from the onsite fuel storage tanks back to the tanker truck during offloading filling operations. Phase I EVR systems are 98 percent effective in controlling fugitive emissions from escaping into the environment. The Phase II EVR equipment, which also includes “in-station diagnostics,” controls and monitors the vapors in the return path from the fuel dispensers back to the onsite fuel storage tanks. Phase II EVR systems are 95 percent effective in controlling fugitive emissions from escaping into the environment.

The annual fuel throughput of the proposed gasoline station service would be approximately 4.8 million gallons (MG) a year, includes Phase I and Phase II vapor recovery systems, and would be located in an urban area approximately 570 feet (173 meters) from the nearest sensitive receptor, a multi-family development in the Palomar Station Specific Plan Area. Based on a distance of 173 meters to the nearest receptor, the default cancer risk is <0.01 per one million for a station with an annual throughput of 1 MG. As such, the estimated cancer risk for the station with a 4.8 MG annual throughput is estimated to be 0.67 per one million. The screening risk assessment does not indicate that the gasoline station would cause a risk of concern, nor does it exceed the threshold of 10 in a million. In addition, the proposed gasoline station meets the California Air Pollution Control Officer’s Association (CAPCOA) land use guidelines such that the nearest sensitive receptors are located greater than the recommended 50-foot separation between residences and typical gas dispensing facilities (CARB 2005). Furthermore, gas station permit applications with the SDAPCD fall under a general HRA that is in place with the SDAPCD and a project-specific HRA is not required (Creaven 2018) since use categories such as gas stations are considered small foot-print facilities with small zones of impact (OEHHA 2015). Other long-term operational emissions include toxic substances such as cleaning agents in use on site. Compliance with State and federal handling regulations would ensure that emissions remain below a level of significance. The use of such substances such as cleaning agents is regulated by the 1990 federal CAA Amendments as well as State-adopted regulations for the chemical composition of consumer products. Project-related TAC emission impacts during operation would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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

Construction activities would be temporary and transitory and associated odors would cease upon construction completion. Accordingly, the proposed project would not create objectionable odors affecting a substantial number of people during construction, and short-term impacts would be less than significant.

As discussed in CARB’s *Air Quality and Land Use Handbook*, land uses typically associated with odor complaints from operation include sewage treatment plants, landfills, recycling facilities, waste transfer stations, petroleum refineries, biomass operations, autobody shops, coating operations, fiberglass manufacturing, foundries, rendering plants, and livestock operations (CARB 2005). onsite fuel storage tanks and dispensers would be equipped with vapor recovery systems to minimize fugitive emissions of fuel vapors and would thereby minimize fuel vapor odors. Nonetheless, minor amounts of odorous fuel vapors may be released. Additionally, vehicles approaching, idling, and leaving the site may release odorous exhaust emissions. As the project site is located at the intersection of two arterial roads, North Las Posas Road and West Mission Road, vehicle exhaust is already prevalent. Odors of this nature dissipate quickly with distance and do not typically result in

odor impacts. As the project would not include a land use typically associated with odor complaints, operational odor impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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4 Biological Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<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, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Methods

A Biological Resources Assessment (BRA) was prepared for the project on November 2021 by Rincon Consultants Inc. (Appendix B). The BRA mapped vegetation, aquatic communities, and unvegetated land; documented plant and wildlife species present; and evaluated habitats onsite for the potential to support special-status species. A reconnaissance survey was conducted on October 7, 2020. The results and project impacts summarized below are based on findings from the BRA.

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

The project site is located on an existing vacant lot that has been heavily disturbed. During the reconnaissance survey, limited ruderal vegetation consisting of shortpod mustard (*Hirschfeldia incana*) and telegraph weed (*Heterotheca grandiflora*), and tamarisk (*Tamarix ramosissima*) were observed. The following common wildlife species were also noted: house finch (*Haemorhous mexicanus*), Anna's hummingbird (*Calypte anna*), western kingbird (*Tyrannus verticalis*), and mourning dove (*Zenaidura macroura*). One common reptile, western fence lizard (*Sceloporus occidentalis*) and two common mammals, California ground squirrel (*Otospermophilus beecheyi*) and desert cottontail (*Sylvilagus audubonii*). Both the vegetation and wildlife observed are common species and are associated with habitats not found onsite. No special status plant species nor special status wildlife species were observed and due to the previous disturbance the site has limited habitat suitability. Therefore, no special status plant or wildlife species have the potential to occur. However, the habitat within and adjacent to the project site has the potential to support native nesting birds protected by California Fish and Game Code 3503 and the federal Migratory Bird Treaty Act. Direct impacts from construction activities include ground disturbance and removal of trees or shrubs which could contain bird nests and indirect impacts from noise from construction equipment. Therefore, mitigation would be required to reduce impacts to nesting birds. Impacts would be less than significance with Mitigation Measure BIO-1.

Mitigation Measures

BIO-1 Nesting Birds and Raptors Survey

If any construction or staging activities are conducted between February 1 and September 15, a qualified biologist shall conduct a nesting bird survey no more than three days prior to the start of such activities to identify nesting birds within the project site and a 300-foot buffer around the project site (500 feet for raptors). If any nests are found, their locations shall be flagged and an appropriate avoidance buffer, ranging in size from 25 to 50 feet for song birds, and up to 500 feet for raptors depending upon the species and the proposed work activity, shall be determined and demarcated by a qualified biologist with bright orange construction fencing or other suitable flagging. Active nests shall be monitored at a minimum of once per week until it has been determined that the nest is no longer being used by either the young or adults. No disturbance shall occur within this buffer until the qualified biologist confirms that breeding/nesting is completed, and all the young have fledged. If project activities must occur within the buffer, they shall be conducted at the discretion of the qualified biologist and with monitoring and management to ensure that nesting success is not jeopardized. If no nesting birds are observed during the survey, then no further actions shall be necessary.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

- b. *Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?*

The California Department of Fish and Wildlife (CDFW) provides protection for sensitive vegetation and aquatic natural communities. Any impacts to CDFW defined sensitive natural communities or communities identified in local or regional plans must be evaluated. Due to the existing site being heavily disturbed, no sensitive natural communities defined by CDFW on their Natural Communities list and Vegetation Alliances and Associations lists occur on the project sites. Additionally, the project site is bordered three concrete v-ditches to the east, west, and south. These v-ditches convey stormflow into the municipal stormdrain system through a culvert under North Las Posas Road. However, the water activity in the v-ditches is temporary and the v-ditches do not support riparian vegetation or riparian habitat. No impacts on sensitive natural communities would occur as a result of the project.

NO IMPACT

- c. *Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?*

Wetlands are sensitive environmental resources that are protected at federal, State, and local levels. The State Water Resources Control Board (SWRCB) and Regional Water Quality Control Boards (RWQCB) issue permits for the discharge of fill material into surface waters. As discussed in criterion b, the project has three concrete v-ditches that are considered ephemeral and do not support aquatic resource functions. The waters that flow through the v-ditches are unlikely to be waters of the United States nor streambeds that would be regulated by the U.S. Army Corps of Engineers or CDFW. In addition, the project has been designed to avoid the concrete v-ditches bordering the site. Therefore, no direct impacts to these resources would occur.

NO IMPACT

- d. *Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?*

Wildlife movement includes migration (i.e., usually one way per season), inter-population movement (i.e., long-term genetic flow) and small travel pathways (i.e., daily movement corridors within an animal's territory). While small travel pathways usually facilitate movement for daily home range activities such as foraging or escape from predators, they also provide connection between outlying populations and the main corridor, permitting an increase in gene flow among populations. The project site is located in an urbanized location with developments and heavily traveled roadways bordering the site. The surrounding developments and roadways act as barriers to movement for terrestrial species, thus eliminating connectivity between blocks of core habitat and constraining wildlife movement in the immediate vicinity of the project site. Furthermore, the project is not located within a designated wildlife corridor or an essential connectivity site nor is it a suitable habitat for special status species (Appendix B). Therefore, the proposed project would not result in any significant impacts that would interfere substantially with the movement of any native

resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites.

NO IMPACT

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

The Conservation and Open Space Element of the City's General contains policies, development standards, and permitting procedures applicable to sites hosting wetlands, waterways and riparian habitat, hillsides, and woodland resources. None of these policies, development standards, and permitting procedures apply to the project since the project site is developed with urban uses and there are no wetlands, waterways, riparian habitat, or woodland resources located therein. Therefore, the project would not conflict with local policies and ordinances and no impact would occur.

NO IMPACT

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

The Multiple Habitat Conservation Program (MHCP) is a comprehensive, multi-jurisdictional planning program designed to create, manage, and monitor an ecosystem preserve in northwestern San Diego County intended to protect viable populations of native plant and animal species and their habitat while accommodating economic development and quality of life for San Diego residents. The City of San Marcos began preparing a draft of the City Subarea Plan of the MHCP in December 1999, and although the Subarea Plan has not yet been approved by the U.S. Fish and Wildlife Service and CDFW, the plan is a component of the adopted MHCP and is currently being used as a guide for open space design and preservation within the city. The MHCP has identified certain areas, known as focused planning areas (FPAs), which have parcel-level preserve goals which would contribute to achieving local and regional conservation. The FPAs are represented by a combination of "hardline" preserves, indicating lands that will be conserved and managed for biological resources, and "softline" planning areas, within which preserve areas will ultimately be delineated based on further data and planning.

The study area is located within the MHCP, but is not located within an FPA, as illustrated in Figure 2-1 of the Final MHCP Plan. The project area is not within a Biological Core and Linkage Area, as illustrated in Figure 2-3 of the Final MHCP Plan and discussed in Appendix B. Therefore, the project would not conflict with the MHCP provisions. Even though the City's Subarea Plan is not yet approved, the project has been designed to comply with the plan's goals and policies. As such, the project would not conflict with the provisions of an applicable plan, and impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

5 Cultural Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

This section provides an analysis of the project’s impacts on cultural resources, including historical and archaeological resources, as well as human remains, and is based on the Cultural Resource Study attached as Appendix C.

CEQA requires a lead agency determine whether a project may have a significant effect on historical resources (Public Resources Code [PRC] Section 21084.1) and tribal cultural resources (PRC Section 21074 [a][1][A]-[B]). A historical resource is a resource listed in, or determined to be eligible for listing, in the California Register of Historical Resources (CRHR), a resource included in a local register of historical resources, or any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant (CEQA Guidelines Section 15064.5[a][1-3]).

A resource shall be considered historically significant if it:

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

In addition, if it can be demonstrated that a project would cause damage to a unique archaeological resource, the lead agency may require reasonable efforts be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. To the extent that resources cannot be left undisturbed, mitigation measures are required (PRC Section 21083.2[a-b]).

PRC Section 21083.2(g) defines a unique archaeological resource as an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it:

200 North Las Posas Road Project

1. Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information;
2. Has a special and particular quality such as being the oldest of its type or the best available example of its type; or
3. Is directly associated with a scientifically recognized important prehistoric or historic event or person.

A Cultural Resources Study was completed for the project by Rincon Consultants Inc., in October 2021. The study includes the results of a California Historical Resource Information System (CHRIS) records search, a historic-period map review, a Native American outreach, and a pedestrian field survey.

The cultural resources records search was conducted on September 18, 2020, at the South Coast Information Center (SCIC) at San Diego State University. The search was performed to identify previously conducted cultural resources studies, as well as previously recorded cultural resources within the project sites and a 0.5-mile radius. The CHRIS search included a review of the National Register of Historic Places (NRHP), the California Register of Historical Resources (CRHR), the Office of Historic Preservation Historic Properties Directory, the California Inventory of Historic Resources, and the Archaeological Determinations of Eligibility list. The SCIC records search identified that 29 previously conducted cultural resources studies have been performed within a 0.5-mile radius of the project site (Appendix C). Four of the previously conducted cultural resource studies included portions of the project site. Additionally, six cultural resources are recorded within a 0.5-mile radius of the project site with none located within the project site. The historic map and aerial photography review noted that the site had been previously developed with an auction house and pavement that have since been removed and are no longer present. Rincon contacted the Native American Heritage Commission on September 18, 2020, to request a Sacred Lands File search of the project site and surrounding area within a 0.5-mile radius in addition to requesting a list of Native American tribes who may have knowledge of cultural resources within the project area. The Sacred Lands File search had negative results and three response letters were received. Lastly, a pedestrian field survey was conducted on September 30, 2020, with no observations or identification of cultural resources.

The City of San Marcos initiated AB 52 and SB 18 consultation with the Native American Heritage Commission on February 25, 2021. A Sacred Lands File search was completed by the NAHC with positive results for the project vicinity. A total of 21 letters were sent to 17 Native American tribes with three tribes responding. Refer to 18, *Tribal Cultural Resources*, for details about the tribes. The Rincon Band of Luiseño Indians responded on April 25, 2022, stating that the identified location is within the Traditional Use Area (TUA) of the Luiseño people and within the Rincon Band's specific Area of Historic Interest (AHI). As such, the Rincon Band is traditionally and culturally affiliated to the project area. The Pechanga Band of Indians responded on May 5, 2022, requesting ongoing consultation for the project.

- a. *Would the project cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?*
- b. *Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?*

Based on the results of the cultural resources records search, Native American scoping, and pedestrian field survey, no cultural resources were identified within the project site. However, there

are four prehistoric resources within 0.5 mile of the project site and two of these resources are prehistoric village sites with dense artifact deposits and human remains. Therefore, there is a high possibility that during construction there would be an unanticipated discovery of archaeological resources, that may also be considered historical resources. Impacts to unanticipated resources are potentially significant. Mitigation Measures CR-1 through CR-3 would reduce archaeological impacts to less than significant levels by requiring a pre-excavation agreement, performing construction monitoring, and outlining unanticipated discovery procedures.

Mitigation Measure

Mitigation Measure CR-1: Pre-Excavation Agreement

Prior to the issuance of a Grading Permit, or ground disturbing activities, the Applicant/Owner shall enter into a Tribal Cultural Resources Treatment and Repatriation Agreement (Pre-Excavation Agreement) with a Traditionally and Culturally Affiliated Native American Tribe (TCA Tribe), identified in consultation with the City. The purpose of the Pre-Excavation Agreement shall be to formalize protocols and procedures between the Applicant/Owner and the TCA Tribe for the protection, treatment, and repatriation of Native American human remains, funerary objects, cultural and/or religious landscapes, ceremonial items, traditional gathering areas, and other tribal cultural resources. Such resources may be located within and/or discovered during ground disturbing and/or construction activities for the proposed project, including any additional culturally appropriate archaeological studies, excavations, geotechnical investigations, grading, preparation for wet and dry infrastructure, and other ground disturbing activities. Any project-specific Monitoring Plans and/or excavation plans prepared by the project archaeologist shall include the TCA Tribe requirements for protocols and protection of tribal cultural resources that were agreed to during the tribal consultation.

The landowner shall relinquish ownership of all non-burial related tribal cultural resources collected during construction monitoring and from any previous archaeological studies or excavations on the project site to the TCA Tribe for proper treatment and disposition per the Pre-Excavation Agreement, unless ordered to do otherwise by responsible agency or court of competent jurisdiction. The requirement and timing of such release of ownership, and the recipient thereof, shall be reflected in the Pre-Excavation Agreement. If the TCA Tribe does not accept the return of the cultural resources, then the cultural resources will be subject to curation.

Mitigation Measure CR-2: Construction Monitoring

Prior to the issuance of a Grading Permit or ground disturbing activities, the Applicant/Owner or Grading Contractor shall provide written documentation (either as signed letters, contracts, or emails) to the City's Planning Division stating that a Qualified Archaeologist and Traditionally and Culturally Affiliated Native American monitor (TCA Native American monitor) have been retained at the Applicant/Owner or Grading Contractor's expense to implement the construction monitoring program, as described in the Pre-Excavation Agreement.

The Qualified Archaeologist and TCA Native American monitor shall be invited to attend all applicable pre-construction meetings with the General Contractor and/or associated subcontractors to present the construction monitoring program. The Qualified Archaeologist and TCA Native American monitor shall be present on site during grubbing, grading, trenching, and/or other ground disturbing activities that occur in areas of native soil or other permeable natural surfaces that have the potential to unearth any evidence of potential archaeological resources or tribal cultural

resources. In areas of artificial paving, the Qualified Archaeologist and TCA Native American monitor shall be present on site during grubbing, grading, trenching, and/or other ground disturbing activities that have the potential to disturb more than six inches below the original pre-project ground surface to identify any evidence of potential archaeological or tribal cultural resources. No monitoring of fill material, existing or imported, will be required if the General Contractor or developer can provide documentation to the satisfaction of the City that all fill materials being utilized at the site are either: 1) from existing commercial (previously permitted) sources of materials; or 2) are from private or other non-commercial sources that have been determined to be absent of tribal cultural resources by the Qualified Archaeologist and TCA Native American monitor.

The Qualified Archaeologist and TCA Native American monitor shall maintain ongoing collaborative coordination with one another during all ground disturbing activities. The requirement for the construction monitoring program shall be noted on all applicable construction documents, including demolition plans, grading plans, etc. The Applicant/Owner or Grading Contractor shall provide written notice to the Planning Division and the TCA Tribe, preferably through e-mail, of the start and end of all ground disturbing activities.

Prior to the release of any grading bonds, or prior to the issuance of any project Certificate of Occupancy, an archaeological monitoring report, which describes the results, analysis, and conclusions of the construction monitoring shall be submitted by the Qualified Archaeologist, along with any TCA Native American monitor's notes and comments received by the Qualified Archaeologist, to the Planning Division Manager for approval. Once approved, a final copy of the archaeological monitoring report shall be retained in a confidential City project file and may be released, as a formal condition of Assembly Bill (AB) 52 consultation, to [INSERT TRIBE] or any parties involved in the project specific monitoring or consultation process. A final copy of the report, with all confidential site records and appendices, will also be submitted to the South Coastal Information Center after approval by the City.

Mitigation Measure CR-3: Unanticipated Discovery Procedures

Both the Qualified Archaeologist and the TCA Native American monitor may temporarily halt or divert ground disturbing activities if potential archaeological resources or tribal cultural resources are discovered during construction activities. Ground disturbing activities shall be temporarily directed away from the area of discovery for a reasonable amount of time to allow a determination of the resource's potential significance. Isolates and clearly non-significant archaeological resources (as determined by the Qualified Archaeologist, in consultation with the TCA Native American monitor) will be minimally documented in the field. All unearthed archaeological resources or tribal cultural resources will be collected, temporarily stored in a secure location (or as otherwise agreed upon by the Qualified Archaeologist and the TCA Tribe), and repatriated according to the terms of the Pre-Excavation Agreement, unless ordered to do otherwise by responsible agency or court of competent jurisdiction.

If a determination is made that the archaeological resources or tribal cultural resources are considered potentially significant by the Qualified Archaeologist, the TCA Tribe, and the TCA Native American monitor, then the City and the TCA Tribe shall determine, in consultation with the Applicant/Owner and the Qualified Archaeologist, the culturally appropriate treatment of those resources.

If the Qualified Archaeologist, the TCA Tribe, and the TCA Native American monitor cannot agree on the significance or mitigation for such resources, these issues will be presented to the Planning Division Manager for decision. The Planning Division Manager shall make a determination based

upon the provisions of CEQA and California Public Resources Code Section 21083.2(b) with respect to archaeological resources and California Public Resources Section 21704 and 21084.3 with respect to tribal cultural resources, and shall take into account the religious beliefs, cultural beliefs, customs, and practices of the TCA Tribe.

All sacred sites, significant tribal cultural resources, and/or unique archaeological resources encountered within the project area shall be avoided and preserved as the preferred mitigation. If avoidance of the resource is determined to be infeasible by the City as the Lead Agency, then the City shall require additional culturally appropriate mitigation to address the negative impact to the resource, such as, but not limited to, the funding of an ethnographic study and/or a data recovery plan, as determined by the City in consultation with the Qualified Archaeologist and the TCA Tribe. The TCA Tribe shall be notified and consulted regarding the determination and implementation of culturally appropriate mitigation and the drafting and finalization of any ethnographic study and/or data recovery plan, and/or other culturally appropriate mitigation. Any archaeological isolates or other cultural materials that cannot be avoided or preserved in place as the preferred mitigation shall be temporarily stored in a secure location on site (or as otherwise agreed upon by the Qualified Archaeologist and TCA Tribe), and repatriated according to the terms of the Pre-Excavation Agreement, unless ordered to do otherwise by responsible agency or court of competent jurisdiction. The removal of any artifacts from the project site will be inventoried with oversight by the TCA Native American monitor.

If a data recovery plan is authorized as indicated above and the TCA Tribe does not object, then an adequate artifact sample to address research avenues previously identified for sites in the area will be collected using professional archaeological collection methods. If the Qualified Archaeologist collects such resources, the TCA Native American monitor must be present during any testing or cataloging of those resources. Moreover, if the Qualified Archaeologist does not collect the cultural resources that are unearthed during the ground disturbing activities, the TCA Native American monitor may, at their discretion, collect said resources for later reburial or storage at a local curation facility, as described in the Pre-Excavation Agreement.

In the event that curation of archaeological resources or tribal cultural resources is required by a superseding regulatory agency, curation shall be conducted by an approved local facility within San Diego County and the curation shall be guided by California State Historical Resources Commission's Guidelines for the Curation of Archaeological Collections. The City shall provide the Applicant/Owner final curation language and guidance on the project grading plans prior to issuance of the grading permit, if applicable, during project construction. The Applicant/Owner shall be responsible for all repatriation and curation costs and provide to the City written documentation from the TCA Tribe or the curation facility, whichever is most applicable, that the repatriation and/or curation have been completed.

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

No human remains have been identified within the project sites; however, the discovery of human remains is always a possibility during ground disturbing activities. If human remains are found, the State of California Health and Safety Code Section 7050.5 states no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. In the event of an unanticipated discovery of human remains, the County Coroner must be notified immediately. If the human remains are determined to be

prehistoric, the Coroner would notify the Native American Heritage Commission, which would determine and notify a most likely descendant (MLD). The MLD has 48 hours from being granted site access to make recommendations for the disposition of the remains. If the MLD does not make recommendations within 48 hours, the landowner shall reinter the remains in an area of the property secure from subsequent disturbance. Given the potential to encounter human remains, impacts would be potentially significant and would be reduced to less than significant through Mitigation Measure CR-4.

Mitigation Measure CR-4: Human Remains

As specified by California Health and Safety Code Section 7050.5, if human remains, or remains that are potentially human, are found on the project site during ground disturbing activities or during archaeological work, the person responsible for the excavation, or his or her authorized representative, shall immediately notify the San Diego County Medical Examiner'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 Medical Examiner 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 Medical Examiner will determine within two working days of being notified if the remains are subject to his or her authority. If the Medical Examiner recognizes the remains to be Native American, and not under his or her jurisdiction, then he or she shall contact the Native American Heritage Commission by telephone within 24 hours. The Native American Heritage Commission will make a determination as to the Most Likely Descendent, who shall be afforded 48 hours from the time access is granted to the discovery site to make recommendations regarding culturally appropriate treatment.

If suspected Native American remains are discovered, the remains shall be kept in situ (in place) until after the Medical Examiner makes its determination and notifications, and until after the Most Likely Descendent is identified, at which time the archaeological examination of the remains shall only occur on site in the presence of the Most Likely Descendent. The specific locations of Native American burials and reburials will be proprietary and not disclosed to the general public. According to California Health and Safety Code, six or more human burials at one location constitute a cemetery (Section 8100), and disturbance of Native American cemeteries is a felony (Section 7052). In the event that the Applicant/Owner and the Most Likely Descendent are in disagreement regarding the disposition of the remains, State law will apply, and the mediation process will occur with the NAHC. In the event that mediation is not successful, the landowner shall rebury the remains at a location free from future disturbance (see Public Resources Code Section 5097.98(e) and 5097.94(k)).

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

6 Energy

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

California is one of the lowest per capita energy users in the United States, ranked 50th in the nation, due to its energy efficiency programs and mild climate (U.S. Energy Information Administration 2021). Electricity and natural gas are primarily consumed by the built environment for lighting, appliances, heating and cooling systems, fireplaces, and other uses such as industrial processes in addition to being consumed by alternative fuel vehicles. Most of California’s electricity is generated in state with approximately 30 percent imported from the Northwest and Southwest in 2020; however, the state relies on out-of-state natural gas imports for nearly 90 percent of its supply (California Energy Commission [CEC] 2021a and 2021b). In addition, approximately 33 percent of California’s electricity supply in 2020 came from renewable energy sources, such as wind, solar photovoltaic, geothermal, and biomass (CEC 2021a). In 2018, Senate Bill 100 (SB 100) accelerated the state’s Renewable Portfolio Standards Program, codified in the Public Utilities Act, by requiring electricity providers to increase procurement from eligible renewable energy and zero-carbon resources to 33 percent of total retail sales by 2020, 60 percent by 2030, and 100 percent by 2045. Electricity and natural gas service would be provided to the project by San Diego Gas & Electric (SDG&E). Table 5 summarizes the electricity and natural gas consumption for San Diego County, in which the project site would be located, and for SDG&E, as compared to statewide consumption.

Table 5 2020 Electricity and Natural Gas Consumption

Energy Type	San Diego County	SDG&E	California	Proportion of SDG&E Consumption	Proportion of Statewide Consumption ¹
Electricity (GWh)	19,045	17,445	279,510	109%	7%
Natural Gas (millions of therms)	505	5,231	12,332	10%	4%

GWh = gigawatt-hours
¹ For reference, the population of San Diego County (3,315,404 persons) is approximately 8.4 percent of the population of California (39,466,855 persons) (California Department of Finance 2021).
 Source: CEC 2021c

Petroleum fuels are primarily consumed by on-road and off-road equipment in addition to some industrial processes, with California being one of the top petroleum-producing states in the nation (U.S. Energy Information Administration 2021). Gasoline, which is used by light-duty cars, pickup trucks, and sport utility vehicles, is the most used transportation fuel in California with 12.6 billion gallons sold in 2020 (CEC 2021d). Diesel, which is used primarily by heavy duty-trucks, delivery vehicles, buses, trains, ships, boats and barges, farm equipment, and heavy-duty construction and military vehicles, is the second most used fuel in California with 1.7 billion gallons sold in 2020 (CEC 2021d). Table 6 summarizes the petroleum fuel consumption for San Diego County, in which the project site would be located, as compared to statewide consumption.

Table 6 2020 Annual Gasoline and Diesel Consumption

Fuel Type	San Diego County (gallons)	California (gallons)	Proportion of Statewide Consumption ¹
Gasoline	1,055	12,572	8%
Diesel	94	1,744	5%

¹ For reference, the population of San Diego County (3,315,404 persons) is approximately 8.4 percent of the population of California (39,466,855 persons) (California Department of Finance 2021).

Source: CEC 2021d

Energy consumption is directly related to environmental quality in that the consumption of nonrenewable energy resources releases criteria air pollutant and greenhouse gas (GHG) emissions into the atmosphere. The environmental impacts of air pollutant and GHG emissions associated with the project’s energy consumption are discussed in detail in Section 3, *Air Quality*, and Section 8, *Greenhouse Gas Emissions*, respectively.

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

The proposed project would use nonrenewable and renewable resources for construction and operation of the project. The anticipated use of these resources is detailed in the following subsections. Applicant-provided information, the CalEEMod outputs for the air pollutant and GHG emissions modeling (Appendix D), and the trip generation rates in the traffic study completed for the project (Appendix D) were used to estimate energy consumption associated with the proposed project.

Construction Energy Demand

The project would require site preparation and grading, including hauling material off-site; pavement and asphalt installation; building construction; architectural coating; and landscaping and hardscaping. During project construction, energy would be consumed in the form of petroleum-based fuels used to power off-road construction vehicles and equipment on the project site, construction worker travel to and from the project site, and vehicles used to deliver materials to the site. As shown in Table 7, project construction would require approximately 3,708 gallons of gasoline and approximately 27,018 gallons of diesel fuel. These construction energy estimates are conservative because they assume that the construction equipment used in each phase of construction is operating every day of construction.

Table 7 Estimated Fuel Consumption during Construction

Source	Fuel Consumption (gallons) Gasoline	Fuel Consumption (gallons) Diesel
Construction Equipment & Hauling Trips	N/A	27,018
Construction Worker Vehicle Trips	3,708	N/A

Notes: N/A = not applicable
 See Appendix D for energy calculation sheets.

Energy use during construction would be temporary in nature, and construction equipment used would be typical of similar-sized construction projects in the region. In addition, construction contractors would be required to comply with the provisions of California Code of Regulations Title 13 Sections 2449 and 2485, which prohibit diesel-fueled commercial motor vehicles and off-road diesel vehicles from idling for more than five minutes and would minimize unnecessary fuel consumption. Construction equipment would be subject to the USEPA Construction Equipment Fuel Efficiency Standard, which would also minimize inefficient, wasteful, or unnecessary fuel consumption. Furthermore, per applicable regulatory requirements, such as 2019 California Green Building Standards Code (CALGreen), the project would comply with construction waste management practices to divert a minimum of 65 percent of construction debris. These practices would result in efficient use of energy necessary to construct the project. In the interest of cost-efficiency, construction contractors also would not utilize fuel in a manner that is wasteful or unnecessary. Therefore, the project would not involve the inefficient, wasteful, and unnecessary use of energy during construction, and construction impacts related to energy consumption would be less than significant.

Operation of the project would contribute to regional energy demand by consuming electricity, natural gas, and gasoline and diesel fuels. Natural gas and electricity would be used for heating and cooling systems, lighting, appliances, and water and wastewater conveyance, among other purposes. Gasoline and diesel consumption would be associated with vehicle trips generated by customers and employees. Table 8 summarizes estimated operational energy consumption for the proposed project. As shown therein, project operation would require approximately 38,228 gallons of gasoline and 6,230 gallons of diesel for transportation fuels, 0.46 GWh of electricity, and 14,415 U.S. therms of natural gas. Vehicle trips associated with future workers, customers, and deliveries would represent the greatest operational use of energy associated with the proposed project.

Table 8 Estimated Project Annual Operational Energy Consumption

Source	Energy Consumption ¹	Energy Consumption ¹
Transportation Fuels		
Gasoline	38,228 gallons	44,197 MMBtu
Diesel	6,230 gallons	1,176MMBtu
Electricity	0.46 GWh	1,554 MMBtu
Natural Gas Usage	14,415 U.S. therms	1,340 MMBtu

MMBtu = million metric British thermal units; GWh = gigawatt-hours

¹ Energy consumption is converted to MMBtu for each source

See Appendix D for energy calculation sheets and Appendix A for CalEEMod output results for electricity and natural gas usage

The project would be required to comply with all standards set in the latest iteration of the California Building Standards Code (California Code of Regulations Title 24), which would minimize

the wasteful, inefficient, or unnecessary consumption of energy resources by the built environment during operation. California's CALGreen standards (California Code of Regulations Title 24, Part 11) require implementation of energy-efficient light fixtures and building materials into the design of new construction projects. Furthermore, the latest Building Energy Efficiency Standards (California Code of Regulations Title 24, Part 6) require newly constructed buildings to meet energy performance standards set by the CEC. These standards are specifically crafted for new buildings to result in energy efficient performance so that the buildings do not result in wasteful, inefficient, or unnecessary consumption of energy.

Furthermore, the project would further reduce its use of nonrenewable energy resources as the electricity generated by renewable resources provided by SDG&E continues to increase to comply with State requirements through SB 100, which requires electricity providers to increase procurement from eligible renewable energy resources to 33 percent of total retail sales by 2020, 60 percent by 2030, and 100 percent by 2045. As discussed in Section 8, *Greenhouse Gas Emissions*, the project would implement applicable GHG reduction measures from the City of San Marcos CAP, including providing electric vehicle charging stations at three parking spaces (reduces gasoline fuel use), and installing approximately 10 kW of solar panels on the rooftop of the car wash and its attached canopy structure which is anticipated to reduce electricity demand by approximately 17,000 kWh per year. Therefore, project operation would not result in potentially significant environmental effects due to the wasteful, inefficient, or unnecessary consumption of energy, and impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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

The City of San Marcos adopted an updated CAP in December 2020. The City's updated CAP contains comprehensive implementation actions intended to promote renewable energy and energy efficiency. As discussed furthermore in Section 8, *Greenhouse Gas Emissions*, the proposed project would be consistent with applicable policies from the City's CAP. Furthermore, the project would include solar photovoltaic system with a rated capacity of approximately 10 kW. Therefore, the proposed project would have no impact on a State or local renewable energy or energy efficiency plan.

LESS THAN SIGNIFICANT IMPACT

7 Geology and Soils

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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Would the project:

a. Directly or indirectly cause 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 a known fault?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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 type="checkbox"/>	<input checked="" type="checkbox"/>
b. Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	<input type="checkbox"/>	<input 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 direct or indirect risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

- a.1. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?*

The project site is not located in the Alquist-Priolo Earthquake Fault Zone (California Department of Conservation 2021). According to the City's General Plan, no active or potentially active faults traverse San Marcos (City of San Marcos 2012c). Therefore, the risk associated with exposing people or structures to ground rupture of a known earthquake fault is low. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- a.2. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?*

San Marcos has experienced minor to moderate ground shaking events historically. San Marcos has a lower potential for strong ground shaking than other areas in southern California. General background seismicity is considered low in San Marcos with earthquake activity concentrated on faults to the north (Newport-Inglewood and Elsinore Hills), east (Elsinore and San Jacinto), and offshore to the west (Thirtymile Bank). The Rose Canyon Fault is considered the greatest potential threat to San Marcos. This fault and the other Southern California faults are potential generators of ground shaking in the project area (City of San Marcos 2012c). However, the project site is not subject to unusual levels of ground shaking, and the project would not involve uses, such as mining or fracking that are known to cause or exacerbate ground shaking.

To reduce geologic and seismic impacts, the City regulates development through the requirements of the California Building Code. The purpose of the California Building Code is to establish minimum standards to safeguard the public health, safety, and general welfare through structural strength, means of egress, and general stability by regulating and controlling the design, construction, quality of materials, use and occupancy, location, and maintenance of all building and structures within its jurisdiction. The earthquake design requirements of the California Building Code consider the occupancy category of the structure, site class, soil classifications, and various seismic coefficients. The California Building Code provides standards for various aspects of construction, including but not limited to excavation, grading, earthwork, construction, preparation of the site prior to fill placement, specification of fill materials, fill compaction and field testing, retaining wall design and construction, foundation design and construction, and seismic requirements. It includes provisions to address issues such as (but not limited to) construction on expansive soils and soil strength loss. In accordance with California law, project design and construction would be required to comply with provisions of the California Building Code. Because the project would comply with the California Building Code and because the project would not exacerbate existing ground shaking hazards, impacts related to seismically induced ground shaking would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- a.3. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction?*

Liquefaction is a phenomenon in which saturated silty-to-cohesionless soil above the groundwater table are subject to a temporary loss of strength due to the buildup of excess pore pressure during cyclic stresses induced by an earthquake. These soils may acquire a high degree of mobility and lead

to structurally damaging deformations. Liquefaction begins below the water table, but after liquefaction has developed, the groundwater table rises and causes the overlying soil to mobilize. Liquefaction typically occurs in areas where groundwater is less than 30 feet from the surface and where the soils are composed of poorly consolidated fine- to medium-grained sand. In addition to the necessary soil conditions, the ground acceleration and duration of the earthquake must also be of a sufficient level to initiate liquefaction.

The project site is located in a zero susceptibility liquification zone based on Figure 6-1 from the Safety Element of the General Plan (City of San Marcos 2012c). However, pursuant with San Marcos Municipal Code 17.32.040, *Grading Permit Requirements*, it is mandated that a geotechnical report be prepared and signed by a licensed Civil Engineer in the State of California to obtain a grading permit. This requirement would ensure liquefaction does not pose a risk to project components because recommendations included in the geotechnical report would need to be implemented during project construction activities. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

a.4. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving landslides?

The project sites are relatively flat, and it is not located in an identified landslide hazard zone (City of San Marcos 2012c). Therefore, the project would not expose people or structures to risk of loss, injury, or death involving landslides or liquefaction; impacts would be less than significant.

NO IMPACT

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

Ground-disturbing activities associated with project implementation would result in the removal of some topsoil during construction. Standard construction best management practices would be implemented to avoid or minimize soil erosion associated with ground-disturbing activities. As discussed furthermore in Section 10, *Hydrology and Water Quality*, implementation of erosion control measures required by San Marcos Municipal Code Section 17.32.13, *Permanent Erosion Control*, as well as adherence to requirements provided by the National Pollutant Discharge Elimination System permit for construction activities would avoid or minimize potential impacts. Upon completion of construction activities, the site would be almost entirely paved, and soils would be stabilized by landscaping, minimizing the potential for soil erosion. Therefore, impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

c. Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?

d. Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

Unstable soils include expansive, compressible, erodible, corrosive, or collapsible soils. Expansive soils are associated with alluvium and bedrock formations that contain minerals susceptible to expansion under wet conditions and contracting under dry conditions. Lateral spreading is defined as the finite, lateral displacement of sloping ground because of pore pressure build-up or liquefaction in a shallow underlying deposit during an earthquake. Figure 6-1 in the City's General

Plan Safety Element does not identify the project site as being susceptible for landslides or liquefaction. In addition, as discussed in criterion a.3, a geotechnical report would need to be prepared for a grading permit. The civil engineer preparing the geotechnical study would be required to analyze to soil to identify if it is unstable and expansive and offer recommendations to reduce or prevent the effects of unstable soils and/or expansive soils. Therefore, impacts from unstable soils and placing structures on expansive soils would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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

The project would connect to the existing sewer system and would not use septic tanks or another alternative wastewater disposal system. Therefore, there is no impact to soils from proposed septic tanks or wastewater.

NO IMPACT

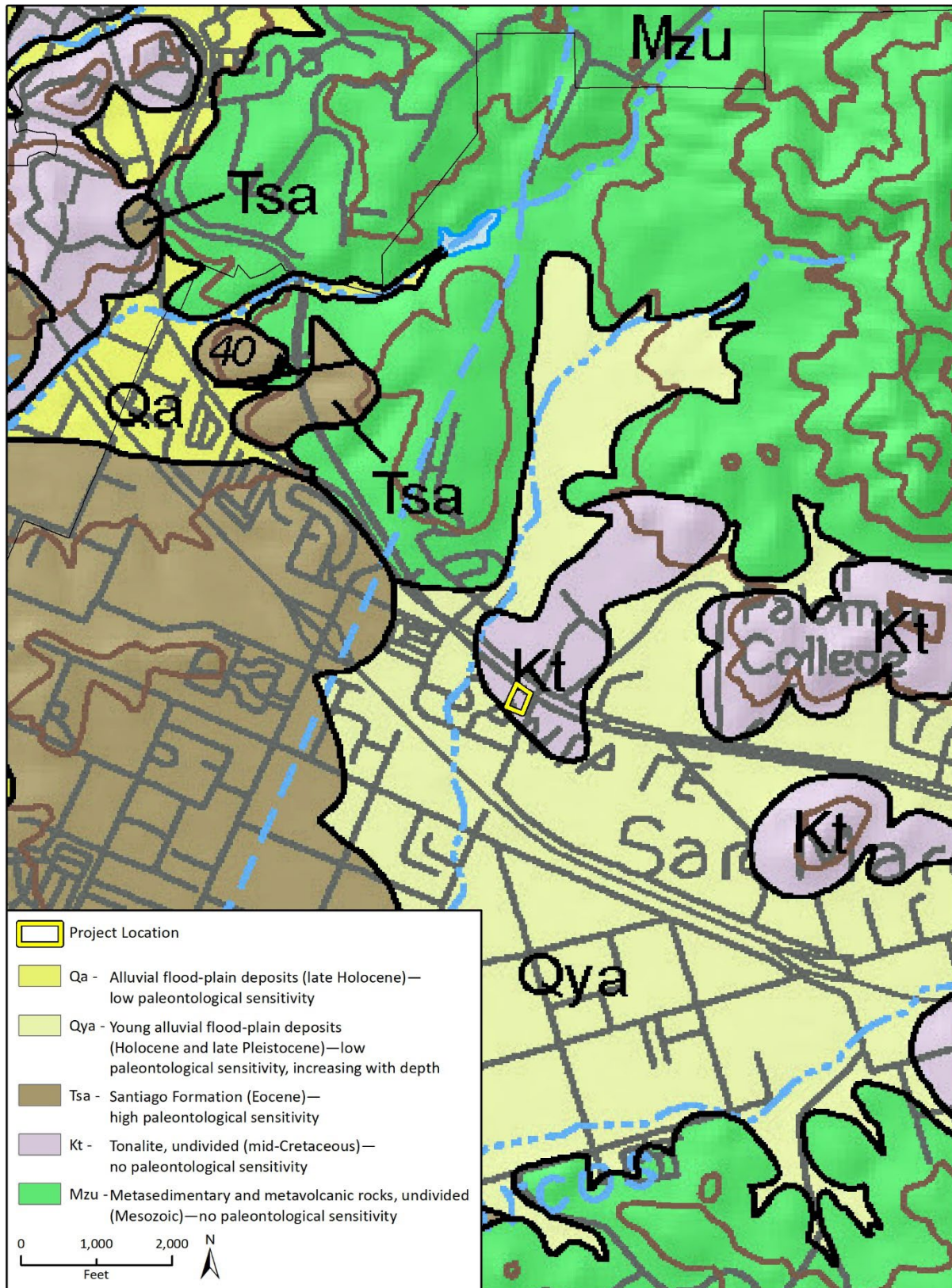
- f. *Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?*

The paleontological sensitivities of the geologic units underlying the project site were evaluated to determine if the proposed project could result in significant impacts to paleontological resources. The analysis was based on the results of an online paleontological locality search and review of existing information in the scientific literature concerning known fossils within geologic units mapped within the project site. Based on the available information contained in existing scientific literature, paleontological sensitivities were assigned to the geologic units underlying the project site. The potential for impacts to scientifically important paleontological resources is based on the potential for ground disturbance to directly impact paleontologically sensitive geologic units. The Society of Vertebrate Paleontology has developed a system for assessing paleontological sensitivity and describes rock units as having high, low, undetermined, or no potential for containing scientifically significant nonrenewable paleontological resources (Society of Vertebrate Paleontology 2010). This system is based on whether vertebrate or significant invertebrate fossils have been determined by previous studies to be present or are likely to be present in the relevant rock units.

The project site lies in the Peninsular Ranges Geomorphic Province, one of 11 major geomorphic provinces in California (California Geological Survey 2002). In general, the Peninsular Ranges consist of young, steeply sloped, northwest trending mountain ranges underlain by metamorphosed Late Jurassic to Early Cretaceous-aged extrusive volcanic rock and Cretaceous-aged igneous plutonic rock of the Peninsular Ranges Batholith. The project site is in the City of San Marcos, south of the San Marcos Mountains and Merriam Mountains within the San Marcos US Geological Survey 7.5-minute quadrangle. As shown in Figure 9, the project site is underlain by a single geologic unit: Cretaceous age undivided tonalite (Kt). Tonalite is an igneous rock formed by molten rock cooling and solidifying within the earth. Due to the way in which it formed, Kt cannot preserve paleontological resources and has no paleontological sensitivity. Therefore, construction of the project would not directly or indirectly destroy unique paleontological resources, paleontological site, or a unique geological feature since the site is unlikely to have paleontological resources. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

Figure 8 Geologic Units and Paleontological Sensitivity of the Project Site



Geologic data provided by Kennedy, M.P., Tan, S.S., Bovard, K.R., Alvarez, R.M., Watson, M.J., and Gutierrez, C.I. 2007. Geologic map of the Oceanside 30x60-minute quadrangle, California. California Geological Survey, Regional Geologic Map No. 2, scale 1:100,000"

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8 Greenhouse Gas Emissions

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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"/>

Methods

Rincon Consultants, Inc. prepared an Air Quality and Greenhouse Gas Emissions Study to analyze the project’s air quality emissions and impacts on surrounding sensitive land uses. The analysis considered temporary construction impacts and long-term operation air quality impacts associated with the project. The results of the Air Quality and Greenhouse Gas Emissions Study are used in the analysis and are included as Appendix A.

Overview of Climate Change and Greenhouse Gases

Climate change is the observed increase in the average temperature of the Earth’s atmosphere and oceans along with other substantial changes in climate (such as wind patterns, precipitation, and storms) over an extended period of time. Climate change is the result of numerous, cumulative sources of GHG emissions contributing to the “greenhouse effect,” a natural occurrence which takes place in Earth’s atmosphere and helps regulate the temperature of the planet. The majority of radiation from the sun hits Earth’s surface and warms it. The surface, in turn, radiates heat back towards the atmosphere in the form of infrared radiation. Gases and clouds in the atmosphere trap and prevent some of this heat from escaping into space and re-radiate it in all directions.

GHG emissions occur both naturally and as a result of human activities, such as fossil fuel burning, decomposition of landfill wastes, raising livestock, deforestation, and some agricultural practices. GHGs produced by human activities include carbon dioxide (CO₂), methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. Different types of GHGs have varying global warming potentials (GWP). The GWP of a GHG is the potential of a gas or aerosol to trap heat in the atmosphere over a specified timescale (generally, 100 years). Because GHGs absorb different amounts of heat, a common reference gas (CO₂) is used to relate the amount of heat absorbed to the amount of the gas emitted, referred to as “carbon dioxide equivalent” (CO₂e), which is the amount of GHG emitted multiplied by its GWP. Carbon dioxide has a 100-year GWP of one. By contrast, methane has a GWP of 30, meaning its global warming effect is 30 times greater

than CO₂ on a molecule per molecule basis (Intergovernmental Panel on Climate Change [IPCC] 2021).²

The United Nations IPCC expressed that the rise and continued growth of atmospheric CO₂ concentrations is unequivocally due to human activities in the IPCC's Sixth Assessment Report (2021). Human influence has warmed the atmosphere, ocean, and land, which has led the climate to warm at an unprecedented rate in the last 2,000 years. It is estimated that between the period of 1850 through 2019, that a total of 2,390 gigatonnes of anthropogenic CO₂ was emitted. It is likely that anthropogenic activities have increased the global surface temperature by approximately 1.07 degrees Celsius between the years 2010 through 2019 (IPCC 2021). Furthermore, since the late 1700s, estimated concentrations of CO₂, methane, and nitrous oxide in the atmosphere have increased by over 43 percent, 156 percent, and 17 percent, respectively, primarily due to human activity (USEPA 2021b). Emissions resulting from human activities are thereby contributing to an average increase in Earth's temperature. Potential climate change impacts in California may include loss of snowpack, sea level rise, more extreme heat days per year, more high ozone days, more large forest fires, and more drought years (State of California 2018).

Regulatory Framework

In response to climate change, California implemented Assembly Bill 32 (AB 32), the "California Global Warming Solutions Act of 2006." AB 32 required the reduction of statewide GHG emissions to 1990 emissions levels (essentially a 15 percent reduction below 2005 emission levels) by 2020 and the adoption of rules and regulations to achieve the maximum technologically feasible and cost-effective GHG emissions reductions. On September 8, 2016, the Governor signed Senate Bill 32 into law, extending AB 32 by requiring the State to further reduce GHG emissions to 40 percent below 1990 levels by 2030 (the other provisions of AB 32 remain unchanged). On December 14, 2017, CARB adopted the 2017 Scoping Plan, which provides a framework for achieving the 2030 target. The 2017 Scoping Plan relies on the continuation and expansion of existing policies and regulations, such as the Cap-and-Trade Program and the Low Carbon Fuel Standard, and implementation of recently adopted policies and legislation, such as SB 1383 (aimed at reducing short-lived climate pollutants including methane, hydrofluorocarbon gases, and anthropogenic black carbon) and SB 100 (discussed further below). The 2017 Scoping Plan also puts an increased emphasis on innovation, adoption of existing technology, and strategic investment to support its strategies. As with the 2013 Scoping Plan Update, the 2017 Scoping Plan does not provide project-level thresholds for land use development. Instead, it recommends local governments adopt policies and locally-appropriate quantitative thresholds consistent with a statewide per capita goal of six metric tons (MT) of CO₂e by 2030 and two MT of CO₂e by 2050 (CARB 2017).

Other relevant state laws and regulations include:

- **SB 375:** The Sustainable Communities and Climate Protection Act of 2008 (SB 375), signed in August 2008, enhances the state's ability to reach AB 32 goals by directing the CARB to develop regional GHG emission reduction targets to be achieved from passenger vehicles by 2020 and 2035. Metropolitan Planning Organizations are required to adopt a Sustainable Communities Strategy (SCS), which allocates land uses in the Metropolitan Planning Organization's Regional Transportation Plan (RTP). On March 22, 2018, CARB adopted updated regional targets for reducing GHG emissions from 2005 levels by 2020 and 2035. The San Diego Association of

² The Intergovernmental Panel on Climate Change's (2021) *Sixth Assessment Report* determined that methane has a GWP of 30. However, the 2017 Climate Change Scoping Plan published by the California Air Resources Board uses a GWP of 25 for methane, consistent with the Intergovernmental Panel on Climate Change's (2007) *Fourth Assessment Report*. Therefore, this analysis utilizes a GWP of 25.

Governments (SANDAG) was assigned targets of a 15 percent reduction in per capita GHG emissions from passenger vehicles from 2005 levels by 2020 and a 19 percent reduction in per capita GHG emissions from passenger vehicles from 2005 levels by 2035. SANDAG adopted the 2050 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) in October 2011, which meets the requirements of SB 375.

- **SB 100:** Adopted on September 10, 2018, SB 100 supports the reduction of GHG emissions from the electricity sector by accelerating the state’s Renewables Portfolio Standard Program. SB 100 requires electricity providers to increase procurement from eligible renewable energy resources to 33 percent of total retail sales by 2020, 60 percent by 2030, and 100 percent by 2045.
- **California Building Standards Code (California Code of Regulations Title 24):** The California Building Standards Code consists of a compilation of several distinct standards and codes related to building construction including plumbing, electrical, interior acoustics, energy efficiency, and handicap accessibility for persons with physical and sensory disabilities. The current iteration is the 2019 Title 24 standards. Part 6 is the Building Energy Efficiency Standards, which establishes energy-efficiency standards for residential and non-residential buildings in order to reduce California’s energy demand. Part 12 is the CALGreen, which includes mandatory minimum environmental performance standards for all ground-up new construction of residential and non-residential structures.

San Marcos Climate Action Plan

At the local level, the City of San Marcos adopted its updated Climate Action Plan (CAP) in December 2020 (City of San Marcos 2020a). The City’s updated CAP establishes GHG emissions targets for years 2020 and 2030, consistent with statewide goals identified in AB 32, Executive Order S-03-05, and SB 32. The CAP contains comprehensive implementation actions related to transportation, land, energy, and water uses, as well as managing wastewater and solid waste generation. The City’s goals are to reduce GHG emissions four percent below 2012 levels by 2020 and 42 percent below 2012 levels by 2030.

The City’s CAP includes three methods to evaluate the GHG impacts associated with proposed development projects in the City. The first method is to screen out projects that would be too small to make a considerable contribution to the cumulative impact of climate change and would not need to provide additional analysis to demonstrate consistency with the CAP. The City developed a list of project screening thresholds for various project types that would be anticipated to emit less than 500 MT CO₂e per year. The second method is to evaluate whether a project would incorporate applicable GHG reduction measures from the CAP. The City prepared a CAP Consistency Checklist to simplify this review; where a project complies with the checklist, no further analysis is required. The third method is intended to accommodate projects that cannot use the Checklist due to unique land uses or circumstances but are otherwise consistent with CAP projections. These projects may incorporate project-specific GHG reduction measures and demonstrate consistency with the CAP through comparison to a numerical threshold of 2.1 MT CO₂e per service population per year, where service population is defined as the sum of the number of residents and jobs generated by the project.

Methodology

GHG emissions associated with project construction and operation were estimated using CalEEMod, version 2020.4.0, with the assumptions described in Appendix A and in Section 3, *Air Quality* in addition to the following:

- **Amortization of Construction Emissions.** In accordance with South Coast Air Quality Management District’s recommendation, GHG emissions from construction of the proposed project were amortized over a 30-year period and added to annual operational emissions to determine the project’s total annual GHG emissions (South Coast Air Quality Management District 2008).
- **Water Usage.** For the car wash, the water usage was estimated using data from professional car wash industry surveys and reports. Based on 80,000 vehicles washed per year, the estimated water use for the proposed car wash would be 2,104,000 gallons per year.

Significance Thresholds

Individual projects do not generate sufficient GHG emissions to influence climate change directly. However, physical changes caused by a project can contribute incrementally to significant cumulative effects, even if individual changes resulting from a project are limited. The issue of climate change typically involves an analysis of whether a project’s contribution towards an impact would be cumulatively considerable. “Cumulatively considerable” means the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, other current projects, and probable future projects (CEQA Guidelines Section 15064[h][1]).

According to CEQA Guidelines Section 15183.5(b), projects can tier from a qualified GHG reduction plan, which allows for project-level evaluation of GHG emissions through the comparison of the project’s consistency with the GHG reduction policies included in a qualified GHG reduction plan. This approach is considered by the Association of Environmental Professionals (2016) in its white paper, *Beyond Newhall and 2020*, to be the most defensible approach presently available under CEQA to determine the significance of a project’s GHG emissions. The updated San Marcos CAP, with a 2030 target that is consistent with SB 32, is a qualified GHG reduction plan consistent with the requirements of CEQA Guidelines Section 15183.5. The CAP provides a CAP Consistency Checklist; however, since this project requires a General Plan Amendment, GHG emissions were also quantified for the project and the existing land use designation to determine consistency.

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

CAP Consistency Checklist

As discussed in the previous section, The City of San Marcos CAP is a qualified GHG reduction plan consistent with the requirements of CEQA Guidelines Section 15183.5. The CAP Consistency Checklist for the project is included as Appendix A and a summary is included in the section below.

Step 1: Land Use Consistency

Step 1 of the CAP Consistency Checklist evaluates the land use consistency of a project. If a project is consistent with the existing General Plan land use and specific/master plan or zoning designations, then the project proceeds to Step 2 of the Checklist.

Project Emissions

Since the project is not consistent with the existing General Plan land use designation, GHG emissions were estimated for the proposed project and for a project that would fit the existing MU3 development. The GHG emissions from this existing land use designation model were then compared to the GHG emissions from the proposed project. Modeling methodology and results can be found in Appendix A.

The proposed project would result in GHG emissions from construction-related sources such as construction equipment use, construction-related commute, hauling, and delivery trips. Operation-related sources would include project-generated traffic, energy use, area sources, water use, and solid waste disposal.

Table 9 shows GHG emissions associated with the proposed project and the existing land use designation. As shown, the project would generate approximately 552 MT CO₂e per year, while the MU3 development would generate approximately 2,223 MT CO₂e per year. The project would generate 1,671 less MT CO₂e per year compared to the MU3 development. This is due to a reduction in development intensity and a reduction in vehicle trips associated with the proposed project. Therefore, the project would generate GHG emissions less than the estimated emissions generated under the existing designation and would proceed to Step 2 of the CAP Consistency Checklist.

Table 9 Project Total Annual GHG Emissions

Emission Source	Annual Proposed Project Emissions (MT CO₂e)	Annual Existing Land Use Designation Emissions (MT CO₂e)
Construction ¹	9	N/A
Operation		
Area	<1	<1
Energy	184	390
Mobile	337	1,699
Solid Waste	13	52
Water	10	82
Total Project Emissions	552	2,223
Project Net Emissions (Project – Existing Emissions)	-1,671	

Notes: N/A = not applicable; MT CO₂e = Metric Tons of Carbon Dioxide Equivalent; CO₂ = Carbon Dioxide; CH₄ = Methane; N₂O = Nitrous Oxide

¹ Construction emissions were estimated to be 352 MT CO₂e. Results were amortized over a 30-year period.

Source: Appendix A

Step 2: CAP Measures Consistency

Step 2 of the CAP Consistency Checklist evaluates a project’s implementation of applicable GHG reduction measures from the CAP.

ELECTRIC VEHICLE CHARGING STATIONS (MEASURE T-2) - EXCEEDED

This measure applies to multi-family residential and non-residential projects. Where applicable, projects shall install electric vehicle charging stations (Level 2 or better) in at least 5 percent of the total parking spaces provided onsite.

The project would include 59 onsite parking spaces; five percent of this amount would equate to three spaces. The project would comply with this requirement by providing three electric vehicle charging stations parking spaces which are proposed to be Level 2 chargers.

BICYCLE INFRASTRUCTURE (MEASURE T-8) – NOT APPLICABLE

This measure applies to residential and non-residential projects which would either propose intersection or roadway improvements or the City’s General Plan Mobility Element identifies bicycle infrastructure improvements at an intersection or roadway segment improved as part of the project.

This measure would not be applicable to the project because the proposed project would not include any intersection or roadway segment improvements.

TRANSPORTATION DEMAND MANAGEMENT (MEASURE T-9) – NOT APPLICABLE

This measure applies to multi-family residential and non-residential projects that would be subject to the City’s TDM Ordinance. Where applicable, projects shall develop and implement a TDM Plan.

This measure was developed based on a 1-2% application rate. Thus 1-2% of the total tenant-occupants are subject to comply. If the 1-2% application rate results in less than 1 tenant-occupant then this measure would not be applicable. The project is anticipated to have approximately 20 employees. 1-2% of 20 employees would represent less than half an employee. Therefore, measures such as providing discounted transit passes or bicycle spaces would not see adoption of at least one employee. The project does provide a vanpool parking space and pedestrian connections to external streets. In addition, a retail type use is not coherent with telecommuting.

REDUCE PARKING NEAR TRANSIT (MEASURE T-12) – NOT APPLICABLE

This measure applies to multi-family residential projects which would be located within one half-mile of a major transit stop. Where applicable, projects shall provide at least 27 percent fewer parking spaces than required based on the City’s municipal code parking requirements.

This measure would not be applicable because the project proposes non-residential uses.

WATER HEATERS (MEASURE E-1) – NOT APPLICABLE

This measure applies to residential projects. Where applicable, projects shall install one, or a combination of, specified water heater types.

This measure would not be applicable because the project proposes non-residential uses.

PHOTOVOLTAIC INSTALLATION (MEASURE E-2L) - EXCEEDED

This measure applies to non-residential projects. Where applicable, projects shall install photovoltaic systems with a minimum capacity of two watts per sf of gross floor area.

The project proposes a 5,000 square foot food mart; a 3,000 square foot car wash; and a 6,192 square foot gas station canopy. Consistency with this item would require a photovoltaic system with

a capacity of approximately 28.4 kW. The project would comply with this item through installation of solar panels with a rated capacity of at least 28.4 kW. .

LANDSCAPING WATER USE (MEASURE W-L) – MET

This measure applies to residential and non-residential projects which are subject to the City’s Water Efficient Landscape Ordinance. Where applicable, projects shall comply with the Water Efficient Landscape Ordinance.

The project would comply with the City’s Water Efficient Landscape Ordinance; the project’s estimated total water use is 154,563 gallons per year, while the maximum applied water allowance is 197,067 gallons per year.

URBAN TREE CANOPY (MEASURE C-2) - EXCEEDED

This measure applies to single-family residential projects and to multi-family and non-residential projects which provide more than 10 parking spaces. Where applicable, single family residential projects shall plant one tree per unit and multi-family and non-residential projects shall provide one tree per five parking spaces.

The project would include 59 onsite parking spaces; one tree per five spaces would equate to 12 trees. The project would include 49 total trees, which would exceed the requirements of Measure T 2. Proposed trees include includes 14 Art’s Seedless Dessert Willows, 12 Shoestring Acacias, 9 Engelmann Oaks, 6 Desert Museum Palo Verde, 4 Guadalupe Palms, and 4 Cootamurda Wattles.

Checklist Conclusion

As shown, the project would be consistent with all applicable measures from the CAP Consistency Checklist. As the City of San Marcos CAP is a qualified GHG reduction plan consistent with the requirements of CEQA Guidelines Section 15183.5 and the project is consistent with the San Marcos CAP, impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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9 Hazards and Hazardous Materials

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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Would the project:

a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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 0.25 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 that is included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. For a project located in an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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

Potential hazardous materials, such as fuel, paint products, lubricants, solvents, and cleaning products, may be used and/or stored onsite during the construction of the proposed project. However, due to the limited quantities of these materials to be used during construction, they are not considered hazardous to the public at large. The transport, use, and storage of hazardous materials during project construction would be conducted pursuant to all applicable federal, State, and local policies, including but not limited to Title 49 of the Code of Federal Regulations implemented by California Code of Regulations Title 13, which describes strict regulations for the safe transportation of hazardous materials, and in cooperation with the County Fire Department's Health Hazardous Materials Division.

During operation, the project would be subject to routine inspection by federal, State, and local regulatory agencies with jurisdiction over fuel-dispensing facilities. Hazardous materials regulations, which are codified in California Code of Regulations Titles 8, 22, and 26, and their enabling legislation set forth in Chapter 6.95 of the California Health and Safety Code, were established at the State level to ensure compliance with federal regulations and to reduce the risk to human health and the environment from the routine use of hazardous substances. Protection against accidental spills and releases provided by this legislation includes physical and mechanical controls of fueling operations, including automatic shutoff valves; requirements that fueling operations are contained on impervious surface areas; oil/water separators or physical barriers in catch basins or storm drains; vapor emissions controls; leak detection systems; and regular testing and inspection.

The applicant is also required to comply with applicable provisions of Title 49 of the Code of Federal Regulations Parts 100–185 and all amendments through December 9, 2005 (Hazardous Materials Regulations). Hazardous materials must be stored in designated areas designed to prevent accidental release to the environment. California Building Code requirements prescribe safe accommodations for materials that present a moderate explosion hazard, high fire or physical hazard, or health hazards. Gasoline dispensing operations in San Diego County are also subject to SDAPCD regulations, such as Rule 61.3.1, concerning the release of hazardous materials and are required to be equipped with certified vapor recovery systems. A permit to operate would also be required and the permitting process would ensure that the fuel facility is in compliance with the SDAPCD regulations.

The gasoline and diesel fuel would need to be transported via truck – a routine procedure that is not expected to impose excessive risk. The project would be required to comply with the California Vehicle Code Section 31303, which requires that hazardous materials be transported using routes with the lowest travel time. California Vehicle Code Section 31303 further prohibits the transportation of hazardous materials through residential neighborhoods. Therefore, impacts associated with handling, storing, and dispensing of hazardous materials during construction and operation of the project would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- b. *Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?*

Although the project involves the storage and use of petroleum gasoline, compliance with applicable federal and State laws related to the storage of hazardous materials would be required to

maximize containment and provide for prompt and effective cleanup if an accidental release occurs. Applicable standards include the California Environmental Protection Agency's Aboveground Petroleum Storage Act, California Division of Occupational Safety and Health operational requirements, and California Health and Safety Code Section 25270 regarding aboveground storage tanks.

The San Diego County Hazardous Materials Division is the local Certified Unified Program Agency, the agency responsible for the implementation and regulation of the California Environmental Protection Agency's Unified Program which consolidates the following programs: the Aboveground Petroleum Storage Act Program, California Accidental Release Prevention (CalARP) Program, Hazardous Materials Business Plan Program, Hazardous Materials Management and Inventory Program, Hazardous Waste and Hazardous Waste Treatment Program, and the Underground Storage Tank Program.

Operators or facilities that use or store large quantities of hazardous materials are required by law to prepare a Hazardous Materials Business Plan that lists the hazardous materials stored and their volumes and locations and submit the plan through the California Environmental Reporting System. Users of acutely hazardous materials above prescribed thresholds must prepare and submit a Risk Management Plan under the CalARP Program. The purpose of the CalARP program is to prevent accidental releases of substances that can cause serious harm to the public and the environment, to minimize the damage if releases do occur, and to satisfy community right-to-know laws. Release reporting is required by several State and federal laws.

In compliance with these regulations, the proposed project incorporates several safety design features, including:

- Leak detection methods for underground storage tanks, including Automatic Tank Gauging, Groundwater Monitoring, and Tank Tightness Testing and Inventory Control
- Aboveground Spill Detection and Prevention Methods
- Vapor Recovery System
- Emergency Shut Off Devices

With adherence to the listed project safety design feature, and due to existing and applicable State, federal, and county laws and programs regarding hazardous materials management, safety and reporting, impacts associated with reasonably foreseeable upset and accident conditions involving the release of hazardous materials during construction and operation of the project would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- c. *Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?*

The nearest existing school, Palomar College (1440 West Mission Road), is located approximately 0.1-mile northwest of the nearest project site boundary. The project would comply with federal, State, and local policies to ensure the project would not create significant hazards to the public and environment as described above. The project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of existing or proposed schools directly, indirectly, or cumulatively. Therefore, impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- d. *Would the project be located on a site that is included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?*

The project site is not listed as a hazardous material site compiled pursuant to Government Code Section 65962.5. The following resources were reviewed to determine if hazardous materials may be present at the project site, including:

- California Department of Toxic Substances Control's (DTSC) online EnviroStor database (DTSC 2021),
- California State Water Resource Control Board's (SWRCB's) online GeoTracker database (SWRCB 2021a),
- State of California Geologic Energy Management Division (CalGEM) Online Mapping System (CalGEM 2021),
- National Pipeline Mapping System (NPMS) online Public Map Viewer (Pipeline and Hazardous Materials Safety Administration 2021), and
- SWRCB polyfluoroalkyl substances (PFAS) database (SWRCB 2020b).

A review of the DTSC EnviroStor and SWRCB GeoTracker databases found that the project site is not listed as a hazardous materials site or an unauthorized release site. Three unauthorized release site was identified within 1,000 feet of the subject property. The cases and sites are as follows:

- **Coca Cola Enterprises (T0608184290) at North Las Posas Road/Armolite Drive.** This facility is approximately 400 feet southeast of the southern project site boundary. At this facility a 1988 environmental investigation discovered chlorinated solvents in a sample of groundwater from the onsite groundwater monitoring wells that exceeded the State's maximum contaminant level for drinking water. A leak was reported on November 1, 1996, and a subsequent investigation was undertaken by Smith Environmental, Kleinfelder, and Med-Tox Associates for the property. In the environmental documents prepared on May 15, 1997, it was recommended that the onsite groundwater monitoring wells be decommissioned in accordance with the San Diego County Department of Environmental Health Standards (DEH). The DEH reviewed the environmental documents and agreed with said recommendation. The case closure summary from July 18, 1997, noted that the RWQCB was notified of the contamination and that property was vacant with no structures onsite. The case was closed on July 25, 1997.
- **Pioneer Mills (T0607300032) at 1329 West Mission Road.** This facility is approximately 160 feet northwest of the northern project site boundary. The case consisted of a leaking underground storage tank (LUST) cleanup site. The site was remediated, and a letter dated February 12, 1993, from the DEH stated that no further action was required, thus closing the case.
- **San Marcos Gas (T0607383730) at 1290 West Mission Road.** This facility is approximately 340 feet northeast of the northern project boundary. The facility at this location included a gas station with underground storage tanks and the case was identified as a LUST cleanup site. A leak was discovered on March 18, 2003 and stopped on the same date. The leak was then reported on April 3, 2003. The cleanup action involved the removal of petroleum contained soil. A Preliminary Site Investigation Report, dated October 31, 2011, was prepared and concluded no further action was needed to the low concentrations of detectable petroleum hydrocarbons

found at 5-foot sampling and 10-foot samplings. The DEH closed the case with no further action needed in a letter dated July 12, 2013.

Since the cases for these facilities are all closed with no further action, they are not sites with active hazardous materials present.

CalGEM Online Mapping System indicates that no oil wells are located on the subject property, adjacent properties, or within 0.25 mile of the project site. The NPMS online Public Map Viewer indicates that no natural gas transmission pipelines or hazardous liquid pipelines are located on the project site or adjacent properties.

According to the SWRCB, “PFAS are a large group of human-made substances that do not occur naturally in the environment and are resistant to heat, water, and oil” (SWRCB 2021b). Review of the Statewide PFAS Investigation online Public Map Viewer indicates that there are no current chrome plating, airport, landfill, or publicly owned treatment works PFAS orders at any facilities located within 0.5 mile of the project site. Additionally, review of the California 2019 Statewide Drinking Water System Quarterly Testing Results online Public Map Viewer indicates that no drinking water wells have been tested for PFAS within 0.5 mile of the project site.

Consequently, there are no active hazardous materials sites onsite or within 1,000 feet of the site, impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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

The project site is not located in any airport land use plan area or within two miles of a public airport. The nearest airport is the McClellan-Palomar Airport (2198 Palomar Airport Road) in the City of Carlsbad, approximately five miles west of the project site. The McClellan-Palomar Airport Land Use Compatibility Plan establishes six safety zones within the Airport Influence Area (AIA) to evaluate the safety compatibility of land use actions. These safety zone boundaries are based on general aviation aircraft accident location data, runway configuration, and aircraft operational procedures. No portion of the city lies within these established safety zones. Therefore, the project would not result in aviation-related safety hazards or excessive noise for people residing or working in the project area, and no impacts would occur.

NO IMPACT

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

The construction and operation of the project would not substantially alter or otherwise interfere with public rights-of-way and would provide adequate internal ingress and egress for necessary emergency response vehicles. According to the City’s General Plan, official evacuation routes have not been established; however, there are several main thoroughfares that would serve as primary evacuation corridors for most of the planning area in the event of an emergency (City of San Marcos 2012c). The project site is located adjacent to two main thoroughfares that would serve as primary evacuation corridors in the event of an emergency: North Las Posas Road and West Mission Road.

No roads would be permanently closed due to the construction or operation of the project, and no structures would be developed that could potentially impair implementation of or physically

interfere with an adopted emergency response plan or emergency evacuation plan. No structures would be developed that could potentially impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

If there are temporary lane closures during project construction (potentially on Twin Oaks Valley Road or Borden Road), construction activities would avoid interference with an emergency plan through the use of traffic control measures to maintain traffic flow and access and/or road detours. Due to the temporary nature of project construction and the use of traffic control measures to avoid interference with an emergency plan, potential impacts from project construction would be less than significant.

In addition, as discussed in Section 17, *Transportation*, the project would not have a significant impact on area intersections that would be used for emergency access or evacuation. As such, operation of the project would not interfere with existing emergency evacuation plans or emergency response plans in the area. Therefore, the operation of the project would not result in any impacts to emergency response or evacuation plans.

LESS THAN SIGNIFICANT IMPACT

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

The project site is located on an undeveloped parcel that is not in a California Department of Forestry and Fire Protection (CalFIRE) Very High Fire Hazard Severity Zone (VHFHSZ); the project is approximately 0.4-mile feet southwest of a VHFHSZ (CalFIRE 2021). The project would be designed, constructed, and operated pursuant to applicable standards outlined in the latest California Fire Code published by the California Building Standards Commission. For example, in the 2019 Edition and adopted in Chapter 17 of the City of San Marcos Code of Ordinances, such requirements include building and emergency access, adequate emergency notification, and means of egress for emergency vehicles. While project construction may require temporary truck and equipment access and parking on and around the project site, construction would not require lane or roadway closures that would temporarily impair emergency response or evacuation. Additional discussion of wildfire risks is included in Section 20, *Wildfire*. The project would not create a significant risk of loss, injury, or death involving wildfires, and impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

10 Hydrology and Water Quality

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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Would the project:

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

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

Potential water quality impacts associated with the project include short-term construction impacts from erosion and sedimentation as well as potential hazardous material discharge from construction equipment and materials. Because the project would involve development and ground disturbance of over one acre, it would be required to comply with regulations established under National Pollution Discharge Elimination System (NPDES) permit for construction stormwater discharges. The Construction General Permit, General Permit Order 2009-0009-DWQ, would also require the development of a Storm Water Pollution Prevention Plan (SWPPP) by a certified Qualified SWPPP Developer. The project would also be required to submit three sets of erosion control plans along with the grading plans per San Marcos Municipal Code Section 17.32.13, *Permanent Erosion Control*. The SWPPP for the Construction General Permit can be used for the City, but the project would also meet the minimum best management practice (BMP) requirements for the City that are detailed in the Construction Best Management Practices Manual. These would reduce potential construction impacts to water quality and discharge to a less than significant level.

Post construction and operation of the project would comply with Chapter 14.15 of the San Marcos Municipal Code, which requires development of land to prevent, to the maximum extent possible, pollutants from entering the stormwater conveyance system in San Marcos. The project would also comply with requirements of the San Diego RWQCB Municipal Separate Stormwater Permit, Order No. R9-2013-0001. The City of San Marcos developed a Jurisdictional Urban Runoff Management Program (JURMP) to comply with this Order and to reduce pollution in urban runoff in San Marcos.

Under Order R9-2013-0001, the project would require additional treatment control BMPs under Provision E.3.b (City of San Marcos 2008). The project would comply with all necessary provisions and BMPs, along with preparing a SWPPP.

With compliance with all applicable regulations and measures, the project would not violate water quality standards or waste discharge requirements. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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

San Marco's water supply is provided primarily by Vallecitos Water District (VWD), which receives all its supply from the San Diego County Water Authority (SDCWA). SDCWA obtains most of its water from the State Water Project (SWP) and from the Colorado River via the Colorado River Aqueduct. The project site and area are located in the San Marcos Valley Groundwater Basin. VWD currently does not obtain water from the groundwater basin, as it receives its water from SDCWA, which is not reliant on imported water sources. VWD conducted a groundwater feasibility analysis in 1996 which concluded the storage capacity would not produce groundwater at an economically viable rate, even in the short term (VWD 2021a). Therefore, there would be no impact to groundwater depletion as the project would not utilize the groundwater as a potable water source.

The project is located in the San Marcos Valley Groundwater Basin on an undeveloped vacant lot with no impervious surfaces. Construction of the project would increase impervious surfaces with the construction of the fuel station, convenience store, automated car wash and associated parking spots and walkways to approximately 55,501 square feet, which could impact groundwater recharge and supplies.

The project would be required to implement BMPs and submit the required NPDES permit, which would reduce the impacts of increased impervious surfaces. The project would comply with all applicable regulations and policies and would not utilize groundwater for construction or operation; therefore, impacts to groundwater would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- c.(i) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- or off-site?*
- c.(ii) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?*
- c.(iii) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner that would create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?*

All development projects in San Marcos are required to meet minimum requirements of incorporating site design and source control BMPs. Source control BMPs, as mentioned above, would reduce erosion and siltation impacts on local drainage patterns. The project would also implement site design BMPs, or low impact development, to mimic the hydrology of the site before the development of the proposed project. The project would comply with the San Diego RWQCB Order R9-2013-0001, as amended by Order Nos. R9-2015-0001 and R9-2015-0100, otherwise known as the Municipal Permit, and the City's Treatment Control Best Management Practices (TCBMP) program to include post-construction BMPs. Under the RWQCB Order R9-2013-0001, the project would be considered a "Priority Development Project," and would be required to implement low-impact development (LID) BMPs designed to retain (i.e., intercept, store, infiltrate, evaporate, and evapotranspire) onsite pollutants contained in the volume of storm water runoff produced from a 24-hour 85th percentile storm event (design capture volume).

Additionally, the project would implement BMPs to accommodate project runoff volumes and rates with those prior to project development. This would reduce any potential impacts on stormwater system capacity. The project would also comply with requirements of the NPDES Municipal Separate Storm Sewer System (MS4) Storm Water Management Program (SWMP) Permit No. R9-2013-0001, the JURMP, and Chapter 14.15 of the San Marcos Municipal Code, which would prevent pollutants, to the maximum extent possible, from entering the stormwater conveyance system. Compliance with these regulations would reduce project impacts related to runoff exceeding system capacity to a less than significant level.

LESS THAN SIGNIFICANT IMPACT

- c.(iv) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would impede or redirect flood flows?*

The project site is vacant and consists entirely of permeable surfaces. The project would involve construction of a fuel station, food mart, and car wash that would increase the impervious surface cover on the project site by 55,501 square feet, which is 79 percent of the overall site.³ However, as described above, the project would comply with the RWQCB Order R9-2013-0001, as amended by Order Nos. R9-2015-0001 and R9-2015-0100, otherwise known as the Municipal Permit, and the City's TCBMP program to include post-construction BMPs. The RWQCB permit requires capture and treatment of the 85th percentile, 24-hour storm event. Under the JRMP, all regulated commercial businesses are required to develop and implement Stormwater Management Plans to control stormwater runoff.

In addition, the project would include four biofiltration basins as a BMP. The first biofiltration basin would be located in the northeast corner of the site, the second area would be in the northwest corner of the site, and the third and fourth biofiltration basins would be along the southeastern corner. These design features would capture and treat stormwater runoff, reduce the quantity and level of pollutants in runoff leaving the site, and would ensure project runoff does not exceed the capacity of stormwater drainage systems.

Given that the project would implement a BMP to capture and retain stormwater onsite, as described above for compliance with the City's TCBMP and County MS4 permit requirements, potential impacts related to the alteration of the site's drainage pattern would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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

San Marcos is located downstream of various dams and reservoirs which create various inundation hazards in parts of the City. According to San Marcos General Plan Safety Element, there are four dams and ten reservoirs in the planning area. The project site is not located within an inundation zone from the dams or reservoirs located in the City. Furthermore, the project is not a Federal Emergency Management Agency (FEMA) designated flood zone (FEMA 2021). The project site is located 9.8 miles east of the Pacific Ocean and is not subject to tsunami risk. Additionally, the proposed bioretention areas would ensure that off-site pollution does not occur if the project site was to be inundated. Therefore, impacts resulting in flood hazard, tsunami, or seiche release of pollutants due to project inundation would be less than significant.

LESS THAN SIGNIFICANT IMPACT

³ 55,501 square feet of impervious divided by the total area of 70,217 square feet equates to 79 percent.

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

The project would comply with all applicable regulations and measures to reduce potential water quality impacts during construction and operations of the project. Therefore, the project would not conflict with the implementation of San Diego RWQCB Basin Plan, which establishes water quality objectives and implementation measures. The project site is in the San Marcos Valley Groundwater Basin (9-032), a “Very Low” basin priority under the California Department of Water Resources Sustainable Groundwater Management Act 2019 groundwater Basin Prioritization (California Department of Water Resources 2021). The basin is not required to prepare a Groundwater Sustainability Plan under the Sustainable Groundwater Management Act. Therefore, the project would not impact a sustainable groundwater management plan and no impacts would occur.

NO IMPACT

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11 Land Use and Planning

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a. Would the project physically divide an established community?

The project site is located in an urbanized area of San Marcos with industrial and commercial uses adjacent to the site. The closest residences are multi-family residences located east of North Las Posas Road, approximately 565 feet southeast of the project site. The project would not result in the removal of any existing roadways or the construction of barriers that could prevent access within an established community. Therefore, the project would not physically divide an established community and no impact would occur.

NO IMPACT

b. Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

The fuel facility site has a General Plan designation of MU3. Under the City’s General Plan, MU3 has a maximum floor area ration (FAR) of 1.50 and integrates a blend of permitted uses that cater to both the public and private sectors. Typical uses permitted under the MU3 designation include retail, commercial services, administrative and office uses, institutional and government uses, business support and financial uses, restaurants, and health care facilities. MU3 is typically pedestrian oriented and focuses retail and other active services at street level. Under the City’s Land Use Element, residential uses are not permitted under MU3 and a Specific Plan is required for development (City of San Marcos 2012a). The proposed project includes a request for a General Plan Amendment and Zoning Amendment to modify the 1.8-acre site from MU3 to C. A C land use designation has a maximum density of 0.70 FAR. Per the Land Use and Community Design Element, typical uses under the Commercial (C) land use designation include general retail, markets, commercial services, restaurants, hardware, home improvements centers, financial institutions, lodging, and commercial recreation. Developments under this land use designation are typically one-story developments with larger massing due to a lower density of 0.70 FAR.

The project would be consistent with the C land use designation, which would allow a wide range of retail activities, services, and offices. The existing site is a vacant parcel that is located in an area that includes I, C, SPA, PI, and MU3 designated properties. Consistent with Policy LU-6.4 from the

200 North Las Posas Road Project

Land Use and Community Design Element, the conversion of the land use designation would result in a future commercial development developed on an underutilized lot near other similar development. The project would align with the surrounding development by providing similar revenue-generating commercial opportunities (Policy LU-6.7) and employment opportunities (Policy LU-1.2, Policy LU-6.5, and Policy LU-6.7). The project would also be subject to the City's design review process, including a required plan consistency review. This review would ensure that the proposed developments align with the development and architectural standards set by the City. In addition, as discussed throughout this Initial Study, the project is subject to regulatory requirements and is assigned mitigation measures that avoid or reduce potential impacts to a less than significant level.

Assuming approval of the requested General Plan Amendment because the project aligns with the General Plan policies and City development standards, the project would be consistent with applicable City land use plans, policies, and regulations. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

12 Mineral Resources

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

- a. *Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?*
- b. *Would the project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?*

The project site and surrounding properties are in an urbanized area of San Marcos. San Marcos currently does not have active mines or quarries (City of San Marcos 2012b). Pursuant to the California Surface Mining and Reclamation Act of 1975, the California Geological Survey classifies land through a mineral inventory process intended to ensure that important mineral deposits are identified and protected for future extraction. According to the San Marcos General Plan, the areas located north of State Route 78, such as the project site, are classified as Mineral Resource Zone (MRZ)-1 zone (City of San Marcos 2012b). MRZ-1 zones are areas where adequate information indicates that no significant mineral deposits are present or where it is judged that little likelihood exists for their presence. Therefore, the project would not have an impact on any known mineral resource and no impact would occur.

NO IMPACT

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13 Noise

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project result in:				
a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport 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"/>

Methods

Rincon Consultants, Inc. prepared a Noise and Vibration Study to analyze the potential noise and vibration associated with the construction and operation of the proposed project. The results of the Noise and Vibration Study are used in the analysis in this section. The full report is included as Appendix E.

Overview of Noise and Vibration

Noise

Sound is a vibratory disturbance created by a moving or vibrating source, which is capable of being detected by the hearing organs. Noise is defined as sound that is loud, unpleasant, unexpected, or undesired and may therefore be classified as a more specific group of sounds. The effects of noise on people can include general annoyance, interference with speech communication, sleep disturbance, and, in the extreme, hearing impairment (Caltrans 2013).

HUMAN PERCEPTION OF SOUND

Noise levels are commonly measured in decibels (dB) using the A-weighted sound pressure level (dBA). The A-weighting scale is an adjustment to the actual sound pressure levels so that they are consistent with the human hearing response. Decibels are measured on a logarithmic scale that

quantifies sound intensity in a manner similar to the Richter scale used to measure earthquake magnitudes. A doubling of the energy of a noise source, such as doubling of traffic volume, would increase the noise level by 3 dB; dividing the energy in half would result in a 3 dB decrease (Caltrans 2013).

Human perception of noise has no simple correlation with sound energy: the perception of sound is not linear in terms of dBA or in terms of sound energy. Two sources do not “sound twice as loud” as one source. It is widely accepted that the average healthy ear can barely perceive changes of 3 dBA, increase or decrease (i.e., twice the sound energy); that a change of 5 dBA is readily perceptible (8 times the sound energy); and that an increase (or decrease) of 10 dBA sounds twice (half) as loud (10.5 times the sound energy) (Caltrans 2013).

SOUND PROPAGATION AND SHIELDING

Sound changes in both level and frequency spectrum as it travels from the source to the receiver. The most obvious change is the decrease in the noise level as the distance from the source increases. The manner by which noise reduces with distance depends on factors such as the type of sources (e.g., point or line), the path the sound will travel, site conditions, and obstructions.

Sound levels are described as either a “sound power level” or a “sound pressure level,” which are two distinct characteristics of sound. Both share the same unit of measurement, the dB. However, sound power (expressed as L_{pw}) is the energy converted into sound by the source. As sound energy travels through the air, it creates a sound wave that exerts pressure on receivers, such as an eardrum or microphone, which is the sound pressure level. Sound measurement instruments only measure sound pressure, and noise level limits are typically expressed as sound pressure levels.

Noise levels from a point source (e.g., construction, industrial machinery, air conditioning units) typically attenuate, or drop off, at a rate of 6 dBA per doubling of distance. Noise from a line source (e.g., roadway, pipeline, railroad) typically attenuates at about 3 dBA per doubling of distance (Caltrans 2013). Noise levels may also be reduced by intervening structures; the amount of attenuation provided by this “shielding” depends on the size of the object and the frequencies of the noise levels. Natural terrain features, such as hills and dense woods, and man-made features, such as buildings and walls, can significantly alter noise levels. Generally, any large structure blocking the line of sight will provide at least a 5-dBA reduction in source noise levels at the receiver (Federal Highway Administration [FHWA] 2011). Structures can substantially reduce exposure to noise as well. The FHWA’s guidance indicates that modern building construction generally provides an exterior-to-interior noise level reduction of 10 dBA with open windows and an exterior-to-interior noise level reduction of 20 to 35 dBA with closed windows (FHWA 2011).

DESCRIPTORS

The impact of noise is not a function of loudness alone. The time of day when noise occurs and the duration of the noise are also important factors of project noise impact. Most noise that lasts for more than a few seconds is variable in its intensity. Consequently, a variety of noise descriptors have been developed. The noise descriptors used for this study are the equivalent noise level (L_{eq}), day-night average level (L_{dn}), and the community noise equivalent level (CNEL).

L_{eq} is one of the most frequently used noise metrics; it considers both duration and sound power level. The L_{eq} is defined as the single steady-state A-weighted sound level equal to the average sound energy over a time period. When no time period is specified, a one-hour period is assumed. The L_{max} is the highest noise level within the sampling period, and the L_{min} is the lowest noise level

within the measuring period. Normal conversational levels are in the 60 to 65-dBA L_{eq} range; ambient noise levels greater than 65 dBA L_{eq} can interrupt conversations (Federal Transit Administration [FTA] 2018).

Noise that occurs at night tends to be more disturbing than that occurring during the day. Community noise is usually measured using Day-Night Average Level (DNL or L_{DN}), which is the 24-hour average noise level with a +10 dBA penalty for noise occurring during nighttime hours (10:00 p.m. to 7:00 a.m.). Community noise can also be measured using Community Noise Equivalent Level (CNEL or L_{DEN}), which is the 24-hour average noise level with a +5 dBA penalty for noise occurring from 7:00 p.m. to 10:00 p.m. and a +10 dBA penalty for noise occurring from 10:00 p.m. to 7:00 a.m. (Caltrans 2013).⁴ The relationship between the peak-hour L_{eq} value and the L_{DN} /CNEL depends on the distribution of noise during the day, evening, and night; however noise levels described by L_{DN} and CNEL usually differ by 1 dBA or less. Quiet suburban areas typically have CNEL noise levels in the range of 40 to 50 CNEL, while areas near arterial streets are in the 50 to 60+ CNEL range (FTA 2018).

Groundborne Vibration

Groundborne vibration of concern in environmental analysis consists of the oscillatory waves that move from a source through the ground to adjacent buildings or structures and vibration energy may propagate through the buildings or structures. Vibration may be felt, may manifest as an audible low-frequency rumbling noise (referred to as groundborne noise), and may cause windows, items on shelves, and pictures on walls to rattle. Although groundborne vibration is sometimes noticeable in outdoor environments, it is almost never annoying to people who are outdoors. The primary concern from vibration is that it can be intrusive and annoying to building occupants at vibration-sensitive land uses and may cause structural damage.

Typically, ground-borne vibration generated by manmade activities attenuates rapidly as distance from the source of the vibration increases. Vibration amplitudes are usually expressed in peak particle velocity (PPV) or root mean squared (RMS) vibration velocity. The PPV and RMS velocity are normally described in inches per second (in/sec). PPV is defined as the maximum instantaneous positive or negative peak of a vibration signal. PPV is often used as it corresponds to the stresses that are experienced by buildings (Caltrans 2020).

High levels of groundborne vibration may cause damage to nearby building or structures; at lower levels, groundborne vibration may cause minor cosmetic (i.e., non-structural damage) such as cracks. These vibration levels are nearly exclusively associated with high impact activities such as blasting, pile-driving, vibratory compaction, demolition, drilling, or excavation. The American Association of State Highway and Transportation Officials (AASHTO) has determined vibration levels with potential to damage nearby buildings and structures; these levels are identified in Table 10.

⁴ Because DNL and CNEL are typically used to assess human exposure to noise, the use of A-weighted sound pressure level (dBA) is implicit. Therefore, when expressing noise levels in terms of DNL or CNEL, the dBA unit is not included.

Table 10 AASHTO Maximum Vibration Levels for Preventing Damage

Type of Situation	Limiting Velocity (in/sec)
Historic sites or other critical locations	0.1
Residential buildings, plastered walls	0.2–0.3
Residential buildings in good repair with gypsum board walls	0.4–0.5
Engineered structures, without plaster	1.0–1.5

Source: Caltrans 2020

Numerous studies have been conducted to characterize the human response to vibration. The vibration annoyance potential criteria recommended for use by Caltrans, which are based on the general human response to different levels of groundborne vibration velocity levels, are described in Table 11.

Table 11 Vibration Annoyance Potential Criteria

Human Response	Vibration Level (in/sec PPV) Transient Sources	Vibration Level (in/sec PPV) Continuous/Frequent Intermittent Sources ¹
Severe	2.0	0.4
Strongly perceptible	0.9	0.10
Distinctly perceptible	0.25	0.04
Barely perceptible	0.04	0.01

¹ Continuous/frequent intermittent sources include impact pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers, and vibratory compaction equipment.

Notes: in/sec = inches per second; PPV = peak particle velocity

Source: Caltrans 2020

Project Noise Setting

Sensitive Receivers

Noise exposure goals for various types of land uses reflect the varying noise sensitivities associated with those uses. According to the City of San Marcos Noise Element, the following land uses are considered noise-sensitive: schools, libraries, hospitals, parks, and residential neighborhoods (City of San Marcos 2012d).

Sensitive receivers nearest to the project site include Palomar College, located approximately 520 feet across West Mission Road to the east of the project’s northeastern corner, single family housing located approximately 745 feet across West Mission Road northwest of the project site’s northwestern corner, and multi-family residences located approximately 550 feet east of the project site’s southeastern corner across North Las Posas Road.

Noise Measurements

The most common source of noise in the project site vicinity is vehicular traffic from North Las Posas Road and West Mission Road and railway noise from the adjacent SPRINTER commuter line. To characterize ambient sound levels at and near the project site, three 15-minute sound level measurements were conducted on December 16, 2020. Noise Measurement (NM) 1 was taken at the eastern edge of the project site to capture noise levels from North Las Posas Road. NM2 was taken at the southwestern edge of the project site to capture ambient noise levels at the site. NM3

was taken at the northern edge of the project site to also capture ambient noise levels. Noise sources for all measurements included roadway traffic and SPRINTER trains, which are two compartment commuter trains. One train passed during NM1 and NM2; two trains passed during NM3. The train noise included the train itself, the train horn, as well as warning bells at the intersection crossing. Each pass was approximately one minute long for the warning bells, and 30 seconds long for the train horn and train noise. The loudest noise levels on each measurement occurred during a train pass. NM1 was paused for approximately one minute due to pedestrians playing music.

Table 12 summarizes the results of the noise measurement, and Table 13 shows the recorded traffic volumes from NM1. See Figure 9 for noise measurement locations. The site measurements were conducted during a regional stay at home order in San Diego County in response to the global novel coronavirus pandemic. Due to this response, many businesses and schools were closed at the time noise measurements were collected, and the number of vehicles on the local roadways were reduced compared to typical conditions. Therefore, measured noise levels may have been lower than under typical conditions.

Table 12 Project Site Vicinity Sound Level Monitoring Results

Measurement	Measurement Location	Sample Times	Approximate Distance to Primary Noise Source	L _{eq} (dBA)	L _{min} (dBA)	L _{max} (dBA)
1	Eastern property boundary, adjacent to North Las Posas Road	12:18 – 12:34 p.m.	Approximately 60 feet to centerline of North Las Posas Road	62.1	49.7	73.5
2	Southeastern property boundary	12:38 – 12:53 p.m.	Approximately 250 feet to centerline of North Las Posas Road	52.8	49.3	60.9
3	Northern property boundary, adjacent to railway	12:57 – 1:12 p.m.	50 feet to railway line and 140 feet to centerline of West Mission Road	60.3	48.3	83.8

Source: Appendix E

Table 13 Sound Level Monitoring Traffic Counts

Measurement	Roadway	Traffic	Autos	Medium Trucks	Heavy Trucks
NM1	North Las Posas Road	15-minute count	195	1	1
		One-hour equivalent	780	4	4
Percent			98%	1%	1%

Source: Appendix E

Figure 9 Noise Measurement Locations



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Fig 9 Noise Measurement Locations

Regulatory Setting

City of San Marcos General Plan

The City General Plan Noise Element controls and abates environmental noise and protects the citizens of the City from excessive exposure to noise. The Noise Element specifies the maximum allowable unmitigated exterior noise levels for new developments impacted by transportation noise sources such as arterial roads, freeways, airports, and railroads. In addition, the Noise Element identifies several polices to minimize the impacts of excessive noise levels throughout the community (City of San Marcos 2012d). As shown in Table 14, the Noise Element sets normally acceptable, conditionally acceptable, and generally unacceptable ambient noise levels for proposed developments based on land use.

Table 14 Noise and Land Use Compatibility Guidelines for Exterior Noise

Land Use Category	Exterior Noise Level (CNEL)		
	Normally Acceptable	Conditionally Acceptable	Conditionally Unacceptable
Residential – Single Family, mobile homes, senior/age-restricted housing	<60	60-75	>75
Residential – Multi-family, mixed use (residential/commercial)	<65	65-75	>75
Lodging – Hotels, motels	<65	65-75	>75
Schools, churches, hospitals, residential care facility, childcare facilities	<65	65-75	>75
Passive recreational parks, nature preserves, contemplative spaces, cemeteries	<65	65-75	>75
Active parks, golf courses, athletic fields, outdoor spectator sports, water recreation	<65	65-75	>75
Office/professional, government, medical/dental, commercial, retail, laboratories	<65	65-75	>75
Industrial, manufacturing, utilities, agriculture, mining, stables, ranching, warehouse, maintenance/repair	<65	>65	N/A

Acceptable: Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.

Conditionally Acceptable: New construction or development should be undertaken only after a detailed analysis of the noise reduction measures necessary to achieve acceptable levels for land use. If a project cannot mitigate noise to a level deemed Acceptable, the appropriate County decision-maker must determine that mitigation has been provided to the greatest extent practicable or that extraordinary circumstances exist.

Unacceptable: New construction or development should generally not be undertaken.

Source: Appendix E.

City of San Marcos Municipal Code

The San Marcos Municipal Code Chapter sets forth the City’s standards, guidelines, and procedures concerning the regulation of operational noise. Specifically, noise levels in San Marcos are regulated by San Marcos Municipal Code Chapter 10.24.010, Noise Ordinance. These regulations are intended to implement the goals, objectives, and policies of the General Plan, protect the public health, safety, and welfare of San Marcos, and to control unnecessary excessive, and/or annoying noise in San Marcos.

San Marcos Municipal Code Chapter 17.32.180 states that grading, extraction, and construction activities are allowed between 7:00 a.m. to 4:30 p.m., Monday through Friday. Grading, extraction, or construction activities are not permitted in San Marcos on weekends or holidays. The City’s municipal code does not set noise limits on construction activities, although it has commonly utilized the County of San Diego’s Noise Ordinance construction noise threshold of 75 dBA L_{eq} (8-hour), listed in Section 36.409 of the San Diego County Code of Regulatory Ordinances.

San Marcos Municipal Code Chapter 20.300.070 (Performance Standards) establishes exterior noise standards, which require noise levels from sources maintain certain noise levels for single-family residences, multi-family, commercial uses, and industrial uses. Table 15 shows the allowable exterior noise levels.

Table 15 Exterior Noise Standards by Zone

Zone	Allowable Noise Level (dBA L_{eq}) Measured from the Property Line
Single-Family Residential (A, R-1, R-2)^{1,2}	
7:00 a.m. to 10:00 p.m. (daytime)	60
10:00 p.m. to 7:00 a.m. (overnight)	50
Multifamily Residential (R-3)^{1,2}	
7:00 a.m. to 10:00 p.m. (daytime)	65
10:00 p.m. to 7:00 a.m. (overnight)	55
Commercial (C, O-P, SR)³	
7:00 a.m. to 10:00 p.m. (daytime)	65
10:00 p.m. to 7:00 a.m. (overnight)	55
Industrial	
7:00 a.m. to 10:00 p.m. (daytime)	65
10:00 p.m. to 7:00 a.m. (overnight)	60

¹ For single-family detached dwelling units, the "exterior noise level" is defined as the noise level measured at an outdoor living area which adjoins and is on the same lot as the dwelling, and which contains at least the following minimum net lot area: (i) for lots less than 4,000 square feet in area, the exterior area shall include 400 square feet, (ii) for lots between 4,000 square feet to 10 acres in area, the exterior area shall include 10 percent of the lot area; (iii) for lots over 10 acres in area, the exterior area shall include 1 acre.

² For all other residential land uses, "exterior noise level" is defined as noise measured at exterior areas which are provided for private or group usable open space purposes. "Private Usable Open Space" is defined as usable open space intended for use of occupants of one dwelling unit, normally including yards, decks, and balconies. When the noise limit for Private Usable Open Space cannot be met, then a Group Usable Open Space that meets the exterior noise level standard shall be provided. "Group Usable Open Space" is defined as usable open space intended for common use by occupants of a development, either privately owned and maintained or dedicated to public agency, normally including swimming pools, recreation courts, patios, open landscaped areas, and greenbelts with pedestrian walkways and equestrian and bicycle trails, but not including off-street parking and loading areas or driveways.

³ For non-residential noise sensitive land uses, exterior noise level is defined as noise measured at the exterior area provided for public use.

Source: Appendix E.

- a. *Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?*

Construction

Project construction would occur nearest to the industrial area south of the project site. Over the course of a typical construction day, construction equipment would be located as close as 25 feet to

adjacent property (e.g., the industrial use to the south) but would typically be located at an average distance farther away due to the nature of construction and the lot size of the project. Therefore, it is assumed that over the course of a typical construction day the construction equipment would operate at an average distance of 100 feet from the nearest property.

As detailed in the project Noise and Vibration Study (see Appendix E), construction noise was estimated using reference noise levels from the FHWA Roadway Construction Noise Model (RCNM) (FHWA 2006). Due to the size of the project site, a conservative construction scenario including simultaneous operation of a dozer and a front-end loader working during grading to excavate and move soil was analyzed. At 100 feet, a front-end loader and a dozer would generate a noise level of 74 dBA L_{eq} . This would be below the County of San Diego's threshold of 75 dBA L_{eq} (8-hour) for construction activity. In addition, construction would not occur outside the Municipal Code allowed hours of 7:00 a.m. and 4:30 p.m., Monday through Friday. Therefore, impacts from construction equipment would be less than significant.

Onsite Operation Noise

The proposed car wash would be a new noise source that may be audible at nearby properties, which are developed with a mix of commercial, industrial, and residential uses. These receivers may periodically be subject to project stationary noise from HVAC, car wash blowers, drive-thru speaker, and increased traffic noise from project vehicles. Assumptions for modeling these sources are provided in Appendix E. Noise levels at adjacent properties are shown in Table 16 and displayed in Figure 10 as receivers OFF-1 through OFF-18. As shown in Table 16, noise levels would not exceed City noise limits from stationary sources. Therefore, noise levels from project operation would result in less than significant impacts.

Offsite Roadway Noise

The project would generate new vehicle trips that would increase noise levels on nearby roadways. The project would generate 1,674 total vehicle trips Las Posas Road and West Mission Road. Assuming all vehicle trips occur on each roadway, this would result in traffic increases North Las Posas Road from State Route 78 WB to Grand Avenue, North Las Posas Road from Avenida Azul to Mission Road, South Santa Fe (West Mission Road) from Las Flores Drive to Rancho Santa Fe of 4 percent, 7 percent, and 10 percent, respectively. This would result in approximate noise level increases of 0.2 dBA, 0.3 dBA, and 0.4 dBA, respectively. Therefore, the project's traffic noise increase would not exceed 3 dBA or more, and impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

Table 16 Operational Noise Levels at Off-site Receivers

Receiver	Description	Daytime Noise Level (dBA) ¹	Exceed Daytime Thresholds? ²	Nighttime Noise Level (dBA) ¹	Exceed Nighttime Thresholds? ²
OFF-1	Industrial	55	No	33	No
OFF-2	Industrial	37	No	29	No
OFF-3	Commercial	51	No	23	No
OFF-4	Specific Plan Area (Colluccci/Mobile)	52	No	17	No
OFF-5	Commercial	53	No	18	No
OFF-6	Commercial	48	No	15	No
OFF-7	Single-Family Residential	45	No	12	No
OFF-8	Public Institutional	43	No	11	No
OFF-9	Single-Family Residential	45	No	10	No
OFF-10	Specific Plan Area (Multi-Family Residential)	33	No	13	No
OFF-11	Specific Plan Area (Multi-Family Residential)	42	No	17	No
OFF-12	Commercial	43	No	15	No
OFF-13	Single-Family Residential	48	No	13	No
OFF-14	Single-Family Residential	47	No	13	No
OFF-15 ¹	Single-Family Residential	46	No	12	No
OFF-16	Single-Family Residential	46	No	12	No
OFF-17	Single-Family Residential	46	No	12	No
OFF-18	Mixed Use	46	No	12	No

¹ Car wash blowers are anticipated to operate between the hours of 7:00 a.m. to 10:00 p.m. per the applicant and are therefore only analyzed during the daytime. HVAC and drive-through speaker noise levels are analyzed during the daytime and nighttime hours.

² For multi-family and commercial use, the applicable exterior threshold is 65 dBA L_{eq} from 7:00 a.m. to 10:00 p.m. and 55 dBA L_{eq} from 10:00 p.m. to 7:00 a.m. For single family use, the applicable exterior threshold is 60 dBA L_{eq} from 7:00 a.m. to 10:00 p.m. and 50 dBA L_{eq} from 10:00 p.m. to 7:00 a.m. For industrial use, the applicable exterior threshold is 65 dBA L_{eq} from 7:00 a.m. to 10:00 p.m. and 55 dBA L_{eq} from 10:00 p.m. to 7:00 a.m.

Source: Appendix E

Figure 10 Modeled Receivers and Noise Contours



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- b. *Would the project result in generation of excessive groundborne vibration or groundborne noise levels?*

Project construction would not involve activities typically associated with excessive groundborne vibration such as pile driving or blasting. The equipment utilized during project construction that would generate the highest levels of vibration would include loaded trucks and dozers. The greatest anticipated source of vibration during general project construction activities would be from a dozer, which may be used within 25 feet of the nearest off-site structure. A dozer creates approximately 0.089 inches per second. PPV at a distance of 25 feet (Caltrans 2013). This vibration level is lower than the threshold of 0.24 inches per second PPV. Therefore, temporary impacts associated with construction would be less than significant.

The project does not include any substantial vibration sources associated with operation. Therefore, operational vibration impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- c. *For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?*

The McClellan Palomar Airport is the nearest public airport, located approximately five miles to the west of the project site. The project is not located within two miles of a public airport or public use airport. Therefore, no substantial noise exposure from airport noise would occur to construction workers, users, or employees of the project, and no impacts would occur.

NO IMPACT

14 Population and Housing

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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Would the project:

a. Induce substantial unplanned population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a. *Would the project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?*

The proposed project would not directly induce population growth in the area as no housing units are proposed. The proposed project includes the development of a fuel station, food mart, and a car wash. Furthermore, the proposed project would result in a nominal increase in employment. The SANDAG 2050 RTP/SCS forecasts that San Marcos will have 61,604 jobs by the year 2050, an increase of 24,221 from the number of jobs in 2008 (SANDAG 2011). The project is anticipated to have approximately 20 employees. The new jobs generated by the proposed project would represent approximately 0.08 percent of the anticipated growth in employment in San Marcos. Therefore, the proposed project would not induce directly nor indirectly substantial, unplanned population growth. There would be no impact.

NO IMPACT

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

The project sites do not contain housing or habitable structures, and the project would not result in the removal of housing from the city. Therefore, the project would not displace existing people or housing and there would be no impact.

NO IMPACT

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15 Public Services

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

a.1. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered fire protection facilities, or the need for new or physically altered fire protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?

The San Marcos Fire Department (SMFD) responds to a 33 square mile area inclusive of about 95,000 existing residents (City of San Marcos 2021a). SMFD has an ISO Rating 1 and currently operates four fire stations, four paramedic assessment engine companies, one paramedic assessment truck company, five 24-hour paramedic transport ambulances, one Shift Battalion Chief, and one on-call duty Chief (City of San Marcos 2021a). The project site is located approximately 1.6 miles west (driving distance) of the San Marcos Fire Station No. 1, which would likely be the station serving the proposed project site in an emergency. The proposed project would develop a new fuel station, food mart, and car wash on a previously vacant site. As identified in Chapter 17.64 of the San Marcos Municipal Code, the City of San Marcos has adopted the 2019 California Fire Code and the 2015 International Fire Code. The Fire Code contains regulations related to construction, maintenance and design of buildings and land uses. The project would be required to adhere to all Fire Code requirements.

In addition, the applicant would be required to submit and annex to the applicable Community Facilities District or pay an in-lieu fee due to the proposed new development. Property owners

within Community Facilities Districts are taxed annually for their share to finance local public facilities and services. As the development of this project would contribute to the incremental increase in demand for fire protection services city-wide, Mitigation Measure PS-1 is required.

Mitigation Measures

PS-1 Community Facility District Fee - Fire

Prior to the issuance of a grading permit, the applicant/developer/property owner shall submit an executed version of petition to annex into and establish, the respect to the property, the special taxed levied by the following Community Facility District: CFD 2001-01 (Fire and Paramedic).

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

a.2. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered police protection facilities, or the need for new or physically altered police protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?

The City of San Marcos partners with the San Diego County Sheriff's Department to provide law enforcement and police services (City of San Marcos 2021b). The nearest police station is the San Diego County Sheriff's station located at 182 Santar Place, approximately four miles (driving distance) east from the project site. The San Diego County Sheriff's San Marcos Station serves about 100 square miles. Residents are served by a staff of over 100 sheriff's deputies, volunteers, and professional staff members (San Diego County Sheriff's Department 2021). As discussed in Section 14, *Population and Housing*, the project would not result in a substantial increase in population or employment in the city, and therefore would not cause substantially delayed response times or degraded service ratios or necessitate construction of new facilities. The project is also located in a developed area that is already served and patrolled by the Sheriff. However, since the development of this project would contribute to the incremental increase in demand for police protection services city-wide, Mitigation Measure PS-2 is required.

Mitigation Measures

PS-2 Community Facility District Fee - Police

Prior to the issuance of a grading permit, the applicant/developer/property owner shall submit an executed version of petition to annex into and establish, the respect to the property, the special taxed levied by the following Community Facility District: CFD 98-01, Improvement Area No. 1 (Police).

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

a.3. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered schools, or the need for new or physically altered schools, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives?

The San Marcos Unified School District provides facilities serving grade levels elementary through high school and adult education (San Marcos Unified School District 2021). The proposed project

would involve the construction of a fuel station, convenience store, and automated car wash on a vacant lot. The project would not involve new residential development. Likewise, the project would not generate substantial numbers of new employees within the city that could lead to unanticipated population growth. Therefore, the project would not result in a substantial number of additional students in the school district or the need for new or physically altered school facilities, and no impacts would occur.

NO IMPACT

a.4. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered parks, or the need for new or physically altered parks, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives?

The 2012 San Marcos General Plan sets a parkland standard of 5 acres per 1,000 residents under Police PR-1.1 (City of San Marcos 2012b). The City currently provides approximately 270 acres of developed parkland with 149 acres of neighborhood parks, 98 acres of community parks, 20 acres of mini-parks, and three acres of other recreational facilities. The closest parks to the project site are Innovation Park (0.2 mile west) and Mission Sports Park (0.6 mile west). The 2012 City of San Marcos General Plan Parks, Recreation, and Community Health Element describes 75 acres of future Community Park space, 2 acres of future Neighborhood Park space, 21 acres of future Mini-Park space, and 17 acres of future trails around San Marcos. Approximately 357.79 acres of general future parkland has been allotted through the Planning Department to create a total of 697.84 acres of parkland (City of San Marcos 2012b).

The proposed project involves the development of a vacant lot into a fuel station, food mart, and car wash and would not generate new permanent residents. The nominal increase in employees for the convenience store would not be anticipated to affect the ratio of acres of parkland per resident or necessitate the provision of new or physical altered parks in order to maintain acceptable service ratios. Thus, the project would not contribute to population growth that would result in adverse physical impacts to parks or require the provision of new parks, and no impacts would occur.

NO IMPACT

a.5. Would the project result in substantial adverse physical impacts associated with the provision of other new or physically altered public facilities, or the need for other new or physically altered public facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?

The nearest library to the proposed project is the San Marcos Branch of the San Diego County Library system, which is located at 2 Civic Center Drive (approximately 2.6 miles east). San Marcos residents can also use the California State University San Marcos Library and the Palomar Community College Library for additional resources. The proposed project includes the development of a fuel station, food mart, and car wash and would not result in the addition of new permanent residents. The nominal increase in employees as a result of the convenience store would not require the construction or expansion of new library facilities. The project would not require the construction of public roads, parks, or libraries, and no impacts would occur.

NO IMPACT

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16 Recreation

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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"/>

- a. *Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?*
- b. *Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?*

As discussed under Section 15, *Public Services*, recreational amenities in the City of San Marcos include approximately 270 acres of parkland (City of San Marcos 2012b). Although the City does not currently meet the desired standard of 5 acres of parkland per 1,000 residents as stated in the General Plan, the City has adopted plans to expand parkland area to a total of 697.84 acres (City of San Marcos 2012b).

As discussed above in Section 14, *Population and Housing*, and Section 15, *Public Services*, the project would not substantially increase the number of residents or employees in the area. Because residents can easily access open space and recreational opportunities in the city and because the project would not substantially increase the number of permanent residents in the city, the project would not create unanticipated demand on city parks or cause substantial deterioration of existing parks such that new park facilities would be needed. No impacts would occur.

NO IMPACT

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17 Transportation

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Regulatory Setting

Senate Bill 743 and Vehicle Miles Traveled

Senate Bill 743 (SB 743) was signed into law by Governor Brown in 2013 and tasked the State Office of Planning and Research with establishing new criteria for determining the significance of transportation impacts under CEQA. SB 743 requires the new criteria to “promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses.” It also states that alternative measures of transportation impacts may include “vehicle miles traveled, vehicle miles traveled per capita, automobile trip generation rates, or automobile trips generated.”

SB 743 implements changes to the method for performing transportation impact analyses under CEQA. SB 743 requires the Governor’s Office of Planning and Research to identify new metrics for identifying and mitigating transportation impacts within CEQA. In January 2018, Office of Planning and Research transmitted its proposed CEQA Guidelines implementing SB 743 to the California Natural Resources Agency for adoption, and in January 2019 the Natural Resources Agency finalized updates to the CEQA Guidelines, which incorporated SB 743 modifications, and are now in effect. SB 743 changed the way that public agencies evaluate the transportation impacts of projects under CEQA, recognizing that roadway congestion, while an inconvenience to drivers, is not itself an environmental impact (PRC Section 21099 (b)(2)). In addition to new exemptions for projects consistent with specific plans, the CEQA Guidelines replaced congestion-based metrics, such as auto delay and level of service (LOS), with vehicle miles traveled (VMT) as the basis for determining significant impacts, unless the guidelines provide specific exceptions.

City of San Marcos

CEQA Guidelines Section 15064.3(b) indicates that land use projects would have a significant impact if the project resulted in VMT exceeding an applicable threshold of significance. In November 2020, the City adopted Transportation Impact Analysis Guidelines, which established the following thresholds (City of San Marcos 2020b):

- Residential Uses: A significant impact will occur if the project generates VMT per resident exceeding a level of 15 percent below the countywide average.
- Employment Projects: A significant impact will occur if the project generates VMT per employee exceeding a level of 15 percent below the countywide average.
- Retail Uses: A significant impact will occur if the project would result in a net increase in total citywide VMT.

In addition, the guidelines establish several screening approaches that can be used to quickly identify when a project should be expected to cause a less-than-significant impact related to VMT without the need to complete a detailed VMT analysis. Projects which do not require detailed VMT analysis include small projects consistent with the General Plan, affordable housing projects in smart growth opportunity areas, local-serving retail or public facilities, certain projects in high quality transit areas, and certain projects in low VMT areas.

Methods

The transportation analysis provided herein is based on the Transportation Impact Analysis and Local Transportation Analysis prepared by Linscott Law & Greenspan, Engineers on June 23, 2022, which is included as Appendix F. The road network surrounding the fuel facility site includes the following intersections:

1. South Santa Fe Avenue (West Mission Road)/Rancho Santa Fe Road
2. West Mission Road/Las Posas Road
3. West Mission Road/Palomar College Driveway
4. North Las Posas Road/Armorlite Drive

Additionally, the following streets provide alternative modes of transportation in the form of pedestrian and bicycle facilities:

- Pedestrian sidewalks are present on along West Mission Road, North Rancho Santa Fe Road, and North Las Posas Road. There are also crosswalks at each of the four intersections mentioned above.
- A 21-mile Class I bicycle path (separated facility) is located on the north side of West Mission Road (Inland Rail Trail).
- Class II bicycle lanes (on-street bicycle lane) on each direction of travel on West Mission Road and North Las Posas Road. The bicycle lane on North Las Posas Road between West Mission Road and State Route 28 would be improved to a Class I Share Use path in the future.

Transit service is provided by North County Transit District. The project site is located within a quarter of a mile of the Palomar College SPRINTER Station and a BREEZE bus stop for routes 304, 305, 347, and 445

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

In December 2019, California's Third District Court of Appeal ruled that under SB 743, automobile delay may no longer be treated as a significant impact in CEQA analysis (*Citizens for Positive Growth & Preservation v. City of Sacramento*). Because significance of traffic-related impacts can no longer be based on LOS, impacts related to LOS standards contained within roadway programs, plans, ordinances, or policies are not addressed in this section.

Local circulation system plans adopted by the City include the City's General Plan Mobility Element (2012e), Bicycle and Pedestrian Master Plan, and the Master Trail Plan. Transit service in the project area is provided by North County Transit District.

Consistency with Pedestrian Plans, Policies, and Programs

West Mission Road, North Rancho Santa Fe Road, and North Las Posas Road all have paved pedestrian sidewalks with crosswalks at the intersection. Construction and operation of the project would not change or limit access to these pathways. The project would not conflict with the Mobility Plan include in the Mobility Element of the City of San Marcos General Plan (2012). In addition, the project would be designed to be consistent with the City of San Marcos's Urban Street Design Criteria. Therefore, the project would not conflict with plans, programs, and policies regarding pedestrian facilities, or decrease the performance and safety of such facilities. No impact would occur.

Consistency with Bicycle Plans, Policies, and Programs

There are both Class I and II bicycle lanes in proximity to the project site. The Inland Rail Trail is a 21-mile multi-use path with a Class I bike facility. The trail extends into Oceanside, Vista, San Marcos, Escondido, and a portion of unincorporated San Diego County. The Class II bicycles lanes are located on West Mission Road and North Las Posas Road with a portion of the bicycle lane on North Las Posas Road being improved (West Mission Road and State Route 28) between to a Class I facility. This future traffic improvement is consistent with the City of San Marcos Bicycle and Pedestrian Master Plan (2015). The project would not conflict with plans, programs, and policies regarding pedestrian facilities, or decrease the performance and safety of such facilities. No impact would occur.

Consistency with Transit Plans, Policies, and Programs

Transit services are provided in the vicinity of the project via the North County Transit District SPRINTER hybrid rail and BREEZE bus routes. The Palomar College Station for the SPRINTER is approximately 0.2 miles west of the project site and the nearest bus stop is approximately 300 feet northwest of the site for BREEZE routes 304, 305, 347, and 445.

Since the project consists of a gas station, food mart, and car wash, only patrons traveling in vehicles would be visiting the facility. It is unlikely that patrons would use modes of public transit to access the facility. The project would not substantially increase traffic levels at intersections serving local transit routes nor degrade access to bus stops. Therefore, implementation of the project would not conflict with plans, programs, and policies regarding transit facilities, or decrease the performance and safety of such facilities. No impact would occur.

NO IMPACT

- b. *Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?*

The City's Transportation Impact Analysis Guidelines established screening approaches to identify when a project should be expected to cause a less-than-significant impact related to VMT without the need to complete a detailed VMT analysis (City of San Marcos 2020). Projects which do not require detailed VMT analysis include small projects that are consistent with the General Plan, affordable housing projects in smart growth opportunity areas, local-serving retail or public facilities, certain projects in high quality transit areas, and certain projects in low VMT areas.

The City's screening criterion for local-serving retail is applicable to retail projects that are 50,000 square feet gross floor area or less. As discussed in City's Transportation Impact Analysis Guidelines, examples of local-serving retail include "shopping centers as well as standalone uses such as commercial shops, gas stations, and restaurants" (City of San Marcos 2020).

Based on the VMT analysis presented in Appendix F, the project is screened out from a detailed VMT analysis using the screening criteria outlined in the City's guidelines since it meets the criteria of being a locally serving retail facility with the total project land use density less than 50,000 square feet of gross floor area. The project proposes development of a gas station. The proposed use would be local-serving retail. Consistent with the City's Transportation Impact Analysis Guidelines, the project would be presumed to have a less than significant transportation impact.

LESS THAN SIGNIFICANT IMPACT

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

Changes to the geometric design of the fuel facility site would be to ensure efficient, safe, and adequate access to the fueling stations when entering and exiting the facility. Access to the project site by vehicles would be provided by one right-in/right-out only unsignalized driveway on North Las Posas Road. The project would include a total of 59 parking spaces onsite pursuant with the City's minimum parking requirement. Design of the driveway, circulation areas, and parking stalls for the proposed project would be consistent with applicable street design specifications as published in the City Engineering Divisions most-recent Improvement Design Standards (City of San Marcos 2020). In addition, queuing lengths generated by traffic traveling to the fuel facility and onsite car wash would fit within the available storage capacity. At the project driveway, inbound vehicles traveling into the facility would not have queuing and outbound vehicles departing from the proposed gas station would have an anticipated queue length of up to 33 feet during the PM peak hour, which is below the storage length thresholds of 50 feet described in Appendix F. The onsite car wash would also have 14 queuing spaces available for vehicles in compliance with the City's minimum requirement of five spaces. Therefore, potential impacts associated with a substantial increase in hazards due to a design feature or incompatible use would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- d. *Would the project result in inadequate emergency access?*

Site access for the project would be provided via one driveway along southbound North Las Posas Road. The driveway would be right-in and right-out only and unsignalized. The proposed project would be required to comply with all building, fire, and safety codes and specific development plans would be subject to review and approval by the City's Public Works Department and the San Marcos Fire Department. Required review by these departments would ensure the circulation system for

the project site would provide adequate emergency access. In addition, project construction would not require roadway closures that would impair emergency response or evacuation. There would be no impact.

NO IMPACT

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18 Tribal Cultural Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in a Public Resources Code Section 21074 as either a site, feature, place, or cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

- | | | | | |
|---|--------------------------|-------------------------------------|--------------------------|--------------------------|
| <p>a. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?</p> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <p>b. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.</p> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

PRC Section 21074 (a)(1)(A) and (B) defines tribal cultural resources as “sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe” and is:

1. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or
2. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying these criteria, the lead agency shall consider the significance of the resource to a California Native American tribe.

AB 52 also establishes a formal consultation process for California tribes regarding those resources. The consultation process must be completed before a CEQA document can be certified. Under AB 52, lead agencies are required to “begin consultation with a California Native American tribe that

is traditionally and culturally affiliated with the geographic area of the proposed project.” Native American tribes to be included in the process are those that have requested notice of projects proposed within the jurisdiction of the lead agency.

California Government Code Section 65352.3 (adopted pursuant to the requirements of SB 18) also requires local governments to contact, refer plans to, and consult with tribal organizations prior to making a decision to adopt or amend a general or specific plan and prior to making any decisions on zoning changes related to open space. The tribal organizations eligible to consult have traditional lands in a local government’s jurisdiction, and are identified, upon request, by the Native American Heritage Commission (NAHC). As noted in the California Office of Planning and Research’s Tribal Consultation Guidelines (2005), *“The intent of SB 18 is to provide California Native American tribes an opportunity to participate in local land use decisions at an early planning stage, for the purpose of protecting, or mitigating impacts to, cultural places.”*

- a. *Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code Section 21074 that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?*
- b. *Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code 21074 that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1?*

The City of San Marcos prepared and emailed a notification letter to the NAHC-recommended list of tribes on February 25, 2021 pursuant to AB 52 and SB 18. Consultation letters were submitted to following 17 tribes: Barona Group of the Capitan Grande, Campo Band of Diegueno Mission Indians, Ewiiapaayp Band of Kumeyaay Indians, Iipay Nation of Santa Ysabel, Inaja-Cosmit Band of Indians, Jamul Indian Village, Kwaaymii Laguna Band of Mission Indians, La Posta Band of Diegueno Mission Indians, Manzanita Band of Kumeyaay Nation, Mesa Grande Band of Diegueno Mission Indians, Pala Band of Mission Indians, Pechanga Band of Luiseño Indians, Rincon Band of Luiseño Indians, San Pasqual Band of Diegueno Mission Indians, Soboba Band of Luiseño Indians, Sycuan Band of Kumeyaay Nation, and Viejas Band of Kumeyaay Indians.

Responses for consultation were received from the Rincon Band of Luiseño Indians in a letter dated March 17, 2021, San Pasqual Reservation in a letter dated March 31, 2021, and Pechanga Band of Luiseño Indians in an email on April 12, 2021. The Rincon Band of Luiseño Indians responded on April 25, 2022, stating that the identified location is within the Traditional Use Area (TUA) of the Luiseño people and within the Rincon Band’s specific Area of Historic Interest (AHI). As such, the Rincon Band is traditionally and culturally affiliated to the project area. The Pechanga Band of Indians responded on May 5, 2022, requesting ongoing consultation for the project. As discussed in Section 5, *Cultural Resources*, there are no identified cultural resources onsite. However, because the project involves ground disturbance, there is the possibility of encountering undisturbed subsurface tribal cultural resources during construction of the project. Therefore, the project could result in potentially significant impacts to tribal cultural resources. Mitigation Measures CR-1 through CR-4 are required to reduce impacts to a less than significant level.

Mitigation Measure

See Mitigation Measures CR-1 through CR-4 under Item 5, *Cultural Resources*.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

19 Utilities and Service Systems

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a. *Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?*

Water Facilities

New potable lateral extensions, valves, and other appurtenances would be necessary to serve the proposed fuel station, food mart, car wash, and landscaping. Such improvements would be installed during project construction and on or immediately adjacent to the project site; therefore, the construction or relocation of these facilities would not increase the project's disturbance area. VWD

water treatment facilities or distribution main line improvements would not be necessary to serve the project site. Therefore, impacts with respect to new or expanded water facilities would be less than significant.

Wastewater Facilities

The project site would be served by existing VWD sewer lines. Sewer line extensions would be necessary to connect the proposed buildings to existing facilities along North Las Posas Road and West Mission Road (VWD 2021b).

The project would result in an increase in wastewater generation relative to existing site conditions. The majority of wastewater generated in the City of San Marcos is diverted to the Meadowlark Water Reclamation Facility that has a capacity of five million gallons per day (VWD 2021). As shown in Table 17, the project would generate approximately 7,335 gallons/day, or approximately 0.007 MGD. Table 18 summarizes the available capacity at the Meadowlark Reclamation Facility and the percentage used by anticipated project wastewater generation.

Table 17 Estimated Wastewater Generation

Land Use	Total* (gallons/year)	Total (gallons/day)
Car Wash	2,104,000	5,764
Convenience Market (24 Hours)	573,465	1,571
Total	2,677,465	7,335

Source: Appendix A, CalEEMod Annual Output

Table 18 Wastewater Treatment Plant Capacity

Meadowlark Water Reclamation Facility	
Average Daily Treatment	1.7 MGD
Permitted Capacity	5.0 MGD
Available Capacity	3.3 MGD
Project Wastewater Generation	0.007 MGD
Percent of Available Capacity Used by Project	00.21%

Source: VWD 2021a

As shown in Table 18, wastewater treatment facilities operated by VWD possess sufficient capacity to process additional wastewater generated by the project. The project proponent would construct onsite wastewater treatment pipe connections and pay standard sewer connection fees to the City of San Marcos and VWD. No construction or expansion of wastewater facilities would be necessary to serve the project. Consequently, impacts with respect to wastewater treatment facilities would be less than significant.

Stormwater Facilities

As discussed in Section 10, *Hydrology and Water Quality*, the project would implement site design BMPs to capture, filter, evaporate, detain, and/or infiltrate runoff within the development area. As part of the project’s final design review, the project proponent would submit a Stormwater Management Plan and a SWPPP to the City demonstrating adequate stormwater discharge mitigation using biofiltration basins, capture and controlled release tanks, or other BMPs. Such

BMPs would slow the velocity of water, thereby minimizing the potential for exceedances of stormwater drainage system capacity. Given that stormwater conveyance and storage facilities would be constructed to capture onsite runoff, impacts related to new or expanded stormwater facilities would be less than significant.

Electric Power & Natural Gas

Electrical power service to the project site would be provided by SDG&E, which maintains substations and transmission lines throughout the County. The project will not use natural gas. The project site is currently served by existing electricity infrastructure. As discussed in Section 6, *Energy*, the project would involve an increase in electricity demand to serve the project; however, this demand increase would not be anticipated to require additional electricity substations. Impacts with respect to new or expanded electric power facilities would be less than significant.

Telecommunications

The project would not involve any components requiring telecommunications infrastructure and would not involve the relocation of existing telecommunications facilities. Therefore, no impact related to telecommunications facilities would occur.

Because the project site would be served by existing water, wastewater, electric, natural gas, and telecommunication facilities, construction or relocation of additional facilities would not be necessary and effects would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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

The project site would be served by VWD, which provides water to approximately 105,741 customers in a 45-square mile service area (VWD 2021a). VWD currently obtains 100 percent of its potable water supply from SDCWA, which obtains most of its water via the State Water Project and the Colorado River Aqueduct. Through the SDCWA contract, VWD has increased its portfolio to include at least 1,140 million gallons of desalination water from the SDCWA Claude “Bud” Lewis Carlsbad Desalination Plant in the City of Carlsbad and through the purchase of approximately 896 million gallons per year from the Olivenhain Municipal Water District’s David C. McCollom Water Treatment Plant. VWD provided an average 12.1 million MGD of potable water to residential, commercial, light industrial, landscaping, and agriculture uses in 2020, with a total water demand for the year of 4,835 million gallons. The projected annual total water demand is projected to reach 8,055 million gallons. VWD estimated the available supply and demands in normal years, single dry years, and multiple dry years as required. If water demands develop as projected in the Master Plan, there is a projected surplus of supplies in a normal year as shown in Table 19 and an equal supply in a single dry year and multiple dry years shown in Table 20 and Table 21, respectively (VWD 2021).

Table 19 Normal Year Supply and Demand (million gallons)

	2025	2030	2035	2040	2045
Supply Totals	6,165	6,439	6,653	7,373	8,072
Demand Totals	6,818	7,064	7,317	8,097	8,826
Difference	(653)	(625)	(664)	(724)	(754)
Active and Passive Conservation	653	625	664	724	754
Surplus/(Shortage)	5	4	2	8	9

Source: VWD 2021a

Table 20 Single Dry Year Supply and Demand (million gallons)

	2025	2030	2035	2040	2045
Supply Totals	7,296	7,558	7,828	8,663	9,444
Demand Totals	7,296	7,558	7,828	8,663	9,444
Difference	0	0	0	0	0

Source: VWD 2021a

Table 21 Multiple Dry Years Supply and Demand (million gallons)

		2025	2030	2035	2040	2045
First Year	Supply Totals	7,296	7,558	7,828	8,663	9,444
	Demand Totals	7,296	7,558	7,828	8,663	9,444
	Difference	0	0	0	0	0
Second Year	Supply Totals	7,364	7,628	7,901	8,744	9,532
	Demand Totals	7,364	7,628	7,901	8,744	9,532
	Difference	0	0	0	0	0
Third Year	Supply Totals	7,365	7,628	7,901	8,744	9,532
	Demand Totals	7,365	7,628	7,901	8,744	9,532
	Difference	0	0	0	0	0
Fourth Year	Supply Totals	7,432	7,699	7,975	8,825	9,620
	Demand Totals	7,432	7,699	7,975	8,825	9,620
	Difference	0	0	0	0	0
Fifth Year	Supply Totals	7,432	7,699	7,975	8,825	9,620
	Demand Totals	7,432	7,699	7,975	8,825	9,620
	Difference	0	0	0	0	0

Source: VWD 2021a

The project would result in a water demand of approximately 2.68 million gallons per year, which would increase the demand for the year 2025 under normal conditions by less than 0.04 percent. There would be enough in surplus volumes during normal year conditions to supply the proposed project with water. During dry year conditions, the additional demand from the project presents potential water supply shortages. However, the VWD continues to work closely with the SDCWA for future water supply planning, and based on the information provided by the SDCWA, the water supply available to VWD is considered feasible. As a result, adequate supplies are available to serve

the project, and remaining excess supply would be available to serve reasonably foreseeable future development. Therefore, impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- c. *Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?*

The project site would be served by existing VWD sewer lines. Sewer line extensions would be necessary to connect the proposed buildings to existing facilities along North Las Posas Road and West Mission Road, which would be installed during project construction.

The project would result in an increase in wastewater generation relative to existing site conditions. The majority of wastewater generated in the City of San Marcos is diverted to the Meadowlark Reclamation Facility, which has a capacity of five MGD (VWD 2021a). As shown in Table 18, the project is expected to generate approximately 7,335 GPD, which would constitute 0.16 percent of the capacity of MRF. Therefore, there is adequate wastewater treatment capacity to serve the project. The project would have a less than significant impact on wastewater treatment capacity at VWD.

LESS THAN SIGNIFICANT IMPACT

- d. *Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?*

Solid waste service would be provided by EDCO Waste and Recycling Services, which handles residential, commercial, and industrial collections in the City of San Marcos. EDCO transports collected waste to the Escondido Transfer Station, where it is then transferred to the Sycamore Sanitary Landfill located in Santee. The Sycamore Landfill has a permitted capacity of 5,000 tons/day and a remaining capacity of 113,972,637 cubic yards (California Department of Resources Recycling and Recovery [CalRecycle] 2021).

According to the CalEEMod results (see Appendix A), operation of the proposed project would generate an estimated 26 tons of waste per year (approximately 0.07 ton per day), which is less than 0.001 percent of the permitted daily capacity at the Sycamore Landfill. Therefore, the proposed project would not generate solid waste in excess of the capacity of the Sycamore Landfill. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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

Department of Environmental Health issues the facility permits. The Sycamore Landfill currently has active permit 37-AA-0023 and undergoes quarterly inspections. The facility would cease operation on December 31, 2042. As the project would utilize the Sycamore Landfill for solid waste disposal, it would comply with existing regulations related to solid waste.

The California Integrated Waste Management Act of 1989 (Assembly Bill [AB] 939) mandates that local jurisdictions divert at least 50 percent of all solid waste generated by 2020. Assembly Bill 341

200 North Las Posas Road Project

(AB 341) set a statewide goal for a 75 percent reduction in waste disposal by the year 2020 and established mandatory recycling for commercial businesses. The City is required to comply with this law and report their progress towards achieving the 75 percent reduction goal to CalRecycle. The City of San Marcos currently exceeds AB 939 requirements of solid waste diversion and has achieved an AB 341 compliance rate of 87 percent among all qualifying commercial accounts. The project would comply with applicable solid waste diversion programs. Therefore, it would have no impact related to solid waste regulations.

NO IMPACT

20 Wildfire

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a. Substantially impair an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Expose people or structures to significant risks, including downslopes or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

- a. *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project substantially impair an adopted emergency response plan or emergency evacuation plan?*

According to the Fire Hazard Severity Zones Viewer, the project is not located in a VHFHSZ but is located 0.4 miles southwest of a VHFHSZ, which encompasses Palomar College and surrounding residential neighborhood area (CalFire 2021). The project would be designed, constructed, and operated pursuant to applicable standards outlined in the California Fire Code published by the California Building Standards Commission, 2019 Edition and adopted in Chapter 17 of the City of San Marcos Code of Ordinances. Such requirements include building and emergency access, adequate emergency notification, and means of egress for emergency vehicles. While project construction may require temporary truck and equipment access and parking on and around the project site, construction would not require lane or roadway closures that would temporarily impair emergency response or evacuation.

As discussed in Section 17, *Transportation*, the project would not impede access to emergency services. Additionally, as discussed in Section 15, *Public Services*, the SMFD would provide fire prevention, fire protection, and emergency response for the proposed project. The SMFD would review site plans, site construction, and the actual structure prior to occupancy to ensure that required fire protection safety features, including building sprinklers and emergency access, are implemented. In addition, the proposed project would comply with applicable policies and ordinances for fire prevention, protection, and safety as required by the San Marcos Municipal Code, which include development with modern materials and pursuant to current standards, inclusive of fire-resistant materials, and provision of fire alarms and detection systems, and automatic fire sprinklers. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- b. *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project, due to slope, prevailing winds, and other factors, exacerbate wildfire risks and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?*

The project site is not located within a State Responsibility Area (SRA) nor is it part of a Wildlife Urban Interface (areas subject to high fire hazard) as shown in Figure 3 of the San Marcos Fire Department *Wildland Urban Interface Community Wildfire Protection Plan* (2007). Although the project site is not located in a VHFHSZ, it is approximately 0.4 mile southwest east of a VHFHSZ located around Palomar College and Twin Oaks Valley neighborhood (i.e., Santa Fe Hills community). The project would involve construction of a new fuel station, food mart, and car wash. Due to the project site's location near a VHFHSZ, employees and customers could be exposed to pollutant concentrations and landslide risks in the event of a wildfire.

Project structures and infrastructure would be constructed to modern fire code and safety standards through conformance with the San Marcos Municipal Code Chapter 17.64, which adopts the 2019 California Fire Code and establishes provisions for fire safety related to construction, maintenance and design of buildings and land uses. Facilities would not be located within the steep, vegetated slopes and hillsides where fire risk is greatest. The project site does not include steep slopes and is within an urbanized area of the city that is relatively flat. As Santa Ana winds generally move from northeast to southwest, project development would not exacerbate wildfire risk from winds, since the project site is located downwind of the VHFHSZ. In addition, the project site is easily accessible by the Fire Department, as San Marcos Fire Department Station No. 1 is located approximately 1.6-miles (driving distance) west of the project site.

The project itself would not exacerbate wildfire risks and expose occupants to pollutant concentrations from a wildfire or uncontrolled spread of wildfire, and project design features would help to protect project buildings from the effects of wildfire. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- c. *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?*

The project site is not in an SRA or lands classified as VHFHSZ. It is in proximity to SRA lands classified as VHFHSZ. The project would not involve the construction of new utility infrastructure

that could exacerbate fire risk. All utility infrastructure would be under-grounded, reducing the risk of wildfire caused by overhead power lines. Therefore, the project would not require additional roads, fuel breaks, emergency water sources, power lines or other utilities that would exacerbate fire risk nor cause temporary or ongoing impacts to the environment. Furthermore, roads, fuel clearance, maintained landscaping, and fire-resistant building materials would help to prevent the spread of uncontrolled wildfire. Wildfire impacts from associated project infrastructure would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- d. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project expose people or structures to significant risks, including downslopes or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?*

The project site is located approximately 100 feet east of a VHFHSZ. Slope instability from wildfire scarring of the landscape can result in slope instability in the form of more intensive flooding and landslides. These post-fire slope soils and altered drainage patterns can more easily creep away downslope sides of foundations and reduce lateral support. Major post-wildfire hazards are unstable hill slopes and altered drainage patterns. Slopes may suffer landslides, slumping, soil slips, and rockslides. According to Figure 6-1 in the City of San Marcos General Plan Safety Element, the project site is not located within an area susceptible to landslides (City of San Marcos 2012c). In addition, the project is not a FEMA designated flood zone (FEMA 2021). Flooding in this area is unlikely to be caused by post-fire slope instability or drainage changes since project site is not adjacent to steep slopes.

As such, the project would not expose people or structures to downslope or downstream flooding or landslides. Therefore, impacts related to flooding and landslide hazards due to post-fire slope instability or drainage changes would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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21 Mandatory Findings of Significance

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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Does the project:

a. Have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

a. *Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?*

As discussed in this Initial Study, the project would have no impact, a less than significant impact, or a less than significant impact after mitigation with respect to all environmental issues. Regarding biological resources, the existing habitat onsite does not currently support special status species. Therefore, there is low potential for special-status species to occur. However, there is a possibility of direct and indirect impacts to nesting birds in the surrounding area, thus impacts would be reduced to a less-than-significance level with Mitigation Measure BIO-1 In Section 5, *Cultural Resources*, no historical or archaeological resources were identified on the project site. However, there is high

potential for unanticipated discovery during construction activities. Therefore, potential impacts to unknown prehistoric archeological sites on the project site would be reduced to a less-than-significant level with implementation of Mitigation Measures CR-1 through CR-4, which would require notification and appropriate protective measures in the event of an unanticipated discovery of cultural resources.

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- b. *Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?*

For all other issue areas, the proposed project would have either direct or indirect impacts that have been determined to be less than significant, or less than significant with mitigation incorporated. The project would involve the construction of a gas station, food mart, and car wash facility on a site that is currently vacant. As concluded in Sections 1 through 20, the project would have no impact, a less than significant impact, or a less than significant impact with mitigation incorporated, with respect to all environmental issues considered in this document. Therefore, as there would be no direct or indirect impacts, the proposed project would not contribute to cumulative impacts to these issue areas. Cumulative impacts of several other resource areas have been addressed in the individual resource sections, including Air Quality, Greenhouse Gases, Noise, and Transportation/Traffic (see CEQA Guidelines Section 15064(h)(3)). As discussed in Section 3, *Air Quality*, and Section 8, *Greenhouse Gas Emissions*, the proposed project would result in less than significant impacts associated with air quality and GHG emissions. As discussed in Section 3, *Air Quality*, construction, and operational air pollutant emissions from the project would not exceed SCAQMD thresholds. Similarly, GHG emissions generated by the proposed project would not exceed the SCAQMD threshold and the project would not conflict with applicable sustainability plans established for the purpose of reducing GHG emissions. The impact analyses in these sections use thresholds that already account for cumulative (regional) impacts, except for cumulative localized impacts of construction emissions.

As discussed in Section 13, *Noise*, proposed project, including construction and operation, would not result in a perceptible increase in ambient noise levels. Construction and operation of the project would not create noise that exceeds the City’s noise ordinance requirements for exterior or interior noise levels at the closest sensitive receivers.

Some of the other resource areas (agricultural, mineral resources, population and housing, and recreation) were determined to have no impact in comparison to existing conditions. Therefore, the project would not contribute to cumulative impacts related to these issues. Other issues (e.g., biological resources, cultural resources, geology, hazards, hazardous materials, and tribal cultural resources) are by their nature project specific and impacts at one location do not add to impacts at other locations or create additive impacts. As such, cumulative impacts would be less than significant (not cumulatively considerable).

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

In general, impacts to human beings are associated with air quality, hazards and hazardous materials, and noise impacts. As detailed in analyses for air quality, hazards and hazardous materials, and noise, the proposed project would not result, either directly or indirectly, in adverse hazards related to air quality, hazardous materials, or noise. Compliance with applicable rules, regulations, and recommended mitigation measures would reduce potential impacts on human beings to a less than significant level. Effects on human beings are generally associated with impacts related to issue areas such as air quality, geology and soils, hazards and hazardous materials, noise, and transportation. As discussed in this Initial Study, the project would have a less than significant impact or a less than significant impact with mitigation in each of these resource areas. Therefore, the project would not cause substantial adverse effects on human beings, either directly or indirectly, and impacts associated with the project would be less than significant with mitigation incorporated.

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Appendix A

Air Quality and Greenhouse Gas Technical Study

Appendix B

Biological Resources Assessment

Appendix C

Cultural Resources Assessment

Appendix D

Energy Calculations

Appendix E

Noise and Vibration Study

Appendix F

Transportation Impact Analysis & Local Transportation Analysis