

MITIGATED NEGATIVE DECLARATION

PROJECT NAME: <u>Valley View</u>

PROJECT NO: GPA 2018-0001/ZC 2018-0001/SDP 2018-0007/HDP 2018-0004/HMP

2018-0004/MS 2018-0007 (DEV2018-0099)

PROJECT LOCATION: The Valley View Project is located on a portion of an approximately 6.34-

acre site (Assessor's Parcel Number 209-040-43-00) in the City of Carlsbad. The project site is located on the northeast side of Palmer Way, between Cougar Drive to the northwest and Impala Drive to southeast.

PROJECT DESCRIPTION: The project includes construction of an 11,404-square-foot, two-story office building on a portion of an undeveloped, approximately 6.34-acre site. The first floor of the building would consist of a parking garage with 1,067 square feet of building area (consisting of a lobby and utility rooms) and the second floor would include 10,337 square feet of office space. The proposed office floor would consist of 9,132 square feet of tenant space, two restrooms, and a lobby area. The proposed office building would reach a maximum height of 31 feet. The building is setback 12.5 feet from the Palmer Way right-of-way. In total, only 1.41 acres of the project site, which consists of the proposed office building and associated improvements, would be developed. The remaining 4.93-acre area of the project site (excluding the 1.41 acres of development) would be preserved as natural open space. The area to be preserved consists of steep slopes that would be preserved with the exception of brush management for fire suppression.

The project includes a General Plan Amendment, a Zone Change, a Site Development Plan, a Hillside Development Permit, a Habitat Management Plan Permit, and a Minor Subdivision. The project is designated for Planned Industrial (PI) in the General Plan and zoned as Industrial (M-Q). The intent of the General Plan Amendment and Zone Change would be to designate and re-zone the remaining undeveloped area (4.93-acres) of the project site to Open Space. The Minor Subdivision would separate the newly designated and zoned Open Space area from the developed area that would remain designated and zoned for industrial use.

DETERMINATION: The City of Carlsbad has conducted an environmental review of the above described project pursuant to the Guidelines for Implementation of the California Environmental Quality Act and the Environmental Protection Ordinance of the City of Carlsbad. As a result of said review, the Initial Study identified potentially significant effects on the environment, and the City of Carlsbad finds as follows:

Although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because the mitigation measures described on the attached sheet have been added to the project.
The proposed project MAY have "potentially significant impact(s)" on the environment, but at least one potentially significant impact 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. (Mitigated Negative Declaration applies only to the effects that remained to be addressed).

Although the proposed project could have a significant effect on the environment, there WILL NOT be a significant effect in this case because all potentially significant effects (a) have been analyzed adequately in an earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION pursuant to applicable standards and (b) have been avoided or mitigated pursuant to that earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project. Therefore, nothing further is required.								
A copy of the Initial Study documenting reasons to support the Mitigated Negative Declaration is attached, or file in the Planning Division, 1635 Faraday Avenue, Carlsbad, California 92008, and is available online at https://www.carlsbadca.gov/departments/community-development/agendas-minutes-notices-18045.								
ADOPTED:								
ATTEST:								
Cliff Jones								
Principal Planner								



Mitigated Negative Declaration

1. PROJECT NAME: Valley View Project

2. PROJECT NO: GPA 2018-0001/ZC 2018-0001/SDP 2018-0007/HDP 2018-0004/HMP 2018-0004/MS 2018-0007 (DEV2018-0099)

3. LEAD AGENCY:

City of Carlsbad 1635 Faraday Avenue Carlsbad, California 92008

4. PROJECT APPLICANT:

Land Development LLC PO Box 12409 El Cajon, California 92022

5. LEAD AGENCY CONTACT PERSON:

Jessica Evans, Associate Planner, 442.339.2631, jessica.evans@carlsbadca.gov

- **6. PROJECT LOCATION:** The proposed Valley View Project (project) is located on a portion of an approximately 6.34-acre site (Assessor's Parcel Number 209-040-43-00) in the City of Carlsbad (City) (Figure 1, Regional and Vicinity Map). The project site is located on the northeast side of Palmer Way, between Cougar Drive to the northwest and Impala Drive to southeast (Figure 2, Project Site). The project site is bound by Palmer Way to the south and undeveloped land to north, east, and west.
- 7. GENERAL PLAN LAND USE DESIGNATION: PI (Planned Industrial)
- **8. ZONING:** M-Q (Industrial)
- 9. PROJECT DESCRIPTION: The project includes construction of an 11,404-square-foot, two-story office building on a portion of an undeveloped, approximately 6.34-acre site (Figure 3, Site Plan). The first floor of the building would consist of a parking garage with 1,067 square feet of building area (consisting of a lobby and utility rooms) (Figure 4a, Proposed Office Building - First Floor) and the second floor would include 10,337 square feet of office space (Figure 4b, Proposed Office Building - Second Floor). The proposed office floor would consist of 9,132 square feet of tenant space, two restrooms, and a lobby area (see Figure 4b). Access from the parking garage to the office space would be provided by two stairways, one located on the east end and one located on the west end of the building, as well as one elevator located in the northeastern part of the building within the lobby area. An outdoor employee eating area and common patio, equating to 740 square feet, would be provided on the northern side of the proposed office building. The proposed office building would reach a maximum height of 31 feet. The building is setback 12.5 feet from the Palmer Way right-of-way. In total, only 1.41 acres of the project site, which consists of the proposed office building and associated improvements, would be developed. However, only 0.71 acres out of the area proposed for development would disturb previously undeveloped land (refer to Section X, Hydrology and Water Quality, for further details); the remaining area would consist of associated improvements along Palmer Way. The office building component of the project would be located on a narrow strip of land approximately 0.25 miles long at the edge of a steep-sided canyon at least 150 feet deep. The widest part of the project site is approximately 200 feet wide. Under existing conditions, the project site has been previously graded and groundcover is approximately 100% previously disturbed fill at the surface, consisting of brownish silty sand. While this portion of the project site is generally flat, the project is subject to slight uneven ground and elevations of the proposed office building would vary. Refer to Figures 5a through 5d for project visual renderings.

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Under existing conditions, the project site supports various habitat types and vegetation communities, such as sensitive Diegan coastal sage scrub (CSS), which is found across approximately 5.38 acres of the project site. As such, the remaining 4.93-acre area of the project site (excluding the 1.41 acres of development) would be preserved as natural open space. The area to be preserved consists of steep slopes that would be preserved with the exception of brush management for fire suppression.

Prior to implementation of the project, the following discretionary actions would be required by the City:

- General Plan Amendment (GPA 2018-0001)
- Zone Change (ZC 2018-0001)
- Site Development Plan (SDP 2018-0007)
- Hillside Development Permit (HDP 2018-0004)
- Habitat Management Plan Permit (HMP 2018-0004)
- Minor Subdivision (MS 2018-0007)

The intent of the General Plan Amendment and Zone Change would be to designate and rezone the remaining undeveloped area, 4.93-acres, of the project to Open Space. The Minor Subdivision would separate the newly designated and zoned Open Space area from the developed area that would be designated and zoned for industrial use.

Site Access, Circulation, and Parking

As shown on Figure 3, access to the project site would be provided by two driveways off Palmer Way; the first driveway would be a 25-foot-wide passenger vehicle driveway at the northwestern corner of the project site, and the other would be a 35-foot-wide passenger driveway at the southwestern corner of the project site. The driveways would be connected by a single drive aisle providing through access to the paved parking garage. The project site would include 46 passenger vehicle parking spaces comprised of 29 standard, 11 compact, 2 handicap, and 4 reserved electric vehicle stalls. The project would also include improvements to Palmer Way along the project's street frontage, including a new sidewalk and landscaping. The proposed sidewalk would span the entirety of Palmer Way from the corner of Palmer Way and Cougar Drive to Palmer Way and Impala Drive. In addition, improvements would include a marked crosswalk across Palmer Way that connects two new pedestrian ramps at the corner of Palmer Way across from Cougar Drive.

Landscaping and Brush Management

A variety of trees, shrubs, plants, and land covers would be planted in the landscape areas surrounding the proposed office building and along the property frontages abutting Palmer Way, in conformance with the City's approved plant palette list (Figure 6, Landscape Plan). Additionally, all new landscape and irrigation shall be in conformance with the City's Landscape

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Manual, ordinance, and requirements. All landscaped areas would be irrigated by a completely automated irrigation system that would be designed for the use of recycled water.

In adherence to Chapter 17.04 of the City's Fire Protection Code, existing vegetation on the project site would be thinned and modified to help prevent the spread of wildfire (City of Carlsbad 2017b). As such, the project site would contain three fire protection zones, otherwise referred to as fuel modification zones (FMZs), around the proposed office building that would act as a defensible area where vegetation would be maintained to slow down the spread of fire to and from the building (Figure 7, Fuel Modification Zones). The FMZs would be categorized as FMZ A or FMZ B. FMZ A areas are identified as manufactured slopes abutting hazardous native vegetation, and FMZ B areas are natural slopes with native vegetation where removal of native vegetation is restricted. Within each FMZ area a subcategory zone would apply (Zone A-1, A-2, A-3, B-1, B-2, and B-3) and would be individually subject to modification requirements (refer to Section XX, Wildfire, for further details). Existing vegetation within the project site that is outside the proposed development area and does not fall within an FMZ would remain on site and be protected in place.

Sustainability Features

The project would include project design features to enhance sustainability. These features would include the following:

- Outdoor lighting that complies with California Green Building Standards (CALGreen)
 Section A5.203.1.1.1
- On-site renewable energy provided per CALGreen Section A5.203.1.1.1, which provides for a roof-mounted photovoltaic 17.1 kilowatt direct current system
- Green power (if offered by a local utility) amounting to 50% minimum renewable sources
- Steel framing to comply with CALGreen Section A5.213.1
- Water heating supported by at least 40% of energy from photovoltaics with the use of electric resistance water heaters
- Electric vehicle charging provided per CS-347. Two charging stations are provided with two cable stations.

Transportation Demand Management

The project is required to implement Transportation Demand Management (TDM) measures. A Tier 1 TDM Plan for Non-Residential Projects (Tier 1 TDM Plan) would be implemented throughout the life of the project as a project feature. A Tier 1 TDM Plan requires the identification of a designated Transportation Coordinator, distribution of new hire transportation information, promotion of one citywide TDM event, a monitoring/compliance and reporting standards consistent with the City's TDM Handbook, and TDM goals. A Preliminary Tier 1 TDM Plan (MTC 2022a) has been prepared for the project which identifies project specific TDM measures that are incorporated into the project design, which include: a ride sharing program, telecommuting and alternative work schedules, and commute

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trip reduction marketing. Further details can be found in the project's TDM Plan and Vehicle Miles Traveled (VMT) Analysis. Utility Improvements.

The project site is currently not developed but is located within a developed area served by existing utility providers. As such, the project site would be served by the Carlsbad Municipal Water District for water services and the City for sewer services. The project would include new on-site water and sewer lines that would connect to existing lines within Palmer Way. Stormwater would be captured and flow through two on-site bioretention basins before being discharged into the existing storm drain system within Palmer Way. Additionally, the project would be served electricity by San Diego Gas & Electric (SDG&E) by connecting to existing off-site infrastructure within Palmer Way.

Project Construction and Phasing

The project applicant intends to construct the project in five phases (site preparation, grading, building construction, paving, and architectural coating) starting in June 2022, with the intent of beginning operations in 2023. It is anticipated that construction would take approximately 11 months. Construction equipment would include air compressors, cement and mortar mixers, generator sets, cranes, forklifts, graders, pavers, rollers, rubber-tired dozers, tractors/loaders/backhoes, paving equipment, and welders. The construction schedule has been developed based on available information provided by the applicant, typical construction practices, and best engineering judgment. For further construction and phasing details, refer to Section III, Air Quality.

Operational Characteristics

Once constructed, the proposed industrial office building would operate under typical office business hours, 5 days a week. The project would employ approximately 69 employees (CBC 2019).

10. ENVIRONMENTAL SETTING/SURROUNDING LAND USES:

The approximately 6.34-acre site is currently undeveloped land. Under existing conditions, the project site supports various types of habitat and vegetation communities, including CSS, southern willow scrub, and disturbed habitat. CSS is found across 5.38 acres of the project site and is considered to have a high biological resource value to the site. In total, the project site is suitable habitat for 64 plant and 34 animal species (refer to Section IV, Biological Resources, for further details). The project site is situated within a geographically hilly area. However, the project site itself contains a mixture of relatively flat land and downward facing slope areas primarily along the outer edges of the project site to the north, east, and south. The east side of the project site faces a 40% downward slope.

According to the City's General Plan Land Use Map, land uses surrounding the project site are designated as Planned Industrial (PI) to the north, R-4 (Residential 0–4 dwelling units per acre) and OS (Open Space) to the east, and PI (Planned Industrial) to the south and west (City of Carlsbad 2019). Additionally, the City's Zoning Map shows that the surrounding area is zoned as M-Q (Industrial) to the north, R-A (Residential Agriculture) and OS (Open Space) to the east, and M-Q (Industrial) to the south (City of Carlsbad 2019). The surrounding area is largely characterized by a mix of existing development and undeveloped land. Primary development

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exists across Palmer Way to the west of the project site and includes a variety of commercial and light industrial development properties. Located to the south is a mix of undeveloped land spreading across steep slope areas and light industrial development properties on flat land along Impala Drive. To the northwest boundary of the project site is a landscape business office, trailers, and shed-like structures. The eastern and northeastern areas surrounding the project site consist mostly of undeveloped land with scattered agriculture residential uses located along steep slopes. The nearest residential use to the project site is located approximately 180 feet to the east upon a 40% slope (Figure 8, Nearest Residence).

11. OTHER REQUIRED AGENCY APPROVALS (e.g., permits, financing approval or participation agreements): None.

12.	CAI	LIFORNIA NATIVE AMERICAN TRIBES CONSULTATION:							
	a.	. Have California Native American Tribes traditionally and culturally affiliated with the project							
		area requested consultation pursuant to public resources code section 21080.3.1?							
		⊠ Yes □ No							
	b.	If so, is there a plan for consultation that includes, for example, the determination of significance							

of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?

☑ Yes □ No

13. PREVIOUS ENVIRONMENTAL DOCUMENTATION: None

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14. SUMMARY OF ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The summary of environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" or a "Less-Than-Significant Impact with Mitigation Incorporated" as indicated by the checklist on the following pages.

		Aesthetics		Greenhouse Gas Emissions		Public Services			
		Agriculture & Forestry Resources		Hazards/Hazardous Materials		Recreation			
		Air Quality		Hydrology/Water Quality		Transportation			
	\boxtimes	Biological Resources		Land Use & Planning	\boxtimes	Tribal Cultural Resources			
	\boxtimes	Cultural Resources		Mineral Resources		Utilities/Service Systems			
		Energy		Noise		Wildfire			
	\boxtimes	Geology/Soils		Population & Housing		Mandatory Findings of Significance			
L5.	PRE	PARATION: The Mitigated Ne	gati	ve Declaration for the subje	ct p	roject was prepared by:			
	\mathcal{L}	essica Evans	03/07/2022						
	Ie ssi	ica Evans Associate Planner	Date						

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16.		TERMINATION: (to be completed by Lead Agency) the basis of this initial evaluation:	
	011 (1	the basis of this initial evaluation.	
		I find that the proposed project COULD NOT have a significant e a NEGATIVE DECLARATION will be prepared.	ffect on the environment, and
	×	I find that although the proposed project could have a significathere will not be a significant effect in this case because the number of herein have been added to the project. A MITIGATED NEGATIVE D	nitigation measures described
		I find that the proposed project MAY have a significant effect ENVIRONMENTAL IMPACT REPORT is required.	on the environment, and an
		I find that the proposed project MAY have a "potentially environment, but at least one potentially significant impact 1) has an earlier document pursuant to applicable legal standards, a mitigation measures based on the earlier analysis as described IMPACT REPORT is required, but it must analyze only the effects	ns been adequately analyzed in nd 2) has been addressed by herein. An ENVIRONMENTAL
		I find that although the proposed project could have a significat there WILL NOT be a significant effect in this case because all post-have been analyzed adequately in an earlier ENVIRONMENTAL DECLARATION pursuant to applicable standards and (b) have pursuant to that earlier ENVIRONMENTAL IMPACT REPORT including revisions or mitigation measures that are imposed Therefore, nothing further is required.	otentially significant effects (a) IMPACT REPORT or NEGATIVE been avoided or mitigated or NEGATIVE DECLARATION,
17.		/IRONMENTAL DETERMINATION: The Mitigated Negative Declar iewed and the environmental determination, indicated above, is he	
	Cli	liff Jones	03/07/2022
	Cliff	f Jones Principal Planner	Date
18.	the n	PLICANT CONCURRENCE WITH MITIGATION MEASURES: This is mitigation measures in the Mitigated Negative Declaration and corasures to the project.	•
		Indian / mg/our	3.7.22
	Signa	nature	Date
	Audı	drey M Inskeep	
	Print	nt Name	

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EVALUATION OF ENVIRONMENTAL IMPACTS:

1. A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

- 2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
- 3. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
- 4. "Less than Significant with Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analyses," as described in (5) below, may be cross-referenced).
- 5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
 - a. Earlier Analysis Used. Identify and state where they are available for review.
 - b. Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
 - c. Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
- 6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
- 7. Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

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- 8. The explanation of each issue should identify:
 - a. The significance criteria or threshold, if any, used to evaluate each question; and
 - b. The mitigation measure identified, if any, to reduce the impact to less than significant.
- 9. Tribal consultation, if requested as provided in Public Resources Code Section 21080.3.1, must begin prior to release of a negative declaration, mitigated negative declaration, or environmental impact report for a project. Information provided through tribal consultation may inform the lead agency's assessment as to whether tribal cultural resources are present, and the significance of any potential impacts to such resources. Prior to beginning consultation, lead agencies may request information from the Native American Heritage Commission regarding its Sacred Lands File, per Public Resources Code sections 5097.9 and 5097.94, as well as the California Historical Resources Information System administered by the California Office of Historic Preservation.

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I.	Exc	STHETICS ept as provided in Public Resources Code Section 21099, would the ject:	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
	a)	Have a substantial adverse effect on a scenic vista?			X	
	b)	Substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				×
	c)	In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?			\boxtimes	
	d)	Create a new source of substantial light and glare, which would adversely affect day or nighttime views in the area?			\boxtimes	

a) Less-than-Significant Impact: The City's General Plan does not designate any scenic views or vistas in the City (City of Carlsbad 2015a). However, rolling hills and other natural features and built infrastructure frame Carlsbad's physical form. Natural areas and open spaces in the City include lagoons, the ocean, hillsides, habitats, and parks. The project site is located along Palmer Way, which has views of the hillsides. Therefore, implementation of the project could obstruct views of the hills. However, a large component of the project would include preserving the existing vegetation on site, primarily in the eastern part of the project site along the sloped areas. This area would be rezoned and designated as OS (Open Space) as part of the project. Thus, a majority of the project site would remain undeveloped. The eastern and northeastern areas surrounding the project site consist mostly of undeveloped land with scattered agriculture and rural/semi-rural residential uses located along steep slopes. The land use designations to the east of the project site are OS (Open Space) and R-4 (Residential 0–4 dwelling units per acre). Zoning to the east is OS (Open Space) and R-A (Residential Agriculture). As such, the project area proposed to be preserved would be similar to the surrounding area to the east and northeast. No impact to a scenic vista would occur.

The other project component would include developing a two-story office building on the relatively flat portion of the project site abutting Palmer Way. As such, there is potential for the proposed building to block views of the hills. However, the proposed office building would be substantially visually similar to the surrounding area to the northwest, west, and south. Primary development includes commercial and light industrial uses to the west and southeast and an office and trailers to the northwest. Directly south of the project site is a small portion of landscaped land situated along Impala Drive. This portion of the project site is designated PI (Planned Industrial) and zoned M-Q (Industrial), similar to the areas south and west of the project site. The surrounding area to the north of the site is designated Planned Industrial (PI) and zoned as M-Q (Industrial). While the

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office building component of the project would have the potential to obstruct views of the hills to the east from Palmer Way, the proposed building would be designed effectively to reduce the potential obstruction of view. Refer to Figures 5a through 5d for a conceptual rendering of the proposed project as viewed from Palmer Way. As such, the proposed building would not have an effect on a scenic vista.

As discussed above, the City's General Plan does not designate scenic views or vistas in the City. However, the City is home to various natural features such as lagoons, the ocean, hillsides, habitats, and parks. Looking east from Palmer Way, views of the hillsides can be seen from the project site. As such, views of the hills may be obstructed as a result of the project. However, a majority of the project site would remain undeveloped and would not obstruct any of the views of the hillsides from Palmer Way. Additionally, construction of the proposed office building would take a place on a smaller portion of the project site and would be consistent with the light industrial, commercial, and office uses in the surrounding area. Further, the project would be effectively designed to reduce obstruction of the views from Palmer Way. Therefore, the proposed project would have a less-than-significant impact on scenic vistas.

- b) No Impact: The project site is not located in the vicinity of a state scenic highway (Caltrans 2011). Additionally, the City's General Plan Open Space, Conservation, and Recreation Element does not identify any local scenic roadways in the City (City of Carlsbad 2015a). The City's Land Use and Community Design Element identifies Carlsbad Boulevard and adjacent land (Carlsbad Boulevard coastal corridor) as a transportation corridor that provides open views of the ocean, beaches, and lagoons that should be preserved and enhanced (City of Carlsbad 2015a). However, the project site would be located approximately 3.5 miles east of Carlsbad Boulevard and would not be visible from the transportation corridor. Therefore, no impact would occur.
- c) Less-than-Significant Impact: Section 15387 of the California Environmental Quality Act (CEQA) Guidelines states that an urbanized area means a central city or a group of contiguous cities with a population of 50,000 or more, together with adjacent densely populated areas having a population density of at least 1,000 persons per square mile. In July 2019, the population in the City was estimated to be 115,382 (U.S. Census 2019). Therefore, the project is located within an urbanized area and the second question of this threshold applies. The project site is zoned Industrial (M-Q) (City of Carlsbad 2017a). A portion of the project site would include an industrial office building and would not conflict with the zoning. However, 4.93 acres of the project site are proposed to be re-zoned as Open Space (OS) to preserve the existing on-site vegetation. Upon approval of the proposed zone change, the project site would have a zoning of Industrial (M-Q) and Open Space (OS). The proposed office building would be developed in compliance with any aesthetic, visual, or scenic requirement of the city's zoning code and the M-Q zone. While the project site connects to El Camino Real from Palmer Way, the site does not have actual frontage on El Camino Real and is not subject to standards set by the El Camino Real Corridor Development Standards Guidelines. Therefore, the proposed project would not conflict with applicable zoning governing scenic quality and impacts would be less than significant. Additionally, for the purposes of discussion, a description of visual character and quality is provided below.

The portion of the project site proposed for development is currently undeveloped and is located on a relatively flat area of the site. The remainder of the project site would not include development and would primarily be located along steep slope areas. Trees and shrubs are present throughout the site. Overall, the site lacks maintenance and visual quality. Thus, the project would enhance the visual quality of a portion of the project site by introducing an aesthetically cohesive development with associated landscaping. The proposed project

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would have a modern appearance with an open parking garage on the first floor, which would maintain views of the hills to the east, and a glass window exterior with sleek metal accents design on the second story office floor. Refer to Figures 5a through 5d for a conceptual rendering of the proposed project as viewed from Palmer Way. As previously stated, the remainder of the project site would be placed into an open space land use designation, not be developed, and instead would retain existing vegetation along the sloped areas of the site. The purpose of the open space land use designation shall be to reduce the potential for localized erosion and slide hazards, to prohibit the removal of native vegetation except for creating firebreaks and/or planting fire retardant vegetation, and to protect visual resources of importance to the entire community (City of Carlsbad 2017b).

The surrounding commercial and light industrial developments present to the west and southeast of the project site are mostly two-story, rectangular structures finished with glass materials or light-color exterior paint. The office structures directly to the north of the project site are one story, rectangular in shape, and have white exterior paint. Residences located directly to the east of the project site are single-family homes and vary in size and appearance. These residential uses are separated from the primary office, commercial, and light industrial developments and the project site by open space area and hillsides. The proposed office building would be consistent with the existing development to the north, southeast, and west. Furthermore, the remaining project area proposed to be preserved would not contain any structures and would primarily be located along the steep sloped areas of the site. The land abutting this part of the project would consist of scattered agriculture residences and undeveloped land. As such, impacts to visual character and quality would be less than significant.

d) Less-than-Significant Impact: Under existing conditions, the project site is undeveloped and does not provide a source of light. The proposed project would introduce a new office building which would contribute to more light and glare in the area. However, as shown on Figures 5a-5d, the project does not include highly reflective materials and most if not all windows would include partial covering that would reduce glare coming from lighting within the building during evening hours. Outdoor lighting will be used as required by the California Building Standards Code for parking areas, sidewalks, and security within the project site. Specifically, lighting would consist of lights within the parking garage or canopies, along with low level pedestrian pathway lights. Outdoor lighting is required to comply with Section 21.31.080(F) of the City's Municipal Code, which requires that light sources are designed to avoid direct or indirect glare to any off-site properties or public rights-of-way (City of Carlsbad 2017b). As such, the project would include shields to prevent light spilling onto the natural slope. Additionally, the first floor of the project would consist of a parking garage. Vehicular lights that may be seen from the proposed parking garage would be shielded by a 3-foot-high wall on the north side of the structure (See Figure 4a, Proposed Office Building - First Floor). Furthermore, the project does not include pole mounted light fixtures. Through compliance with the Municipal Code and California Building Standards Code, proposed outdoor lighting would not substantially affect day or nighttime views. Thus, impacts associated with light and glare would be less than significant.

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II.		RICULTURAL AND FORESTRY RESOURCES*	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
	a)	Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				X
	b)	Conflict with existing zoning for agricultural use, or a Williamson Act contract?				\boxtimes
	c)	Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), or timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?				X
	d)	Result in the loss of forest land or conversion of forest land to non-forest use?				×
	e)	Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to non-agricultural use?			\boxtimes	

a) No Impact: As indicated on the map of San Diego County Important Farmland developed by the California Department of Conservation for the Farmland Mapping and Monitoring Program, the project site is located on "Urban Built-Up Land" along the edges of Palmer Way, "Other Land" to north and south near Cougar Drive and Impala Drive, respectively, and "Farmland of Local Importance" near the center of the site starting from Palmer Way to the eastern boundary of the site (DOC 2016). Approximately 1.8 acres of the project site are considered locally important. Urban Built-Up Land generally includes land uses such as residential, commercial, industrial, institutional facilities, and other urban land uses. Other Land generally includes land uses such as low-density rural developments, wetlands, and riparian areas not suitable for livestock grazing. Land surrounded on all sides by urban development and greater than 40 acres is mapped as Other Land. Farmland of Local Importance refers to land that is important to the local agricultural economy as determined by the county's board of supervisors. While a portion of the project site, including areas proposed for development and proposed for open space, is designated Farmland of Local Importance, it is not designated or zoned as such by the City. The entire project site is designated as PI (Planned Industrial) and zoned as M-Q (Industrial). As such, the proposed project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use, and no impact would occur.

^{*} In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model-1997 (LESA) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. There are no lands present in Carlsbad that meet the state's definition of forest land (Public Resources Code section 12220(g)), timberland (Public Resources Code section 4526), or production (Government Code 51104(g)). Therefore, questions related to forestry resources will have no impacts.

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b) *No Impact:* According to the Department of Conservation's map of San Diego County Williamson Act lands, the project site is not located on Williamson Act contract land (DOC 2013). The project site is zoned Industrial (M-Q) (City of Carlsbad 2017a). Therefore, the proposed project would not conflict with existing zoning for agricultural use or a Williamson Act contract, and no impact would occur.

- c) No Impact: The project site is within the Industrial (M-Q) zone and the immediate surrounding area is located within the Industrial (M-Q), Open Space (OS), Office (O), Heavy Commercial (C-M), Residential Agriculture (R-A), and Rural Residential Estate (R-E) zones. The project site and immediate area are surrounded by a mix of light industrial development and undeveloped land. The project site is not currently designated or used for forestry resources. Therefore, the proposed project would not conflict with existing zoning for forest land or timberland, and no impact would occur.
- **d)** No Impact: The project site is within the Industrial (M-Q) zone and the immediate surrounding area is located within the Industrial (M-Q), Open Space (OS), Office (O), Heavy Commercial (C-M), Residential Agriculture (R-A), and Rural Residential Estate (R-E) zones. The project site and immediate area are surrounded by a mix of light industrial development and undeveloped land. The project site is not currently designated or used for forestry resources. Therefore, the proposed project would not result in the loss of forest land or conversion of forest land to non-forest use.
- e) Less-than-Significant Impact: The project site is within the Industrial (M-Q) zone and the immediate surrounding area is located within the Industrial (M-Q), Open Space (OS), Office (O), Heavy Commercial (C-M), Residential Agriculture (R-A), and Rural Residential Estate (R-E) zones. While land to the east and northeast of the project site is zoned Residential Agriculture (R-A), the project site is zoned Industrial (M-Q) and would not convert farmland to non-agricultural use. Additionally, the project site area abutting the land zoned as Residential Agriculture (R-A) would not be developed but rather re-zoned as Open Space (OS) and preserved, creating a buffer between the proposed project and existing agriculture. The project would develop a portion of undeveloped land for a two-story office building. As such, a portion of the site would be impervious and generate more stormwater runoff. Site design best management practices (BMPs) include conserving natural areas, soils, and vegetation; minimizing impervious areas; runoff collection; and landscaping with native or drought tolerant species. The project would include the installation of two biofiltration basins to receive stormwater runoff. Stormwater generated from the new hardscape would be treated on site and be discharged into the Palmer Way storm drain system. See, Section X, Hydrology and Water Quality, for further details. Further, the project site and surrounding area are not currently designated or used for forestry resources. Therefore, impacts associated with the direct or indirect conversion of agricultural uses or forest land would be less than significant.

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III.		R QUALITY* uld the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	a)	Conflict with or obstruct implementation of the applicable air quality plan?			\boxtimes	
	b)	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard?			\boxtimes	
	c)	Expose sensitive receptors to substantial pollutant concentrations?				\boxtimes
	d) ad	Result in other emissions (such as those leading to odors) versely affecting a substantial number of people?			\boxtimes	

^{*} Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the determinations in this section.

Local Air Quality

An area is designated in attainment when it is in compliance with the National Ambient Air Quality Standards (NAAQS) (federal) and/or California Ambient Air Quality Standards (CAAQS) (state). These standards are set by the Environmental Protection Agency or the California Air Resources Board (CARB) for the maximum level of a given air pollutant that can exist in the outdoor air without unacceptable effects on human health or the public welfare. The criteria pollutants of primary concern that are considered in an air quality assessment include ozone (O_3) , nitrogen dioxide (NO_2) , carbon monoxide (CO), sulfur dioxide (SO_2) , particulate matter less than or equal to 10 microns in diameter (PM_{10}) , particulate matter less than or equal to 2.5 microns in diameter $(PM_{2.5})$, lead, and toxic air contaminants. Volatile organic compounds (VOCs) and oxides of nitrogen (NO_x) are precursors to the formation of ground-level O_3 .

Table 1 shows the San Diego Air Basin (SDAB) designations for criteria pollutants.

Table 1
Criteria Pollutants and SDAB Designations

Criteria Pollutant	Federal Designation (NAAQS)	State Designation (CAAQS)
Ozone (8-Hour)	Nonattainment	Nonattainment
Ozone (1-Hour)	_1	Nonattainment
Carbon Monoxide	Attainment	Attainment
PM ₁₀	Unclassifiable ²	Nonattainment
PM _{2.5}	Attainment	Nonattainment
Nitrogen Dioxide	Attainment	Attainment
Sulfur Dioxide	Attainment	Attainment

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Table 1
Criteria Pollutants and SDAB Designations

Criteria Pollutant	Federal Designation (NAAQS)	State Designation (CAAQS)			
Lead	Attainment	Attainment			
Sulfates	No Federal Standard	Attainment			
Hydrogen Sulfide	No Federal Standard	Unclassified			
Visibility	No Federal Standard	Unclassified			

Note: NAAQS = National Ambient Air Quality Standards; CAAQS = California Ambient Air Quality Standards; PM_{10} = particulate matter less than or equal to 10 microns in diameter; $PM_{2.5}$ = particulate matter less than or equal to 2.5 microns in diameter.

- The federal 1-hour standard of 12 parts per hundred million was in effect from 1979 through June 15, 2005. The revoked standard is referenced here because it was employed for such a long period and because this benchmark is addressed in State Implementation Plans.
- At the time of designation, if the available data does not support a designation of attainment or nonattainment, the area is designated as unclassifiable. SOURCE: SDAPCD, 2018 (https://www.sdapcd.org/content/sdc/apcd/en/air-quality-planning/attainment-status.html).

As of November 2017, the SDAB is designated in attainment for all criteria pollutants under the NAAQS with the exception of O_3 (8-Hour) and PM_{10} , which is listed as unclassifiable. The SDAB is currently designated nonattainment for O_3 , PM_{10} , and $PM_{2.5}$ under the CAAQS. It is designated as attainment under CAAQS for CO, NO_2 , SO_2 , lead, and sulfates.

a) Less-than-Significant Impact: The project site is located in the SDAB. The periodic violations of NAAQS in the SDAB, particularly for O₃ in inland foothill areas, requires that a plan be developed outlining the pollution controls that will be undertaken to improve air quality. In San Diego County, this attainment planning process is embodied in the Regional Air Quality Strategy (RAQS) developed by the San Diego Air Pollution Control District (SDAPCD) with regional growth projections provided by San Diego Association of Governments (SANDAG). The RAQS outlines SDAPCD's plans and regulatory control measures designed to attain state air quality standards for ozone. The RAQS, which was adopted by the San Diego County Air Pollution Control Board in 1992, is updated on a triennial basis, with the most recent revision prepared in December 2016.

The SDAPCD has also developed the SDAB's input into the State Implementation Plan (SIP), which is required under the federal Clean Air Act (CAA) for pollutants that are designated as being in nonattainment of national air quality standards for the air basin. The SIP relies on the same information from SANDAG to develop emission inventories and emission control strategies that are included in the attainment plan for the air basin.

The proposed project relates to the SIP and/or RAQS through the land use and growth assumptions that are incorporated into the air quality planning document. These growth assumptions are based on each city's and the County's General Plan. Per Chapter 10, Section 1004 of the California Building Code, in areas without fixed seating, the number of occupants shall be computed at a rate of one occupant per unit of area. The project is subject to the "Business Area" rate which allows one occupant per 150 gross square feet (CBC 2019). Although the proposed office building is a combined total of 11,404 square feet, only the second story, which is 10,337 square feet, is designated for office space. As such, the project would generate an estimated maximum of 69 employees (CBC 2019). According to the SANDAG Series 13 Growth

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Forecast, the City is expected to have 77,422 jobs in 2020 and 79,877 jobs in 2025, which is an increase in 491 jobs per year (SANDAG 2013). The project would be consistent with the underlying General Plan designations and would generate jobs that are accounted for in the anticipated growth projections of the City. As such, the project would not exceed SANDAG projections. Operation of the project will result in emissions that were considered as a part of the RAQS growth projections. As such, the proposed project is not anticipated to conflict with either the RAQS or the SIP. Additionally, the operational emissions from the project are below the screening levels, and subsequently will not violate ambient air quality standards.

b) Less-than-Significant Impact: The SDAPCD operates a network of ambient air monitoring stations throughout San Diego County. Due to its proximity to the City and similar geographic and climatic characteristics, the Camp Pendleton monitoring station concentrations for O₃, NO₂, and PM_{2.5} are considered most representative of the emissions in the City. The Escondido–East Valley Parkway monitoring station is the nearest location where CO concentrations are monitored. The El Cajon–Redwood Avenue monitoring station is the nearest location where SO₂ concentrations are monitored. The San Diego-Kearny Villa Road monitoring station is the closest station monitoring PM₁₀ to the City. Data available for these monitoring sites from 2016 through 2018, shown in Table 2, indicate the most recent air quality violations recorded.

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Table 2
Local Ambient Air Quality Data

				Ambient	Measure	d Concentratio	n by Year	Exceedances by Year			
Monitoring Station	Unit	Averaging Time	Agency/ Method	Air Quality Standard	2016	2017	2018	2016	2017	2018	
					Ozone (O₃)						
Camp Pendleton	ppm	Maximum 1-hour concentration	State	0.09	0.083	0.094	0.084	0	0	0	
	ppm	Maximum	State	0.070	0.073	0.082	0.069	5	5	0	
		8-hour concentration	Federal	0.070	0.073	0.081	0.068	4	4	0	
				Nitr	ogen Dioxide (N	O ₂)					
Camp Pendleton	ppm	Maximum	State	0.18	0.072	0.063	0.048	0	0	0	
		1-hour concentration	Federal	0.100	0.072	0.063	0.048	0	0	0	
	ppm	Annual	State	0.030	0.006	0.006	0.006	0	0	0	
		concentration	Federal	0.053	0.006	0.006	0.006	0	0	0	
				Carl	bon Monoxide (0	CO)					
Escondido	ppm	Maximum	State	20	3.1	2.0	1.9	0	0	0	
		1-hour concentration	Federal	35	3.1	2.0	1.9	0	0	0	
	ppm	Maximum	State	9.0	2.0	1.5	1.4	0	0	0	
		8-hour concentration	Federal	9	2.0	1.5	1.4	0	0	0	
				Su	Ifur Dioxide (SO	2)					
El Cajon	ppm	Maximum 1-hour concentration	Federal	0.075	0.018	0.011	0.004	0	0	0	
	ppm	Maximum	State	0.04	0.0005	0.0004	0.0004	0	0	0	
		24-hour concentration	Federal	0.140	0.0005	0.0004	0.0004	0	0	0	
	ppm	Annual concentration	Federal	0.030	0.0001	0.0001	0.0001	_	_	_	

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Table 2
Local Ambient Air Quality Data

				Ambient	Measure	d Concentration	n by Year	Exce	eedances by \	/ear
Monitoring Station	Unit	Averaging Time	Agency/ Method	Air Quality Standard	2016	2017	2018	2016	2017	2018
				Coarse P	articulate Matte	er (PIVI ₁₀)				
San Diego-	$\mu g/m^3$	Maximum	State	50	35	47	38	0 (0)	0 (0)	0 (0)
Kearny Villa Road		24-hour concentration	Federal	150	36	46	38	0 (0)	0 (0)	0 (0)
	μg/m³	Annual concentration	State	20	ND	17.6	18.4	_	_	_
				Fine Pai	ticulate Matter	(PM _{2.5})				
Camp Pendleton	μg/m³	Maximum 24-hour concentration	Federal	35	34.4	26.0	30.5	0 (0)	0 (0)	0 (0)
	μg/m³	Annual	State	12	9.7	_	_	_	_	_
		concentration	Federal	12.0	9.7	_	_	_	_	_

Sources: CARB 2019; EPA 2019.

Notes: ppm = parts per million; $\mu g/m^3$ = micrograms per cubic meter; ND = insufficient data available to determine the value; — = not available or applicable.

Data taken from CARB iADAM (http://www.arb.ca.gov/adam) and EPA AirData (http://www.epa.gov/airdata/) represent the highest concentrations experienced over a given year. Exceedances of federal and state standards are only shown for O_3 and particulate matter. Daily exceedances for particulate matter are estimated days because PM_{10} and $PM_{2.5}$ are not monitored daily. All other criteria pollutants did not exceed federal or state standards during the years shown. There is no federal standard for 1-hour ozone, annual PM_{10} , or 24-hour $PM_{2.5}$.

The Camp Pendleton Facility monitoring station is located at 21441-W B Street Oceanside, California.

The Escondido monitoring station is located at 600 E. Valley Pkwy, Escondido, California.

The El Cajon monitoring station is located at 10537 Floyd Smith Drive, El Cajon, California.

The San Diego-Kearny Villa station is located at 6123A Kearny Villa Road, San Diego, California.

The San Diego – Rancho Carmel Drive monitoring station is located at 11403 Rancho Carmel Drive, San Diego, California.

The 2016 and 2017 monitoring values are from the Escondido monitoring station and the 2018 monitoring values are from the Rancho Carmel Drive monitoring station.

Measurements of PM_{10} and $PM_{2.5}$ are usually collected every six days and every one to three days, respectively. Number of days exceeding the standards is a mathematical estimate of the number of days concentrations would have been greater than the level of the standard had each day been monitored. The numbers in parentheses are the measured number of samples that exceeded the standard.

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Air quality within the region was in compliance with CAAQS and NAAQS for NO₂, CO, and SO₂ during the monitoring period outlined in Table 2 (2016–2018).

Grading and Construction

The project involves the construction of an 11,404-square-foot office building with 46 parking spaces, which includes emissions associated with grading and construction. Emissions from the construction phase of the project components were estimated using the California Emissions Estimator Model (CalEEMod), Version 2020.4.0,¹ available online (www.caleemod.com). For the purposes of modeling, it was assumed that construction of project components would commence in June 2022 and last approximately 11 months. The project is assumed to be constructed with VOC coatings in accordance with SDAPCD Rule 67.0.1, which would be 50 grams per liter for interior applications and 100 grams per liter for exterior and parking lot applications. The construction schedule has been developed based on available information provided by the applicant, typical construction practices, and best engineering judgment.

Construction of project components would be subject to SDAPCD Rule 55, Fugitive Dust Control. This rule requires that construction of project components includes steps to restrict visible emissions of fugitive dust beyond the property line (SDAPCD 2009). Compliance with Rule 55 would limit fugitive dust (PM₁₀ and PM_{2.5}) that may be generated during grading and construction activities.

Table 3 shows the estimated maximum unmitigated daily construction emissions associated with the conceptual construction phases of the project. Refer to the emissions calculations in the Air Quality Memorandum for further details (Dudek 2021).

Table 3
Estimated Maximum Daily Construction Criteria Air Pollutant Emissions – Unmitigated

	VOC	NOx	СО	SO _x	PM ₁₀	PM _{2.5}
Year			Pounds _l	per Day		
2022	2.29	44.61	16.05	0.12	7.22	3.29
2023	7.32	12.20	13.29	0.03	0.77	0.57
Maximum	7.32	44.61	16.05	0.12	7.22	3.29
SDAPCD Threshold	137	250	550	250	100	55
Threshold Exceeded?	No	No	No	No	No	No

Notes: VOC = volatile organic compound; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particu

As shown in Table 3, daily construction emissions for the project would not exceed SDAPCD's significance thresholds for VOC, NO_x , CO, SO_x , PM_{10} , or $PM_{2.5}$. As such, the project would result in a less-than-significant impact related to construction emissions.

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

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Further, emissions would be minimized through standard construction measures, Stormwater Pollution Prevention Plan (SWPPP) requirements, BMPs, and when applicable, CALGreen, as required by the City, which would reduce fugitive dust debris, emissions, and other criteria pollutant emissions during grading and construction. Therefore, emissions from the construction phase would be minimal, temporary, and localized, resulting in pollutant emissions that are not anticipated to significantly contribute to an existing or projected air quality violation.

Operations

Area

CalEEMod was used to estimate operational emissions from area sources, including emissions from consumer product use, architectural coatings, and landscape maintenance equipment. Emissions associated with natural gas usage in space heating and water heating are calculated in the building energy use module of CalEEMod, as described in the following text.

Consumer products are chemically formulated products used by household and institutional consumers, including detergents; cleaning compounds; polishes; floor finishes; cosmetics; personal care products; home, lawn, and garden products; disinfectants; sanitizers; aerosol paints; and automotive specialty products. Other paint products, furniture coatings, or architectural coatings are not considered consumer products (CAPCOA 2017). Consumer product VOC emissions for the buildings are estimated in CalEEMod based on the floor area of buildings and on the default factor of pounds of VOC per building square foot per day. Consumer products associated with the parking lot and other asphalt surfaces include degreasers, which were estimated based on the square footage of the parking lot and the default factor of pounds of VOC per square foot per day. The CalEEMod default values for consumer products were assumed.

VOC off-gassing emissions result from evaporation of solvents contained in surface coatings, such as in paints and primers used during building maintenance. CalEEMod calculates the VOC evaporative emissions from the application of surface coatings based on the VOC emission factor, the building square footage, the assumed fraction of surface area, and the reapplication rate. The VOC emissions factor is based on the VOC content of the surface coatings, and SDAPCD's Rule 67.0.1, Architectural Coatings, governs the VOC content for interior and exterior coatings. This rule requires manufacturers, distributors, and end users of architectural and industrial maintenance coatings to reduce VOC emissions from the use of these coatings, primarily by placing limits on the VOC content of various coating categories (SDAPCD 2015). The proposed project would use architectural coatings that would not exceed 50 grams per liter for interior applications and 100 grams per liter for exterior applications consistent with SDAPCD Rule 67.0.1. The model default reapplication rate of 10% of area per year is assumed. Consistent with CalEEMod defaults, it is assumed that the surface area for painting equals 2.7 times the floor square footage, with 75% assumed for interior coating and 25% assumed for exterior surface coating (CAPCOA 2017).

Landscape maintenance includes fuel combustion emissions from equipment such as lawn mowers, rototillers, shredders/grinders, blowers, trimmers, chainsaws, and hedge trimmers. The emissions associated with landscape equipment use are estimated based on CalEEMod default values for emission factors (grams per square foot of building space per day) and number of summer days (when landscape maintenance would generally be performed) and winter days.

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Energy

In addition to area sources, CalEEMod was also used to estimate emissions from the project's energy use, which includes emissions associated with building electricity and natural gas usage (non-hearth). In accordance with City Council Ordinance No. CS-348, the project would use electric-based water heating. Electricity use would contribute indirectly to criteria air pollutant emissions; however, the emissions from electricity use are only quantified for greenhouse gases (GHGs) in CalEEMod since criteria pollutant emissions occur at the site of the power plant, which is typically off site. CalEEMod default values for energy consumption for each land use were applied for the project analysis. The proposed project would be designed to include a 17.1-kilowatt solar photovoltaic rooftop system.

Mobile Sources (Motor Vehicles)

Based on the project's traffic impact analysis, vehicle trip emissions associated with travel to and from the project would result in 229 average daily trips (MTC 2022c).

CalEEMod was used to estimate daily emissions from proposed vehicular sources. CalEEMod default data, including temperature, trip characteristics, variable start information, emissions factors, and trip distances, were conservatively used for the model inputs. Project-related traffic was assumed to include a mixture of vehicles in accordance with the model outputs for traffic. Vehicle trip emissions associated with the project are minimal and not anticipated to significantly contribute to an existing or projected air quality violation.

Maximum daily emissions associated with the operation of the project after all phases of construction are shown in Table 4. Refer to the Air Quality Memorandum for complete details of the emissions calculations (Dudek 2021).

Table 4
Estimated Maximum Daily Operational Criteria Air Pollutant Emissions

	voc	NOx	СО	SO _x	PM ₁₀	PM _{2.5}		
Source		Pounds per Day						
Area	0.27	0.00	0.00	0.00	0.00	0.00		
Energy	0.01	0.06	0.05	0.00	0.00	0.00		
Mobile	0.61	0.63	5.29	0.01	1.16	0.31		
Total	0.89	0.69	5.34	0.01	1.16	0.31		
SDAPCD Threshold	137	250	550	250	100	55		
Threshold Exceeded?	No	No	No	No	No	No		

Notes: VOC = volatile organic compound; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particu

As shown in Table 4, the maximum daily operational emissions would not exceed the SDAPCD's thresholds for VOC, CO, NO_x , SO_x , PM_{10} , or $PM_{2.5}$ during the operation of the project.

Annual operations emissions estimated for the project are shown in Table 5.

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Table 5
Estimated Annual Operational Criteria Air Pollutant Emissions

	VOC	NO _x	СО	SO _x	PM ₁₀	PM _{2.5}		
Source		Tons per Year						
Area	0.05	0.00	0.00	0.00	0.00	0.00		
Energy	0.00	0.01	0.01	0.00	0.00	0.00		
Mobile	0.08	0.09	0.72	0.00	0.16	0.04		
Total	0.13	0.10	0.73	0.00	0.16	0.04		
SDAPCD Threshold	13.7	40	100	40	15	10		
Threshold Exceeded?	No	No	No	No	No	No		

Note: VOC = volatile organic compound; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particul

As shown in Table 5, the annual operations emissions for the project do not exceed the SDAPCD's significance thresholds for VOC, CO, NO_x, SO_x, PM₁₀, or PM_{2.5}. Because the project would not exceed the daily or annual SDAPCD significance thresholds, the project would have a less-than-significant impact on an air quality standard violation.

Cumulative Impacts

In analyzing cumulative impacts from the project, the analysis must specifically evaluate a project's contribution to the cumulative increase in pollutants for which the SDAB is designated as nonattainment for the CAAQS and NAAQS. If the project does not exceed thresholds and is determined to have less-than-significant project-specific impacts, it may still contribute to a significant cumulative impact on air quality if the emissions from the project components, in combination with the emissions from other proposed or reasonably foreseeable future projects, are in excess of established thresholds. However, the project would only be considered to have a significant cumulative impact if its contribution accounts for a significant proportion of the cumulative total emissions (i.e., it represents a "cumulatively considerable contribution" to the cumulative air quality impact).

Additionally, for the SDAB, the RAQS serves as the long-term regional air quality planning document for the purpose of assessing cumulative operational emissions within the basin to ensure the SDAB continues to make progress toward NAAQS and CAAQS attainment status. As such, cumulative projects located in the San Diego region would have the potential to result in a cumulative impact to air quality if, in combination, they would conflict with or obstruct implementation of the RAQS. Similarly, individual projects that are inconsistent with the regional planning documents on which the RAQS is based would have the potential to result in cumulative impacts if they represent development beyond regional projections.

The SDAB has been designated as a federal nonattainment area for O_3 and a state nonattainment area for O_3 , PM_{10} , and $PM_{2.5}$. PM_{10} and $PM_{2.5}$ emissions associated with construction generally result in near-field impacts. As discussed previously, the emissions of all criteria pollutants would be below the significance levels. Construction would be short term and temporary in nature. Additionally, construction activities required for the implementation of project components would be considered typical of a residential project and would not require atypical construction practices that would include high-emitting activities. Grading and construction operations associated with the project would minimize emissions through standard

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construction measures, SWPPP measures and BMPs and CALGreen, as noted in response III.b). Once construction is completed, construction-related emissions would cease. Operational emissions generated by the project would not result in a significant impact. As such, the project would result in less-than-significant impacts to air quality relative to operational emissions.

Regarding long-term cumulative operational emissions in relation to consistency with local air quality plans, the SIP and RAQS serve as the primary air quality planning documents for the state and SDAB, respectively. The SIP and RAQS rely on SANDAG growth projections based on population, vehicle trends, and land use plans developed by the cities and by San Diego County as part of the development of their general plans. Therefore, projects that propose development that is consistent with the growth anticipated by local plans would be consistent with the SIP and RAQS and would not be considered to result in cumulatively considerable impacts from operational emissions. As discussed in response III.a, the project is consistent with the existing zoning and land use designations and is within the SANDAG growth projections. Thus, it would be consistent at a regional level with the underlying growth forecasts in the SIP and RAQS.

As a result, the project would not result in a cumulatively considerable contribution to regional O_3 concentrations or other criteria pollutant emissions. Cumulative air quality impacts for construction and operation would be less than significant for the project.

c) No Impact: Sensitive receptors include schools, hospitals, playgrounds, childcare centers, athletic facilities, long-term healthcare facilities, rehabilitation centers, convalescent centers, retirement homes, or other facilities that house individuals with health conditions that would be adversely impacted by changes in air quality. For purposes of this analysis, residents are also considered sensitive receptors. The closest sensitive receptors to the proposed project are the residences located approximately 300 feet northeast of the site.

Carbon Monoxide Hotspots

Projects contributing to adverse traffic impacts may result in the formation of CO hotspots. To verify that the proposed project would not cause or contribute to a violation of the CO standard, a screening evaluation of the potential for CO hotspots was conducted. The Traffic Impact Analysis performed for the project evaluated the level of service (LOS) impacts at intersections affected by the project (MTC 2022c). The potential for CO hotspots was evaluated based on the results of the traffic report. The project would not exceed San Diego County's screening criteria for performing a quantitative CO hotspots analysis. Therefore, impacts would be less than significant.

Health Effects of Toxic Air Contaminants

In addition to impacts from criteria pollutants, project impacts may include emissions of pollutants identified by the state and federal government as toxic air contaminants or hazardous air pollutants. The greatest potential for toxic air contaminant emissions during construction would be diesel particulate emissions from heavy equipment operations and heavy-duty trucks and the associated health impacts to sensitive receptors. The closest sensitive receptors would be any receptor located directly adjacent to the proposed alignments and associated facilities.

Construction of project components would not require the extensive use of heavy-duty construction equipment, which is subject to a CARB Airborne Toxics Control Measure for in-use diesel construction

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equipment to reduce diesel particulate emissions, and would not involve extensive use of diesel trucks, which are also subject to an Airborne Toxics Control Measure. Construction of the project would occur over a period of 11 months and would be periodic and short term within each phase. Following completion of construction activities, project-related toxic air contaminant emissions would cease. Additionally, no diesel-powered equipment would operate during project operation.

Health Effects of Criteria Air Pollutants

Construction and operation of the project would not result in emissions that exceed the SDAPCD's emission thresholds for any criteria air pollutants. The SDAPCD thresholds are based on the SDAB complying with the NAAQS and CAAQS, which are protective of public health; therefore, no adverse effects to human health would result from the project. The following provides a general discussion of criteria air pollutants and their health effects. The VOC and NO_x emissions would minimally contribute to regional O₃ concentrations and the associated health effects. In addition to O₃, NO_x emissions would not contribute to potential exceedances of the NAAQS and CAAQS for NO2. As shown in response III.b, the existing NO₂ concentrations in the area are well below the NAAQS and CAAQS standards. Thus, it is not expected that the project's operational NO_x emissions would result in exceedances of the NO₂ standards or contribute to associated health effects. CO tends to be a localized impact associated with congested intersections. The associated CO hotspots were discussed previously as a less-than-significant impact. Thus, the project's CO emissions would not contribute to significant health effects associated with this pollutant. PM₁₀ and PM_{2.5} would not contribute to potential exceedances of the NAAQS and CAAQS for particulate matter, obstruct the SDAB from coming into attainment for these pollutants, or contribute to significant health effects associated with particulates. Therefore, health impacts associated with criteria air pollutants would be less than significant.

d) Less-than-Significant Impact: The proposed project could generate emissions resulting in objectionable odors from construction, vehicles and/or equipment exhaust from VOCs, ammonia, carbon dioxide, hydrogen sulfide, methane, alcohols, disulfides, dusts, or other pollutants during the construction or operation of the project. Such exposure would be in trace amounts, localized in the immediate area, and temporary and would generally occur at magnitudes that would not affect substantial numbers of people. Therefore, impacts associated with odors during construction or operation would be less than significant.

	OLOGICAL RESOURCES	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by California Department of Fish and Game or U.S. Fish and Wildlife Service?		×		
b)	Have a substantial adverse effect on any riparian, aquatic or wetland habitat or other sensitive natural community identified in		X		

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	IOLOGICAL RESOURCES Vould the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
	local or regional plans, policies, or regulations or by California Department of Fish and Game or U.S. Fish and Wildlife Service?				
c)	Have a substantial adverse effect on state or federally protected wetlands (including but not limited to marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?		\boxtimes		
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?		\boxtimes		
e)	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?			X	
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?		\boxtimes		

An Updated Biological Resources Survey Report (Biological Report) was prepared by Vincent N. Scheidt, a certified biological consultant, in October 2021 (Scheidt 2021). The Biological Report documents the biological surveys of existing conditions and impact analysis. The following section is based on the findings within the Biological Report.

Methods

As discussed in the Biological Report, the project research methods included a literature review and site surveys to identify plant and wildlife species on site. Literature was reviewed prior to initiation of the site surveys. For further information on literature reviewed, refer to the Biological Report (Scheidt 2021).

Survey Results

The Biological Report identifies existing biological resources within the project site. As seen in Figure 9, Biological Resources Impacts, there are three primary types of vegetation found on site: CSS, southern willow scrub, and disturbed habitat. Additionally, Figure 9 identifies orange-throated whiptail (Aspidoscelis hyperythra beldingi), California gnatcatcher (Polioptila californica), and California adolphia (Adolphia californica) as plant and wildlife species found on the project site.

Habitat Types and Vegetation Communities

Diegan Coastal Sage Scrub

Approximately 5.38 acres of CSS vegetation is found on site. This habitat type is dominated by California sagebrush (*Artemisia californica*), black sage (*Salvia mellifera*), laurel sumac (*Malosma laurina*), and

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numerous other CSS species. The on-site CSS extends down the east and north facing slope and up the west facing slope a short distance east of the on-site drainage. The biological resource value of the CSS on this site is high.

Southern Willow Scrub

Approximately 0.21 acres of southern willow scrub vegetation is found on site in alignment with the on-site drainage on the southern portion of the project site. This habitat is dominated by a mature stand of arroyo willows (*Salix lasiolepis*). Additionally, two mature coast live oaks (*Quercus agrifolia*) are found below the willows adjacent to the drainage. The biological resource value of the southern willow scrub on this site is high.

Disturbed Habitat

Approximately 0.75 acres of disturbed habitat is found on the western edge of the project site. This area consists of what appears to be a previously graded area supporting weedy vegetation such as wild anise (Foeniculum vulgare), wild lettuce (Lactuca serriola), black mustard (Brassica nigra), and numerous other urban weeds. The area also supports remnants of old illegal dumping activity, although the installation of a temporary fence along Palmer Way has mostly blocked this activity. The biological resource value of the disturbed habitat is low.

Table 6 summarizes the existing habitat types found on site, as well as potential impacts (discussed below).

Table 6
Project Site Existing Habitat Types and Impacts

Habitat-Type	Existing Acreage	Impacted Acreage	Mitigation Ratio	Minimum Mitigation Required	Preserved Acreage
CSS	5.38 ac	0.68 ac	2:1	1.36 ac	4.70 ac
DH	0.75 ac	0.75 ac	n/a	Mitigation fee	None
SWS	0.21 ac	None	3:1 None		0.21 ac
Total	6.34 ac	1.43 ac	1	1.36 ac	4.91 ac

Source: Scheidt 2021.

Notes: CSS = coastal sage scrub; ac = acres; DH = disturbed habitat; n/a = not applicable; SWS = southern willow scrub.

Flora

Sixty-four species of vascular plants were found on the project site. The plant species observed typify the diversity normally found in CSS and on disturbed/developed habitat areas in this part of the City. A complete list of the plants detected, listed alphabetically, can be found in the Biological Report (Scheidt 2021). This list would be expected to represent at least 80% of the naturalized plants occurring on this site. The balance would be seasonal annuals or other ephemeral species, or species on the very steep slopes.

Fauna

Thirty-eight species of vertebrate animals were observed on the project site. These are mostly common species, abundant in the project site's general vicinity. Animals observed on site are listed in the Biological

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Report (Scheidt 2021). This list is generally representative of the native fauna that resides on site, although many additional species are anticipated. In particular, the invertebrate fauna of this site is anticipated to consist of dozens of additional species, all common to the local area.

Sensitive Plant Species

One sensitive plant species was observed during the field surveys: California adolphia (Scheidt 2021). Sensitive plants are those listed as "Rare," "Endangered," "Threatened," or "of Special Concern," or otherwise considered noteworthy by the City, the California Department of Fish and Wildlife (CDFW), the U.S. Fish and Wildlife Service, the California Native Plant Society, or other conservation agencies and organizations. This species occurs in coastal scrub and chaparral habitats, particularly within clayey soils. California adolphia is represented on site by six mature specimens, all occurring in the development area (Scheidt 2021). Because of the growth form of California adolphia, it is difficult to estimate numbers, and it is likely that additional specimens occur on the very steep slope areas within the CSS.

Sensitive Animal Species

Because the project site supports CSS, the project site was surveyed for the presence or absence of California gnatcatcher, a federally listed Threatened Species, which is known to inhabit this habitat type. During surveying, two sensitive animal species (California gnatcatcher and orange-throated whiptail) were observed on the project site. Sensitive animals are those listed as "Rare," "Endangered," "Threatened," or "of Special Concern" or otherwise considered noteworthy by the City, CDFW, the U.S. Fish and Wildlife Service, the National Audubon Society, or other conservation agencies and organizations.

California Gnatcatcher

One female California gnatcatcher was observed foraging on and at the edge of the steep slope just east of the disturbed area within the central portion of the site. This species occurs in coastal shrubs and chaparral scrub habitats. Thus, the project site is considered occupied by this species.

Orange-Throated Whiptail

One orange-throated whiptail was observed on site in association with the southernmost limits of the disturbed habitat. Additional specimens occurring in the flatter areas of the site are anticipated. This species inhabits CSS, chaparral and areas of open brush with loose soils. Additionally, this species may be found in open, dry riparian areas.

Wetlands and Jurisdictional Waters

The project site supports one area of jurisdictional wetlands or waters in the form of an on-site drainage near the site's southern edge. The drainage likely qualifies as waters of the state and waters of the United States as defined by the CDFW, the San Diego Regional Water Quality Control Board (RWQCB), and the U.S. Army Corps of Engineers (USACE), respectively. No improvements in this area are proposed in association with proposed project. However, any discharge into the drainage requiring improvements, including construction access, and any footings or supports placed within the drainage, would be likely be considered impacts to waters of the state/waters of the United States and would require CDFW, RWQCB, and USACE clearances prior to construction.

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Habitat Connectivity and Wildlife Corridors

As stated in the Biological Report, the project site does not support any nursery sites (Scheidt 2021). Additionally, the project site does not support any local or regional wildlife corridors. The nearest area containing a wildlife corridor is located to the northwest at Agua Hedionda Creek. This area is about 200 feet downslope from the northwest project site edge. This area is part of the North County Multiple Habitat Conservation Program (MHCP) Core Area No. 5, which borders the property along its northeastern edge.

a) Less-than-Significant Impact with Mitigation Incorporated: The project site is home to various types of habitats and vegetation. As previously discussed in this section, three sensitive species were detected on the project site. Sensitive species are those listed as rare, endangered, threatened, or of special concern, and thus considered special-status species. All resident sensitive species, as well as non-sensitive species, would be directly and indirectly impacted within the project site footprint. This includes six specimens of California adolphia, an undetermined number of orange-throated whiptails, and one pair of California gnatcatchers (if habitat removal activities occur during the breeding season).

Direct impacts would result from the actual removal of plants and wildlife from the site as a product of the removal of their habitat. Indirect impacts would primarily consist of edge effects impacting natural areas on site and adjoining off-site areas that are utilized by the resident plant and animal species. Examples of indirect impacts include the introduction of exotic species, human intrusions into natural areas, lighting, traffic, and noise. Further, indirect impacts to breeding birds associated with clearing and construction activities could occur if activities were to take place during the avian breeding season. As seen in Table 6, the total amount of land to be impacted by the project is 1.43 acres. The remaining 4.91 acres would remain undeveloped and would be preserved. Habitat that would be impacted as a result of the project would be 0.68 acres of CSS and 0.75 acres of disturbed habitat. As presented in Table 6, the entire area of disturbed habitat would be impacted while a small portion of CSS would be impacted. As such, the disturbed habitat would be the primary area to be affected and the majority of the project site would remain undisturbed from construction activities. However, because the portion of the project site proposed for development would create direct and indirect impacts to sensitive plant and animal species (including their habitat), impacts would be potentially significant.

Impacts to 0.68 acres of CSS require mitigation at a 2:1 ratio. Mitigation may be provided through the onsite preservation of 4.70 acres of CSS habitat (Mitigation Measure [MM] BIO-1 and MM-BIO-2). Mitigation for impacts to 0.75 acres of disturbed habitat will be provided by paying a per acre in-lieu mitigation fee (MM-BIO-1). Impacts to California adolphia shall be avoided through the dedication of on-site open space. However, California adolphia is not federal or state listed and is not covered under the City's Habitat Management Plan (HMP) (City of Carlsbad 2004). Therefore, impacts to the species are not considered significant and species-specific mitigation for California adolphia is not required. Impacts to the adjacent HMP preserve areas would be avoided through implementation of the HMP Adjacency Standards (MM-BIO-3). Impacts to nesting birds would be avoided through avoidance of construction during the breeding season or preconstruction surveys (MM-BIO-4).

Therefore, impacts to special-status species would be less than significant with mitigation incorporated.

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Mitigation Measures

MM-BIO-1

Mitigation for impacts to 0.68 acre of Coastal Sage Scrub requires mitigation at a 2:1 mitigation ratio. Mitigation shall be provided through the onsite preservation of 4.70 acres of Coastal Sage Scrub habitat. Mitigation for impacts to 0.75 acre of Disturbed Habitat shall be provided by paying a per acre in-lieu mitigation fee prior to final map approval, issuance of a grading permit, or clearing of any habitat, whichever occurs first. Note that a final, current mitigation fee will be determined by the Carlsbad City Council.

MM-BIO-2

Prior to final map approval, issuance of a grading permit, or clearing of any habitat, whichever occurs first, the project applicant shall perform the following, each of which shall be approved by the City:

- Record a conservation easement, as defined by California Civil Code, Section 815.1, or other protective measure for all on-site mitigation land including 4.93 acres of open space.
- Select a qualified, City-approved, conservation entity to manage the conserved land.
- Prepare a preserve management plan, which will be approved by the City of Carlsbad.
- Prepare a Property Analysis Record, or acceptable alternative, to estimate costs of inperpetuity management and monitoring or otherwise provide for an estimate of funding needed.
- Provide a non-wasting endowment or other funding sources acceptable to the City of Carlsbad at a qualified third-party financial institution based on the Property Analysis Record to sufficiently cover the costs of in-perpetuity management and monitoring.

MM-BIO-3

In order to prevent impacts of the proposed development on the City of Carlsbad's Habitat Management Plan (HMP) preserve area off site, the proposed project shall comply with the adjacency standards outlined in the Carlsbad HMP. Prior to the issuance of the first grading permit, the project plans shall reflect the adjacency standards as follows:

a. Fire Management

Fire management for the proposed project shall be addressed through the designation of the fuel modification zones (FMZs). All FMZ areas shall be incorporated within the development boundaries and shall be addressed with the preparation of a fire protection plan.

b. Erosion Control

Standard best management practices will be implemented to avoid, reduce, contain, and clean up toxic chemicals and polluted stormwater runoff and prevent them from contaminating groundwater and off-site wetlands and non-wetland waters. In addition, no new surface drainage shall be directed into the open space areas.

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Landscaping Restrictions

Landscape planting palettes for the proposed project shall not use non-native, invasive plant species that can displace native species in natural communities. These plant species are identified in the Carlsbad HMP but the list of invasive species that will be avoided is not limited to the species on the Carlsbad HMP list. None shall be utilized on site and no potentially invasive species shall be planted in or within 100 feet of the HMP. Additionally, the project shall not use horticultural regimes (irrigation, fertilization, pest control, and pruning) that can alter site conditions in natural areas. Irrigation of the landscaping shall be designed and scheduled to avoid runoff into the proposed open space. Further, the project shall avoid genetic contamination from the introduction of native cultivars not collected on site or in proximity to the site.

d. Fencing, Signs, and Lighting

To control and direct humans, domestic animals, and wildlife, fencing shall be installed on the project site. Signs shall be placed near the entrance and along other appropriate locations. No lighting shall be permitted in the preserve except where essential for roadways, facility use, and safety. Along preserve edges, major highway lighting shall be limited to low pressure sodium sources directed away from the preserve areas. No access or public entrance shall lead to the HMP from the project site. Cut-off shields shall be used on all lighting structures adjacent to the HMP preserve, and lighting shall meet the minimum lumen requirements for commercial parking areas. Lighting shall also be controlled by a dusk-to-dawn sensor to ensure the parking area is not being lit during unnecessary hours. Additionally, parking stalls adjacent to sensitive habitat shall be screened by a 3-foot-high solid concrete screen wall.

e. Predator and Exotic Species Control

Non-native plant and animal species have few natural predators or other ecological controls on their population sizes, and they sometimes thrive under conditions created by humans. These species may aggressively outcompete native species or otherwise harm sensitive species. Therefore, the project shall implement special management measures to control exotic species and non-native predators.

MM-BIO-4

Clearing, grading, and modification activities are generally prohibited during the bird breeding season (February 15–August 31). Other construction activities will also be avoided during the breeding season if feasible. If vegetation clearing or construction cannot be avoided during the breeding season, then a qualified biologist shall conduct preconstruction surveys no more than 3 days prior to the start of construction activities. If a nest is found, a no-work buffer zone shall be established around the nest until the young have successfully fledged, as determined by a qualified biologist. The width of the buffer zone shall be 500 feet for the California gnatcatcher. For other species, the width of the buffer zone shall be determined by a qualified biologist based on the species and as approved by the City of Carlsbad.

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b) Less-than-Significant Impact with Mitigation Incorporated: As stated previously in this section, the project site contains multiple habitat types consisting of CSS, disturbed habitat, and southern willow scrub. Habitat that would be impacted as a result of the project would be 0.68 acres of CSS and 0.75 acres of disturbed habitat. As presented in Table 6, the entire area of disturbed habitat would be developed while a small portion of CSS would be impacted. As such, the disturbed habitat would be the primary habitat to be affected and the majority of the project site would remain undisturbed from construction activities.

Additionally, the project site supports one area of jurisdictional wetlands or waters in the form of an on-site drainage near the site's southern edge. However, the drainage is located within the portion of the site that is not proposed for development. Further, Agua Hedionda Creek is located approximately 200 feet downslope from the northwest edge of the project site. This area is part of MHCP Core Area No. 5. MHCP Core Area No. 5 is part of a comprehensive planning process that addresses the needs of multiple plant and animal species in northwestern San Diego County. Due to the proximity to the MHCP, the project shall comply with the Adjacency Standards set forth in the City's HMP, MM-BIO-3, to reduce potential impacts plant and animal species. Therefore, with implementation of mitigation, impacts associated with aquatic, or wetland habitats would be less than significant.

c) Less-than-Significant Impact with Mitigation Incorporated: As stated previously in this section, the project site supports one area of jurisdictional wetlands or waters in the form of an on-site drainage near the project site's southern edge. The drainage likely qualifies as waters of the state and waters of the United States as defined by the CDFW, the San Diego RWQCB, and USACE.

No improvements associated with the project are proposed in this area. However, any discharge into the drainage requiring improvements, including construction access, and any footings or supports placed within the drainage, would be likely be considered impacts to waters of the state/waters of the United States and would require CDFW, RWQCB, and USACE clearances prior to construction. In compliance with the National Pollutant Discharge Elimination System Construction General Permit, a Stormwater Quality Management Plan (SWQMP) was prepared for the proposed project, which specifies source control, site design, and structural BMPs that would be implemented during construction and operation to minimize impacts to water quality. Refer to Section X, Hydrology and Water Quality, for further details. Additionally, the project would be subject to HMP Adjacency Standards, MM-BIO-3, which reduce potential erosion impacts such as pollution and sedimentation of important water sources and the loss of vegetative cover from landslides. Therefore, impacts associated with a state or federally protected wetland would be less than significant with mitigation incorporated.

d) Less-than-Significant Impact with Mitigation Incorporated: As discussed previously in this section, the project site does not support any nursery sites. Additionally, the project site does not support any local or regional wildlife corridors. The nearest area containing a wildlife corridor is located to the northwest at Agua Hedionda Creek. This area is about 200 feet downslope from the northwest edge of the project site. However, this area is part of MHCP Core Area No. 5, which borders the property along its northeastern edge. MHCP Core Area No. 5 is part of a comprehensive planning process that addresses the needs of multiple plant and animal species in northwestern San Diego County. Due to the proximity to the MHCP, the project shall comply with the Adjacency Standards set forth in the City's HMP, MM-BIO-3, to reduce potential impacts plant and animal species. As such, impacts to wildlife corridors or linkages would be less than significant with the incorporation of mitigation.

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e) Less-than-Significant Impact: The City has no formal tree protection ordinance that pertains to trees located on private property. The City's Tree Ordinance pertains to protection of trees within the public right-of-way (City of Carlsbad 2000). Under existing conditions, the primary habitat types found on the project site are CSS, disturbed habitat, and southern willow scrub (Scheidt 2021). Two mature coast live oak trees were found below southern willow scrub located adjacent to the on-site drainage on the southern portion of the project site. As previously discussed in response IV.b, no improvements associated with the project are proposed in the drainage area. Thus, the area of the project site containing the coast live oak trees would be preserved as open space. Therefore, any conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance, would be less than significant.

f) Less-than-Significant Impact with Mitigation Incorporated: As discussed previously in this section, the area that borders the project site along the northeastern edge is located within MHCP Core Area No. 5 (Scheidt 2021). MHCP Core Area No. 5 is part of a comprehensive planning process that addresses the needs of multiple plant and animal species in northwestern San Diego County. Due to the proximity to the MHCP, the project shall comply with the Adjacency Standards set forth in the City's HMP, MM-BIO-3. As such, with adherence to the MHP Adjacency Standards, impacts would be reduced to a less-than-significant level. Therefore, any conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan would be less than significant with mitigation incorporated.

V. CULTURAL RESOURCES Would the project:		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact	
	a)	Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?				\boxtimes
	b)	Cause a substantial adverse change in the significance of an archeological resource pursuant to §15064.5?		\boxtimes		
	c)	Disturb any human remains, including those interred outside of dedicated cemeteries?		×		

A Cultural Resources Survey (Cultural Survey) was prepared for the project site by Gallegos & Associates in April 2008 (Gallegos 2008). In In September 2020, an update to the Cultural Survey was prepared for the project site (Gallegos 2020). The 2020 update to the Cultural Survey includes the results of an updated survey and update to the existing project site condition and recommendations.

Methods

Record Search and Literature Review

A record search and literature review of the project site was conducted in 2008 by Gallegos & Associates. The record search and literature review were completed at the South Coastal Information Center, San Diego State University, California, and at the research library at Gallegos & Associates (Gallegos 2008).

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Historical Map Review

Historic maps of the project site were reviewed for historic resources, features, and roads (Gallegos 2008).

Survey

The project site was surveyed on foot using 10-meter intervals between survey transects in March 2008 (Gallegos 2008). As previously mentioned, an update to the Cultural Survey was prepared in September 2020 and included a new survey of the project site in July and September 2020. A Native American Monitor representing the San Luis Rey Band of Luiseño Indians provided monitoring services for fieldwork conducted (Gallegos 2020).

Results

Record Search

The record search performed for the project site in 2008 found that within a 1-mile radius of the project site, 27 studies have been conducted, and 19 cultural resource sites and 1 isolate have been recorded. One study has been conducted in the project site. However, no previously recorded sites are recorded within the project site (Gallegos 2008). The update to the Cultural Survey did not identify any cultural resource sites (Gallegos 2020). Therefore, there is no change in findings in the update to the Cultural Survey.

Historical Map Review

No historical sites were identified within the project site based on a review of historical maps (Gallegos 2008). The update to the Cultural Survey did not identify any historical sites (Gallegos 2020). Therefore, there is no change in findings in the update to the Cultural Survey.

Survey

As previously discussed, the project site was surveyed in 2008 as part of the Cultural Survey prepared for the project. The survey found that ground visibility was poor within the steep slope areas, with vegetation consisting of CSS and non-native grasses. Ground visibility was also poor in the relatively flat area adjacent to Palmer Way, with vegetation consisting mostly of mulch and some CSS. Disturbance within the project site includes previous grading and fill for construction of Palmer Way, modern trash dumping, and migrant camp activities. Additionally, the field survey was negative, identifying no cultural resources (Gallegos 2008). The update to the Cultural Survey included findings from a new survey of the project site. The findings showed that no major grading or disturbance occurred since the project site was previously surveyed in 2008. However, vegetation had been cleared since the last survey in 2008. Visibility was excellent for the western 15% of the project site (area most likely for cultural resources). Soil color was light orange to brown. The remaining project site is steep slopes with native vegetation. Additionally, no artifacts were located as a result of the survey, and ground visibility was excellent showing high rodent disturbance and no evidence of a subsurface cultural resource deposit. While the conditions of the project site changed since the previous

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survey in 2008, no cultural resources were identified. Thus, there is no change in findings related to significant cultural resources in the update to the Cultural Survey (Gallegos 2020).

a) **No Impact:** A significant impact may occur if grading or excavation activities associated with a project would disturb historic resources that presently exist within the project site.

A historical resource is defined by California Public Resources Code Section 21084.1 and CEQA Guidelines Section 15064.5 as any resource listed in or determined to be eligible for listing in the California Register of Historical Resources (CRHR), is listed in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), is identified as significant in a historical resource survey meeting the requirements of Public Resources Code Section 5024.1(g), or is determined to be a historical resource by the project's lead agency. The criteria for listing resources on the CRHR were expressly developed to be in accordance with criteria for listing in the National Register of Historic Places, enumerated below. A resource is considered historically significant if it (i) retains "substantial integrity," and (ii) meets at least one of the following criteria (PRC Section 5024.1[c][1–4]):

- 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 order to understand the historic importance of a resource, sufficient time must have passed to obtain a scholarly perspective on the events or individuals associated with the resource. A resource less than 50 years old may be considered for listing in the CRHR if it can be demonstrated that sufficient time has passed to understand its historical importance (see 14 CCR 4852[d][2]). A significant adverse effect would occur if a project were to adversely affect a historical resource as defined by California Public Resources Code Section 21084.1 and Section 15064.5 of the CEQA Guidelines.

As previously discussed, the record search performed for the project site in 2008 found that within a 1-mile radius of the project site, 27 studies have been conducted, and 19 cultural resource sites and 1 isolate have been recorded. One study has been conducted in the project site. However, no previously recorded sites are recorded within the project site. Similarly, the findings of the record search in the Cultural Report identified one previous survey (Seeman 1982) that has been conducted in the project site; however, no cultural resource sites were previously recorded within the project site. Additionally, no historical sites were identified within the project site on the historic maps reviewed (Gallegos 2020). Therefore, no impacts associated with historical resources would occur.

b) Less-than-Significant Impact with Mitigation Incorporated: As previously discussed, the record search performed for the project site in 2008 found that within a 1-mile radius of the project site, 27 studies have been conducted, and 19 cultural resource sites and 1 isolate have been recorded. One study has been conducted in the project site. However, no previously recorded sites are recorded within the project site (Gallegos 2008). The update to the Cultural Survey did not identify any cultural resource sites (Gallegos 2020). Therefore, there is no change in findings in the update to the Cultural Survey. Further, the portion of the project site along Palmer Way has been previously graded and consists of disturbed

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soil. As such, it is possible that any archaeological resources that may have once been located on the graded portion of the project site could have been previously disturbed. Nonetheless, it is always possible that intact archaeological deposits, including tribal cultural resources, are present at subsurface depths that were not impacted by previous grading activities. Thus, MM-CUL-1 through MM-CUL-12 are incorporated to reduce potential impacts to unanticipated archaeological and tribal cultural resources. With incorporation of MM-CUL-1 through MM-CUL-12, impacts associated with archaeological and tribal cultural resources would be less than significant.

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Mitigation Measures

MM-CUL-1

An archaeological monitor shall be present for initial ground-disturbing activities associated with the proposed project in the event unanticipated discoveries are made. If human remains are discovered, California Health and Safety Code Section 7050.5, states that further disturbances and activities shall stop in any area or nearby area suspected to overlie remains, and the County coroner shall be contacted. At this time, the person who discovered the remains will contact the City of Carlsbad so that they may work with the most likely descendent on the respectful treatment and disposition of the remains.

MM-CUL-2

Prior to the commencement of any ground disturbing activities, the project developer shall enter into a Pre-Excavation Agreement, otherwise known as a Tribal Cultural Resources Treatment and Tribal Monitoring Agreement, with the San Luis Rey Band of Mission Indians or other Luiseño tribe. This agreement will contain provisions to address the proper treatment of any tribal cultural resources and/or Luiseño Native American human remains inadvertently discovered during the course of the project. The agreement will outline the roles and powers of the Luiseño Native American monitors and the archaeologist. A copy of said archaeological contract and Pre-Excavation Agreement shall be provided to the City of Carlsbad prior to the issuance of a grading permit.

MM-CUL-3

A Luiseño Native American monitor shall be present during all ground disturbing activities. Ground disturbing activities may include, but are not limited to, archaeological studies, geotechnical investigations, clearing, grubbing, trenching, excavation, preparation for utilities and other infrastructure, and grading activities.

MM-CUL-4

Any and all uncovered artifacts of Luiseño Native American cultural importance shall be treated with dignity and respect and be reburied on-site within an appropriate location protected by open space or easement, etc., where the cultural items will not be disturbed in the future, or shall be returned to the Most Likely Descendant, whichever is most applicable, and shall not be curated, unless ordered to do so by a federal agency or a court of competent jurisdiction.

MM-CUL-5

The Luiseño Native American monitor shall be present at the project's on-site preconstruction meeting to consult with grading and excavation contractors concerning excavation schedules and safety issues, as well as consult with the principal archaeologist concerning the proposed archaeologist techniques and/or strategies for the project.

MM-CUL-6

Luiseño Native American monitors and archaeological monitors shall have joint authority to temporarily divert and/or halt construction activities. If tribal cultural resources are discovered during construction, all earth moving activity within and around the immediate discovery area must be diverted until the Luiseño Native American monitor and the archaeologist can assess the nature and significance of the find.

MM-CUL-7

If a significant tribal cultural resource(s) and/or unique archaeological resource(s) are discovered during ground disturbing activities for this project, the San Luis Rey Band of

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Mission Indians shall be notified and consulted regarding the respectful and dignified treatment of those resources. Pursuant to California Public Resources Code Section 21083.2(b) avoidance is the preferred method of preservation for archaeological and tribal cultural resources. If however, the Applicant is able to demonstrate that avoidance of a significant and/or unique cultural resource is infeasible and a data recovery plan, is authorized by the City of Carlsbad as the lead agency, the San Luis Rey Band of Mission Indians shall be consulted regarding the drafting and finalization of any such recovery plan.

MM-CUL-8

When tribal cultural resources are discovered during the project, if the archaeologist collects such resources, a Luiseño Native American monitor must be present during any testing or cataloging of those resources. If the archaeologist does not collect the tribal cultural resources that are unearthed during the ground disturbing activities, the Luiseño Native American monitor shall follow the procedures in CUL-4.

MM-CUL-9

If suspected Native American human remains are encountered, California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the San Diego County Medical Examiner has made the necessary findings as to origin. Further, pursuant to California Public Resources Code Section 5097.98(b) remains shall be left in place and free from disturbance until a final decision as to the treatment and disposition has been made. Suspected Native American remains shall be examined in the field and kept in a secure location at the site. A Luiseño Native American monitor shall be present during the examination of the remains. If the San Diego County Medical Examiner determines the remains to be Native American, the Native American Heritage Commission (NAHC) must be contacted by the Medical Examiner within 24 hours. The NAHC must then immediately notify the "Most Likely Descendant" about the discovery. The Most Likely Descendant shall then make recommendations within 48 hours, and engage in consultation concerning treatment of remains as provided in Public Resources Code 5097.98.

MM-CUL-10

In the event that fill material is imported into the project area, the fill shall be clean of tribal cultural resources and documented as such. If fill material is to be utilized and/or exported from areas within the project site, then that fill material shall be analyzed and confirmed by an archeologist and Luiseño Native American monitor that such fill material does not contain tribal cultural resources.

MM-CUL-11

No testing, invasive or non-invasive, shall be permitted on any recovered tribal cultural resources without the written permission of the San Luis Rey Band of Mission Indians.

MM-CUL-12

Prior to the release of the grading bond, a monitoring report and/or evaluation report, if appropriate, which describes the results, analysis and conclusions of the monitoring program shall be submitted by the archaeologist, along with the Luiseño Native American monitor's notes and comments, to the City of Carlsbad for approval, and shall be submitted to the South Coastal Information Center. Said report shall be subject to confidentiality as an exception to the Public Records Act and will not be available for public distribution.

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c) Less-than-Significant Impact with Mitigation Incorporated: In the highly unlikely event that human remains are uncovered during ground-disturbing activities, there are regulatory provisions to address the handling of human remains in California Health and Safety Code Section 7050.5, California Public Resources Code Section 5097.98, and CEQA Guidelines Section 15064.5(e). Pursuant to these codes, in the event that human remains are discovered, disturbance of the site shall remain halted until the San Diego County coroner has conducted an investigation into the circumstances, manner, and cause of any death, and the recommendations concerning the treatment and disposition of the human remains have been made to the person responsible for the excavation or to his or her authorized representative, in the manner provided in Section 5097.98 of the California Public Resources Code. The county coroner is required to make a determination within 2 working days of notification of the discovery of the human remains. If the county coroner determines that the remains are not subject to his or her authority, and if he or she recognizes or has reason to believe the human remains to be those of a Native American, he or she shall consult with the Native American Heritage Commission by telephone within 24 hours, to designate a Most Likely Descendant who shall recommend appropriate measures to the landowner regarding the treatment of the remains. If the owner does not accept the Most Likely Descendant's recommendations, the owner or the Most Likely Descendant may request mediation by the Native American Heritage Commission. Refer also to mitigation measure MM-CUL-9. Therefore, with compliance with this existing state law and MM-CUL-9, impacts associated with human remains would be less than significant.

VI. ENERGY Would the project:		Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
 Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation? 			\boxtimes	
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?			×	

a) Less-than-Significant Impact: The construction and operation of the proposed project would require the consumption of energy resources in several forms at the project site and within the project site area. In general, the aggregated temporary (approximately 11-month) construction energy consumption would be less than the energy consumed during the long-term operation of the facility. An overview of the forms of energy consumption for construction and operation is provided as follows:

Construction Energy Consumption

- 1. Temporary direct electrical service: energy provided by SDG&E
 - Construction site lighting
 - Computer equipment
 - Temporary construction trailer operation
- 2. Fossil fuels (diesel and gasoline)

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- Off-road construction equipment
- Diesel-fired electric generators
- Worker vehicles, vendor trucks, and haul trucks

Operational Energy Consumption

- 1. Direct electrical service: energy provided by SDG&E
 - Building heating, ventilation, and air-conditioning
 - Lighting: interior and exterior facilities
 - Computer, audio, and video equipment
 - Appliances
- 2. Indirect energy consumption
 - Supply, distribution, and treatment of water and wastewater; solid waste
- 3. Fossil fuels (diesel and gasoline) transportation
 - Project employees, delivery, and customers

Construction and operational energy consumption is evaluated in detail below.

Construction

Electricity

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

Natural Gas

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

Petroleum

Heavy-duty construction equipment associated with demolition and construction activities would rely on diesel fuel, as would vendor trucks involved in delivery of materials to the project site. Construction workers would travel to and from the project site throughout the duration of construction. It is assumed in this analysis that construction workers would travel in gasoline-powered light-duty vehicles. Heavy-duty construction equipment of various types would be used during each phase of project construction.

In summary, construction of the project is anticipated to consume petroleum over approximately 11 months. California's consumption of petroleum is approximately 74.8 million gallons per day. Based on

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these assumptions, approximately 18 billion gallons of petroleum would be consumed in California over the course of the construction period (EIA 2017). Within San Diego County, approximately 1 billion gallons of petroleum (gasoline and diesel) would be consumed over the course of the construction period (CARB 2020). Therefore, impacts associated during construction would be less than significant.

Operation

Electricity

Operation of the project upon buildout would require electricity for multiple purposes, including cooling, lighting, appliances, and various equipment. Additionally, the supply, conveyance, treatment, and distribution of water and wastewater would indirectly result in electricity usage. The California Building Standards Code serves to enhance and regulate California's building standards. The Building Energy Efficiency Standards are part of the California Building Standards Code (specifically, Part 6 of Title 24). The most recent version of the Building Energy Efficiency Standards is referred to as the "2019 Building Energy Efficiency Standards" and goes into effect in January 2020.

Natural Gas

Project operation would require natural gas for various purposes, including natural gas appliances and space heating. However, the project would rely on electric water heaters. Similar to electricity, the project would be subject to the Title 24 2019 Building Energy Efficiency Standards.

Petroleum

During operations, the majority of fuel consumption resulting from the project would involve the use of motor vehicles traveling to and from the project site, including employees and customers. Over the lifetime of the project, the fuel efficiency of vehicles used by employees and customers, as well as vehicles used for deliveries to the project site, is expected to increase. As such, the amount of petroleum consumed as a result of vehicular trips to and from the project site during operation would decrease over time. There are numerous regulations in place that require and encourage increased fuel efficiency. For example, CARB has adopted an approach to passenger vehicles by combining the control of smog-causing pollutants and GHG emissions into a single, coordinated package of standards. The approach also includes efforts to support and accelerate the number of plug-in hybrids and zero-emissions vehicles in California (CARB 2013). Additionally, in response to Senate Bill 375, CARB adopted the goal of reducing per-capita GHG emissions from 2005 levels by 8% by 2020 and 18% by 2035 for light-duty passenger vehicles in the SANDAG planning area. As such, operation of the project is expected to use decreasing amounts of petroleum over time due to advances in fuel economy.

Summary

The proposed project would create additional electricity and natural gas demand by adding a new office building. However, the project would be subject to the 2019 Building Energy Efficiency Standards, which apply to new construction and regulate energy consumed for heating, cooling, ventilation, water heating, and lighting. Compliance with the 2019 Building Energy Efficiency Standards would ensure that the energy efficiency of the proposed buildings is maximized to the extent feasible. For these reasons, the proposed project would not result in wasteful, inefficient, or unnecessary consumption of energy. Impacts would be less than significant, and no mitigation is required.

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b) Less-than-Significant Impact. The proposed project would be subject to and would comply with, at a minimum, the 2019 California Building Code Title 24 (Title 24 of the California Code of Regulations, Part 6). The proposed project would be consistent with CARB's Scoping Plan, Assembly Bill (AB) 32, and Senate Bill 32. The proposed project would not conflict with existing energy standards and regulations; therefore, impacts during construction and operation of the proposed project would be less than significant. The proposed project would be consistent with the City's Climate Action Plan (CAP) and CAP Ordinances. Therefore, the project would not conflict with plans for renewable energy or energy efficiency and impacts would be less than significant.

	EOLOGY AND SOILS	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury or death involving:				
	i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.			\boxtimes	
	ii. Strong seismic ground shaking?			\boxtimes	
	iii. Seismic-related ground failure, including liquefaction?			\boxtimes	
	iv. Landslides?			\boxtimes	
b)	Result in substantial soil erosion or the loss of topsoil?			\boxtimes	
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?			\boxtimes	
d)	Be located on expansive soils, as defined in Section 1803.5.3 of the California Building Code (2016), creating substantial direct or indirect risks to life or property?			\boxtimes	
e)	Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?				×
f)	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?		⊠		

This section is based on the Preliminary Geotechnical Investigation (Geotechnical Report) prepared by Geotechnical Exploration Inc. in February 2018 (GE 2018) and the Paleontological Resource Survey Report (Paleontological Report) prepared by Red Tail Environmental Inc. in November 2019 (RTE 2019).

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Background and methodologies regarding the geotechnical analysis and paleontological resources analysis can be found in these reports.

- a) i. Less-than-Significant Impact: The project site is located within the seismically active region of Southern California. The California Geologic Survey does not include the City on its list of cities affected by Alquist-Priolo Earthquake Fault Zones (DOC 2019). There are no active faults that run directly through Carlsbad. Prominent fault zones generally considered to have the most potential for earthquake damage in the vicinity of the project site are the active Rose Canyon and Coronado Bank fault zones, located approximately 7 and 23 miles southwest of the project site, respectively (GE 2018). Additionally, the active Elsinore and San Jacinto fault zones are located approximately 22 and 45 miles northeast of the project site, respectively. Although there are no active faults within the City, the City is located within a seismically active region, and earthquakes have the potential to cause ground shaking of significant magnitude. Although located near fault lines, the City lies within a medium-low probabilistic peak ground acceleration zone during earthquake shaking (DOC 2019). Therefore, due to its distance to the nearest active fault, the project site would not be substantially affected by fault rupture. Impacts would be less than significant.
- a) ii. Less-than-Significant Impact: The project would be located within the seismically active region of Southern California. The proximity to nearby fault zones such as the Rose Canyon fault (approximately 7 miles from the project site), the Coronado Bank fault (approximately 23 miles from the project site), the Elsinore fault (approximately 22 miles from the project site), and the San Jacinto fault (approximately 45 miles from the project site) could subject the project site to strong seismic ground shaking (GE 2018). According to the February 2018 Geotechnical Report (GE 2018), the project site is in a seismically active region. However, no active or potentially active fault is known to exist at the site, and the site is not situated within an Alquist-Priolo Earthquake Fault Zone. Further, the project would comply with the most recent California Building Code and applicable grading ordinances of the City and San Diego County. Additionally, a certified geologist would continue to review site plans as they become available, which would include building design standards intended to minimize risk to people and structures from potential seismic ground shaking. As such, impacts would be less than significant.
- a) iii. Less-than-Significant Impact: Liquefaction typically occurs when a site is subjected to strong seismic shaking, on-site soils are less cohesive, and groundwater is encountered near the surface. The factors known to influence liquefaction potential include soil type and grain size, relative density, groundwater level, confining pressures, and intensity and duration of ground shaking. In general, materials that are susceptible to liquefaction are loose, saturated granular soils that have low fines content under low confining pressures. Figure 6-6 in the Public Safety Element of the General Plan indicates that the project site is not within a liquefaction hazard area (City of Carlsbad 2015a). As described in the Geotechnical Report (GE 2018), the materials encountered in exploratory trench excavations T-1, T-3, T-4, and T-6 consisted of loose to medium dense clayey sand fills ranging in depths of 1 to 3 feet, underlain by dense to very dense sands of the Lusardi Formation. The materials encountered in exploratory trench excavations T-2 and T-5 consisted of loose clayey sand and sandy clay topsoil to a depth of 0.5 feet, underlain by dense to very dense sands of the Lusardi Formation. Liquefaction is typically associated with soils that are loosely packed, poorly drained, and fine grained. Further, prior to the issuance of the grading permit, the applicant shall verify that the applicable recommendations of the Geotechnical Report have been incorporated into the project design and construction documents to the satisfaction of the City engineer. Recommendations shall hold to performance standards within the applicable ordinances (including site clearing and preparation, fills, and excavation regulations) of the City and San Diego County, as well as the standards provided in the most

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recent California Building Code. With implementation of the recommendations outlined in the Geotechnical Report and performance standards within all applicable ordinances, the risk of loss, injury, or death involving liquefaction would be less than significant.

a) iv. Less-than-Significant Impact: The project site is situated within a geographically hilly area. However, the project site itself contains a mixture of relatively flat land and downward facing slope areas primarily along the outer edges of the project site to the north, east, and south. According to the City's Final Environmental Impact Report, Carlsbad does not include any areas identified as being susceptible to landslides and the overall risk of landslides is low (City of Carlsbad 2015b). However, areas with steep slopes that have 25% or greater incline/decline have increased landslide risk. The proposed office building would be located on the western edge of the project site where the land is generally flat with gentle slopes. The remaining area of the project site would remain undeveloped and existing vegetation would be preserved. This component of the project would span steep slopes with a maximum decline of 40%. Within the 40% slope, a residential use would be located approximately 180 feet to the east of the project site (Figure 8). To evaluate the risk of landslides, investigation work, laboratory test results, and engineering analysis were conducted for the project site. The results of the Geotechnical Report concluded that the project site would not be considered at high risk for landslides. Refer to the Geotechnical Report for further analysis details (GE 2018). Additionally, the project would adhere to recommendations for site preparation, foundation criteria, and other general construction recommendations outlined in the Geotechnical Report. Therefore, impacts associated with landslides would be less than significant.

b) Less-than-Significant Impact: Under existing conditions, the majority of the project site is undeveloped land, with a small portion of land adjacent to Palmer Way that has been previously graded. However, the project site is currently vacant. Project construction would involve site preparation, light grading, and trenching, which may temporarily expose soils to increased erosion potential. The project would be required to comply with the Construction General Permit, which requires the implementation of a SWPPP. The SWPPP would employ various BMPs intended to minimize soil erosion during construction. Upon completion of construction, the project site would be partially developed with a two-story office building and associated improvements and landscaped areas; paved areas would stabilize soils to minimize erosion. Although the project would introduce a new impervious area (approximately 0.61 acres), which would generate more surface runoff leading to soil erosion, the increase would not be significant.

As discussed further in Section X, during operation, runoff generated from the developed area of the project site would drain to the two proposed biofiltration basins for cleansing purposes and would be conveyed to a proposed underground vault for detention and hydromodification. The runoff would be connected to the existing public storm drain within Palmer Way. Thus, the project would only result in a small increase to runoff. Additionally, the increase in water flow would be detained on site in order release the same amount as preproject conditions. See Section X for further details. Additionally, the project would be subject to SDAPCD Rule 55, Fugitive Dust Control. This rule requires that the proposed project take steps to restrict visible emissions of fugitive dust beyond the property line (SDAPCD 2009). Visible roadway dust as a result of active operations, spillage from transport trucks, or trucks tracking out dirt shall be minimized by applicable erosion control measures that apply to the project. Further, the remaining project site would remain undeveloped and existing vegetation would be preserved. As such, a majority of the project site would remain the same. Therefore, impacts would be less than significant.

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c) Less-than-Significant Impact: Strong ground shaking can not only cause structures to shake, but also has the potential to induce other phenomena that can indirectly cause substantial ground movements, especially in geologic units or soil that is unstable. These phenomena can include soil liquefaction, land sliding, lateral spread, and differential compaction and ground cracking. However, the Geotechnical Report indicates that the location of and geotechnical conditions of the project site are not conducive to any of the aforementioned phenome. As described in the Geotechnical Report (GE 2018), the materials encountered in exploratory trench excavations T-1, T-3, T-4, and T-6 consisted of loose to medium dense clayey sand fills ranging in depths of 1 to 3 feet, underlain by dense to very dense sands of the Lusardi Formation. The materials encountered in exploratory trench excavations T-2 and T-5 consisted of loose clayey sand and sandy clay topsoil to a depth of 0.5 feet, underlain by dense to very dense sands of the Lusardi Formation. Additionally, the materials found in exploratory boring B-1 consisted of dense to very dense sands of the Lusardi Formation from surface to the maximum depth of exploration of 37 feet. Liquefaction is typically associated with soils that are loosely packed, poorly drained, and fine grained. Thus, the underlain soils found below a maximum depth of 3 feet are not considered susceptible to liquefaction.

Additionally, investigation work, laboratory test results, and engineering analysis were conducted for the project site to evaluate the risk of landslides. The results of the Geotechnical Report concluded that the project site would not be considered at high risk for landslides. Refer to the Geotechnical Report for further analysis details (GE 2018). Additionally, the project would adhere to recommendations for site preparation, foundation criteria, and other general construction recommendations outlined in the Geotechnical Report. Prior to the issuance of the grading permit, the applicant is required to verify that the applicable recommendations of the Geotechnical Report have been incorporated into the project design and construction documents to the satisfaction of the City engineer. Recommendations shall hold to performance standards within the applicable ordinances (including grading, construction, and landscaping regulations) of the City and the standards provided in the most recent California Building Code that are intended to reduce risk related to geologic hazards. Therefore, with implementation of these recommendations, impacts would be less than significant.

- d) Less-than-Significant Impact: Soils beneath the project site were tested for their expansive properties. As stated in the Geotechnical Report (GE 2018), soils beneath the project site represent a low to medium expansion potential. Prior to the issuance of the grading permit, the applicant shall verify that the applicable recommendations of the Geotechnical Report have been incorporated into the project design and construction documents to the satisfaction of the city engineer. Recommendations shall hold to performance standards within the applicable ordinances of the City and San Diego County, as well as the standards provided in the most recent California Building Code. With implementation of the recommendations outlined in the Geotechnical Report and performance standards within all applicable ordinances, the project would not lead to risks to life or property regarding expansive soils. Impacts would be less than significant.
- e) No Impact: The project does not propose the use of septic tanks; therefore, no impact would occur.
- **f)** Less-than-Significant Impact with Mitigation Incorporated: On October 28th, 2019, a record search was completed by the San Diego Natural History Museum (SDNHM) to determine whether any known fossil localities occur within or adjacent to the project area and to identify the sensitivity of geological formations present in the project area. Additionally, a literature and geological map review and field survey were conducted. Refer to the Paleontological Report for further details (RTE 2019).

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Geological Map Review Results

As stated in the Paleontological Report (RTE 2019), the paleontologically sensitive rock units underlying the area in the vicinity of Palmer Way are mapped as Late Cretaceous Point Loma Formation underlain by Upper Cretaceous Lusardi Formation. The field survey confirmed that the project site has been previously graded and only previously disturbed dirt can be observed from the surface. Any proposed excavation activity that extends deep enough to encounter previously disturbed deposits has the potential to adversely impact nonrenewable paleontological resources.

Museum Record Search and Literature Results

A paleontological record search and map review for the project was completed at SDNHM and is included in the Paleontological Report (RTE 2019). The SDNHM has recorded 73 fossil localities within 1 mile of the project site, 4 of which are localities from the Pleistocene-age Bay Point Formation, which is not anticipated to be present within the project boundary or impacted during construction. The remaining 69 localities are from the Point Loma Formation, which is anticipated to be present within the project boundary and is likely to be impacted during project construction. The 69 localities yielded trace fossils, burrows and borings, impressions or remains of plants and marine invertebrates and vertebrates, and terrestrial vertebrates. The SDNHM does not have fossil localities from the Lusardi Formation within a 1-mile radius of the project site. Only small plant material fragments have been collected from the Lusardi Formation in Carlsbad, but the age of this geologic unit and its terrestrial depositional setting implies the potential for preserving dinosaurs and other terrestrial vertebrates. Therefore, the Lusardi Formation is assigned a moderate paleontological sensitivity.

Field Survey Results

The field survey conducted for the project found that the groundcover appears to be 100% previously disturbed fill at the surface, consisting of brownish silty sand. Many types of rocks can be observed on the surface, including a moderate amount of igneous rocks. In some places there is decomposed granitic rock and chunks of chalky, calcareous sediment containing medium to course grained angular quartz sand. In the northern part of the project site were pieces of a concreted silty mudstone ranging in size from a couple smaller plum-sized fragments to a larger chunk about 8 inches long. An external mold of a single valve of the Cretaceous-age bivalve *Indogrammatadon* species about 35 millimeters in length was identified on the larger piece. Two of the smaller rocks had fossils as well, but could not be identified beyond being bivalve or gastropod, though one of the small fossils may be an infant of a giant Cretaceous mussel. Generally, the rock material examined at the surface on the project site, including the fossil-bearing concrete blocks containing Cretaceous fossil mollusk, are most likely part of fill material, since they are isolated occurrences. However, the presence of the fossils, which most likely were obtained from sediment from some nearby property, indicate the potential for finding Cretaceous-age marine rock units at the project site, if excavation goes deep enough. Refer to the Paleontological Report (RTE 2019) for further details.

Conclusions

Due to the high paleontological sensitivity of the Point Loma Formation and the moderate paleontological sensitivity of the Lusardi Formation in San Diego County, in addition to the numerous previously disturbed documented fossil collection localities near the project site, implementation of the project would be

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potentially significant with regard to paleontological resources; therefore, mitigation is required. With incorporation of MM-GEO-1, the project would reduce potentially significant impacts to a less-than-significant level.

Mitigation Measures

MM-GEO-1

Due to the possibility of uncovering highly and moderately sensitive paleontological resources, project construction that will impact the Point Loma Formation and the Lusardi Formation shall require a paleontological resource mitigation program during subsurface excavation activity. In the event that paleontological resources (fossils remains) are exposed during construction activities for the project, all construction work occurring within 50 feet of the find shall immediately stop until a Qualified Paleontologist, as defined by the Society of Vertebrate Paleontology's 2010 guidelines, can assess the nature and importance of the find. Depending on the significance of the find, the Qualified Paleontologist may record the find and allow work to continue or may recommend salvage and recovery of the resource. All recommendations shall be made in accordance with the Society of Vertebrate Paleontology's 2010 guidelines, and shall be subject to review and approval by the City of Carlsbad. Work in the area of the find may only resume upon approval of a Qualified Paleontologist. If it is determined that specific locations of excavation would be located in soils that have no potential for paleontological resources to be present, the Qualified Paleontologist may allow for monitoring to be suspended at these locations.

	VIII.GREENHOUSE GAS EMISSIONS Would the project:		Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			\boxtimes	
b)	Conflict with an applicable plan, policy or regulation adopted for the purposes of reducing the emissions of greenhouse gases?			\boxtimes	

Global climate change refers to changes in average climatic conditions on Earth as a whole, including temperature, wind patterns, precipitation, and storms. Global temperatures are moderated by naturally occurring atmospheric gases, including water vapor, carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), ozone, and certain hydro-fluorocarbons. These gases, known as greenhouse gases (CH_4), allow solar radiation (sunlight) into the Earth's atmosphere, but prevent radiative heat from escaping, thus warming the Earth's atmosphere. CH_4 GHGs are emitted by both natural processes and human activities. The accumulation of CH_4 in the atmosphere regulates the Earth's temperature. Emissions of CH_4 in excess of natural ambient concentrations are thought to be responsible for the enhancement of the greenhouse effect and contribute to what is termed "global warming," the trend of warming of the Earth's climate

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from anthropogenic activities. Global climate change impacts are by nature cumulative; direct impacts cannot be evaluated because the impacts themselves are global rather than localized impacts.

California Health and Safety Code Section 38505(g) defines GHGs to include the following compounds: CO_2 , CH_4 , N_2O , ozone, chlorofluorocarbons (CFCs), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆). As individual GHGs have varying heat-trapping properties and atmospheric lifetimes, GHG emissions are converted to carbon dioxide equivalent (CO_2e) units for comparison. The CO_2e is a consistent methodology for comparing GHG emissions because it normalizes various GHG emissions to a consistent measure. The most common GHGs related to the project are those primarily related to energy usage: CO_2 , CH_4 , and N_2O .

In September 2015, the City of Carlsbad adopted a Climate Action Plan (CAP) that outlines actions that the city will undertake to achieve its proportional share of state greenhouse gas (GHG) emissions reductions; the CAP was subsequently revised in May 2020 (City of Carlsbad 2020). The CAP is a plan for the reduction of GHG emissions in accordance with California Environmental Quality Act (CEQA) Guidelines Section 15183.5. Pursuant to CEQA Guidelines Sections 15064(h)(3), 15130(d), and 15183(b), a project's incremental contribution to a cumulative GHG emissions effect may be determined not to be cumulatively considerable if it complies with the requirements of the CAP.

In March 2019, the City Council adopted several ordinances aimed at reducing GHG in new construction and alterations to existing buildings. Projects requiring building permits will be subject to these ordinances, which address the following:

- Energy efficiency (Ord. No. CS-347)
- Solar photovoltaic systems (Ord. No. CS-347)
- Water heating systems using renewable energy (Ord. Nos. CS-347 and CS-348)
- Electric vehicle charging (Ord. No. CS-349)
- Transportation demand management (Ord. No. CS-350)

The CAP established a screening threshold of 900 metric tons carbon dioxide equivalent (MTCO₂e) per year for new development projects in order to determine if a project would need to demonstrate consistency with the CAP through the Consistency Checklist and/or a self-developed GHG emissions reduction program (Self-developed Program). Projects that are projected to emit fewer than 900 MTCO₂e annually would not make a considerable contribution to the cumulative impact of climate change, and therefore, do not need to demonstrate consistency with the CAP. Regardless of this screening threshold, all projects requiring building permits are subject to the above-referenced CAP ordinances. Such projects are therefore required to show compliance with the ordinances through submittal of a completed Consistency Checklist and shown on site plans and building plans.

For a proposed project that requests a land use change through a General Plan amendment, master plan/specific plan amendment, and/or zone change, a project-specific GHG emissions analysis as described in Section 4 of the P-31 GHG Guidance must be submitted as part of the discretionary permit application. If the study reveals the project to be more GHG-intensive as compared to that assumed for the existing land use designation, and the project's emissions would be at or above the screening threshold of 900 MTCO₂e, the project applicant would need to demonstrate compliance with the CAP ordinances through completion

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of a CAP Consistency Checklist <u>and</u> identify additional mitigation measures to offset the increase in emissions resulting from the land use change.

The city's CAP contains a baseline inventory of GHG emissions for 2005, an updated baseline inventory for 2011, a projection of emissions to 2035 (corresponding to the General Plan horizon year), a calculation of the city's targets based on a reduction from the 2005 baseline, and emission reductions with implementation of the CAP.

The city emitted a total of 630,310 MT CO_2e in 2005 and 705,744 MT CO_2e in 2011. Accounting for future population and economic growth, the city projects GHG emissions of 1,007,473 MT CO_2e in 2035. The CAP set a target to achieve a 15% reduction from the 2005 baseline by 2020 based on the recommendation by CARB. The CAP also includes a reduction target to reduce emissions below the 2005 baseline by 49% by 2035. Therefore, the city must implement strategies that reduce emissions to 535,763 MT CO_2e in 2020 and 321,458 MT CO_2e in 2035. By meeting the 2020 and 2035 targets, the city will meet the 2030 state goal identified in Senate Bill 32 and maintain a trajectory to meet its proportional share of the 2050 state target identified in Executive Order S-3-05.

a) Less than Significant Impact: Projects that require a land use designation change and that are projected to emit fewer than 900 MTCO₂e annually would not make a considerable contribution to the cumulative impact of climate change, and therefore, need only to comply with applicable CAP ordinances. Compliance will be evaluated through completion of the CAP Consistency Checklist and determined through issuance of building permits (KMA 2021). The site is currently zoned Industrial (M-Q) and designated as Planned Industrial (PI) in the General Plan (City of Carlsbad 2017a; City of Carlsbad 2019). The proposed project would require a General Plan land use change from Planned Industrial (PI) to Open Space (OS) for the portion of the site that would remain undeveloped. However, the portion of the project being developed with the office building is consistent with the General Plan zoning for the site. Therefore, the project would answer Yes to Step 1 of the Checklist Item A and thus proceed to Step 2 of the Checklist. Table 7 shows the projects consistency with each CAP Checklist item within Step 2. As the project is nonresidential new construction, it must complete Checklist Items 1B, 2B, 3B, 4B, and 5.

Table 7
Project Consistency with City of Carlsbad Climate Action Plan Consistency Checklist

Checklist Item	Requirement	Projects Consistency
1B Energy Efficiency	Nonresidential* new construction or alterations ≥ \$200,000 building permit valuation, or additions ≥ 1,000 square feet. See CALGreen Appendix A5, Discussion A5.2, as amended in CS-347, Section 3.	A5.203.1.1.1: The project would include outdoor lighting with 0.90 allowed outdoor lighting power. A5.203.1.1.2: The project does not include a restaurant, so this does not apply. A5.203.1.2.1: The project would include a 0.90 energy budget. A5.211.1: The project would include on-site renewable energy with a roof-mounted photovoltaic system rated at 17.1-kilowatt direct current. A5.211.3: For power not produced onsite, the project would utilize

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Table 7
Project Consistency with City of Carlsbad Climate Action Plan Consistency Checklist

Checklist Item	Requirement	Projects Consistency
		green power from SDG&E with at least 50% renewable sources. A5.212.1: The project only has one elevator and thus this does not apply. A5.213.1: The project would include steel framing.
2B Photovoltaic Systems	Nonresidential new construction or alterations ≥\$1,000,000 BPV and affecting ≥75% existing floor area, or addition that increases roof area by ≥2,000 square feet. Please refer to Carlsbad Ordinance CS-347, Section 6 when completing this section.	Using the gross floor area method and greater than 10,000 square feet, the project would require a minimum system size of 17.1 kilowatts direct current (15 kWdc x (11,404/10,000)).
3B Water Heating	Nonresidential new construction Please refer to Carlsbad Ordinance CS-347 when completing this section.	The water heating system will derive at least 40% of its energy from photovoltaics. The water heating system for the project is an electric resistance water heater.
4B Electric Vehicle Charging	Nonresidential new construction (includes hotels/motels)	The project proposes 46 total parking spaces. The project is required to have 4 EV spaces and 2 EVSE installed spaces. The project proposes to have 2 EVSE capable and 2 EVSE installed spaces.
5 Transportation Demand Management (TDM)	NA	The project includes 11,404 square feet of office space. Using the City's ADT Table, it would result in 228 total employee ADT. As the project results in greater than 110 ADT, a TDM plan is required.

Source: City of Carlsbad 2020.

Notes: ADT = average daily trips; EV = electric vehicle; EVSE = electric vehicle supply equipment; kWdc = kilowatts direct current; NA = not available; SDG&E = San Diego Gas & Electric; TDM = transportation demand management.

As shown in Table 7, the project would include features that make it consistent with the requirements for new non-residential construction found within the CAP Checklist (KMA 2021). Therefore, the project would be consistent with the City's CAP and CAP Ordinances and impacts would be less than significant.

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b) Less than Significant Impact:

As stated above, the City of Carlsbad adopted a CAP in 2015, and revised its CAP in 2020, that outlines actions that the city will undertake to achieve its proportional share of state GHG emissions reductions. The CAP demonstrates that, with implementation of applicable General Plan goals and policies, coupled with state and federal actions, and execution of CAP measures and actions, the city will reduce GHG emissions in alignment with state goals established by AB 32 and Senate Bill 32, and maintain a trajectory to meet its proportional share of the 2050 state target identified in Executive Order S-3-05. As described in response VIII(a) above, the proposed project is consistent with applicable General Plan goals and policies, and includes design features consistent with the adopted CAP. As such, the proposed project would not conflict with any applicable plan, policy or regulation adopted for the purposes of reducing the emissions of greenhouse gases and impacts would be less than significant.

ıx.		AZARDS AND HAZARDOUS MATERIALS	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
	a)	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			\boxtimes	
	b)	Create a significant hazard to the public or environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?			\boxtimes	
	c)	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				\boxtimes
	d)	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or environment?			\boxtimes	
	e)	For a project located within an airport land use plan, or where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?			×	
	f)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			X	
	g)	Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?			X	

a) Less-than-Significant Impact: Construction of the proposed project would require the transport of potentially hazardous materials including but not limited to fuels, lubricants, and various other materials needed for operation of construction equipment. Proper BMPs, including those identified in the required SWQMP (see Section X) prepared for the proposed project, and hazardous materials handling protocols

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would be prepared and implemented to ensure safe storage, handling, transport, use, and disposal of all hazard materials during the construction phase of the proposed project. Construction would also adhere to any local standards set forth by the City, as well as state and federal health and safety requirements that are intended to minimize hazardous materials risk to the public, such as California Occupational Safety and Health Administration requirements, the Hazardous Waste Control Act, the California Accidental Release Prevention Program, and the California Health and Safety Code. Furthermore, all construction waste, including trash, litter, garbage, solid waste, petroleum products, and any other potentially hazardous materials, would be removed and transported to a permitted waste facility for treatment, storage, or disposal. Use of these materials during construction for their intended purpose would not pose a significant risk to the public or the environment. Therefore, impacts related to routine transport, use, or disposal of hazardous materials during construction would be less than significant.

The project would involve development of an industrial office building with associated street and landscape improvements. The project would also preserve the existing vegetation within the project site that is not proposed for development. During operation of the proposed office building, use of hazardous materials would primarily involve the private use of commercially available cleaning products, landscaping chemicals and fertilizers, and various other commercially available substances. These substances are required to comply with relevant federal, state, and local health and safety laws, which are intended to minimize health risk to the public associated with hazardous materials. Therefore, impacts related to routine transport, use, or disposal of hazardous materials during operation would be less than significant.

- b) Less-than-Significant Impact: As discussed in response IX.a, a variety of hazardous substances and wastes typical to standard construction projects would be stored and used on the project site during construction of the project. Accidental spills, leaks, fires, explosions, or pressure releases involving hazardous materials represent a potential threat to human health and the environment. During both construction and operation of the project, there is potential for release of hazardous materials related to storage, transport, use, and disposal from construction debris, landscaping, and commercial products. However, the project would be required to adhere to federal, state, and local laws, such as the California Occupational Safety and Health Administration requirements, the Hazardous Waste Control Act, the California Accidental Release Prevention Program, and the California Health and Safety Code, which are intended to minimize risk to public health associated with hazardous materials. Additionally, as discussed further in response IX.d, the project site is not included on any hazardous waste site lists, including the California Department of Toxic Substances Control's EnviroStor database, the State Water Resources Control Board's GeoTracker site, the Cortese list, the Superfund Site list, or other lists compiled pursuant to Section 65962.5 of the Government Code (CalEPA 2017; DTSC 2017; SWRCB 2017; EPA 2017). The project site does not contain any Cleanup Program Sites or Leaking Underground Storage Tank Sites. Thus, there are no known hazardous spills that could be emitted during construction. Therefore, impacts would be less than significant.
- c) No Impact: No schools are located within 0.25 miles of the project site. The nearest schools are Sage Creek High School, located approximately 1.3 miles northwest of the project site, and Carlsbad Country Day School, located approximately 1.8 miles west of the project site. No impact would occur.
- d) Less-than-Significant Impact: The project site is not included on any hazardous waste site lists, including the California Department of Toxic Substances Control's EnviroStor database, the State Water Resources Control Board's GeoTracker site, the Cortese list, the Superfund Site list, or other lists compiled pursuant to Section 65962.5 of the Government Code (CalEPA 2017; DTSC 2017; SWRCB 2017; EPA 2017). There are three

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GeoTracker Cleanup Program Sites listed within a 0.5-mile distance of the project site: Valdivia Farms Inc. (located approximately 0.2 miles northeast of the project site), Daniels Cablevision Inc. (located approximately 0.2 miles southwest of the project site), and Fleet Operations (City of Carlsbad) (located approximately 0.3 miles east of the project site). Additionally, there are two GeoTracker Leaking Underground Storage Tank Cleanup Sites within a 0.5-mile distance of the project site: Daniels Cablevision Inc. (located approximately 0.2 miles southwest of the project site) and El Camino Rental (located approximately 0.2 miles west of the project site). However, the project site does not contain any Cleanup Program Sites or Leaking Underground Storage Tank Sites. Therefore, the project would not create a significant hazard to the public or the environment, and impacts would be less than significant.

- e) Less-than-Significant Impact: The project site is located approximately 0.6 miles from the McClellan-Palomar Airport. The McClellan-Palomar Airport Land Use Compatibility Plan was prepared according to Federal Aviation Administration requirements and adopted by the San Diego County Regional Airport Authority acting as the Airport Land Use Commission of San Diego. The McClellan-Palomar Airport Land Use Compatibility Plan provides measures to minimize the public's exposure to excessive noise and safety hazards within areas around the airport and identifies areas likely to be impacted by noise and flight activity created by aircraft operations at the airport. These impacted areas include the Airport Influence Area, the Clear Zone, and the Flight Activity Zone (San Diego County ALUC 2010). According the McClellan-Palomar Airport Land Use Compatibility Plan, the entire project site is located within Zone 6 Traffic Pattern Zone (San Diego County ALUC 2010). Within Zone 6, office buildings are considered compatible, and there is no limit on an acceptable density. Therefore, impacts would be less than significant.
- f) Less-than-Significant Impact: Access to the project site will be through two new driveways off Palmer Way; the first driveway would be a 25-foot-wide passenger vehicle driveway at the northwestern corner of the project site, and the other would be a 35-foot-wide passenger driveway at the southwestern corner of the project site. The driveways would be connected by a single drive aisle providing through access to the paved employee parking garage. The project has been designed to satisfy the emergency requirements of the Carlsbad Fire Department and Carlsbad Police Department. Pursuant to Chapter 21.45 of the City Municipal Code, General Development Standards, drive aisles required for emergency access shall be a minimum of 20 feet wide (City of Carlsbad 2017b). In addition, Chapter 17.04, Fire Prevention Code, of the City Municipal Code states that fire apparatus roads shall have an unobstructed width of not less than 24 feet (City of Carlsbad 2017b). Thus, because the project site would have driveways wider than the widths mentioned above, there would be no conflict with the City's Municipal Code regarding emergency vehicle access. Furthermore, the City is a participant in the Unified San Diego County Emergency Services Organization (USDCESO). The USDCESO Operational Area Emergency Plan (October 2010) contains evacuation routes resulting from a variety of emergencies (USDCESO and County of San Diego 2010). Primary evacuation routes consist of the major freeways, highways, and prime arterials within San Diego County. The closest evacuation route to the project site would be El Camino Real, designated by the City's General Plan as an arterial road, located approximately 470 feet west of the site (City of Carlsbad 2015a). Therefore, impacts associated with an adopted emergency response plan or emergency evacuation plan would be less than significant.
- g) Less-than-Significant Impact: According to Figure 6-10, Structure Fire/Wildfire Threat, of the City's General Plan (City of Carlsbad 2015a), the entire project site is located in a high fire threat Fire Hazard Severity Zone (FHSZ). The types of potential ignition sources that currently exist in the area include vehicle and roadway machinery associated with various land uses in the vicinity, as well as off-site residences. By

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developing a two-story office building, the project would introduce potential ignition sources to the project site. However, the project would also include the conversion of fuels on the landscape to lower flammability. Upon completion of construction, the project site would include better access to the developed portion of the site, a consistently managed and maintained landscape, higher site awareness/monitoring, and generally a reduction in the receptiveness of the area's landscape to ignition.

The project shall comply with ignition resistant fire and building codes. Compliance with these codes will include a layered fire protection system designed to current codes and inclusive of site-specific measures. This will result in a project that is less susceptible to wildfire than surrounding landscapes and would facilitate firefighter and medical aid response. Further, modern infrastructure will be provided along with implementation of the latest ignition resistant construction methods and materials. All structures are required to include interior sprinklers consistent with Carlsbad Fire and Building Codes. In adherence to Chapter 17.04 of the City's Municipal Code, existing vegetation on the project site would be thinned and modified to help prevent the spread of wildfire (City of Carlsbad 2017b). As such, the project site would contain three FMZs around the proposed office building that would act as defensible areas where vegetation would be maintained to slow down the spread of fire to and from the building (Figure 7). The FMZs would be incorporated into the project design. The FMZs would be categorized as FMZ A or FMZ B. FMZ A areas are identified as manufactured slopes abutting hazardous native vegetation and FMZ B areas are natural slopes with native vegetation where removal of native vegetation is restricted. Within each FMZ area a subcategory would apply (Zone A-1, A-2, A-3, B-1, B-2, and B-3), and they would be individually subject to modification requirements (refer to Section XX, Wildfire, for further details). Existing vegetation within the project site that is outside the proposed development area and does not fall within an FMZ would remain on site and be protected in place.

By implementing the recommendations, project-specific requirements, and FMZs outlined above, the project would not expose people or structures to a significant risk, injury, or death involving wildland fires. As such, impacts would be less than significant.

X.		DROLOGY AND WATER QUALITY	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
	a)	Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?			\boxtimes	
	b)	Substantially decrease groundwater supplies or interfere substantially with ground water recharge such that the project may impede sustainable groundwater management of the basin?			\boxtimes	

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x.		DROLOGY AND WATER QUALITY	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
	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 offsite;			\boxtimes	
		ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite			\boxtimes	
		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			\boxtimes	
		iv. Impede or redirect flood flows?			\boxtimes	
	d)	In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?				×
	e)	Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?			\boxtimes	

This section is based on the SWQMP prepared by K&S Engineering Inc. in December 2018 and updated in February 2020 (K&S Engineering 2020). The SWQMP has been prepared consistent with the requirements of the City's BMP Design Manual and with the requirements of San Diego RWQCB Order No. R9-2013-0001 (Regional MS4 Permit).

a) Less-than-Significant Impact: The project is located within the San Diego RWQCB jurisdiction that oversees water quality in the San Diego region. The RWQCB has adopted the Water Quality Control Plan for the San Diego Basin (Basin Plan) that designates beneficial uses of the region's surface water and groundwater, identifies water quality objectives for the reasonable protection of those uses, and establishes an implementation plan to achieve the objectives. The RWQCB also regulates discharges from municipal separate storm sewer systems in the San Diego region under a National Pollutant Discharge Elimination System Municipal Storm Water Permit (Regional Municipal Separate Storm Sewer System [MS4] Permit), which expired on June 27, 2018, but remains in effect under an administrative extension until it is reissued by the RWQCB. The permit requires the development and implementation of BMPs in planning and construction of private and public development projects. Development projects are also required to include BMPs to reduce pollutant discharges from the project site in the permanent design.

Construction activities associated with the proposed project could result in wind and water erosion of the disturbed area leading to sediment discharges. Additionally, construction would involve the use of oil, lubricants, and other chemicals that could be discharged from leaks or accidental spills. These potential sediment and chemical discharges during construction would have the potential to impact water quality in receiving water bodies. Construction of the project would result in more than 1 acre of land disturbance;

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therefore, the project would be required to prepare and implement a SWPPP in accordance with the Statewide Construction General Permit. This requires implementation of water quality BMPs to ensure that water quality standards are met and that stormwater runoff from the construction work areas does not cause degradation of water quality in receiving water bodies. Some of these BMPs include use of silt screening or fiber filtration rolls, appropriate handling and disposal of contaminants, fertilizer and pesticide application restrictions, litter control and pick up, and vehicle and equipment repair and maintenance in designated areas. Implementation of SWPPP requirements would reduce potential hydrology and water quality impacts associated with construction to less than significant.

During operation, the project would introduce a two-story office building, resulting in more impervious area to the site, which would result in more surface runoff. As such, a SWQMP has been prepared for the project. The SWQMP has been prepared consistent with the requirements of the City's BMP Design Manual and with the requirements of San Diego RWQCB Order No. R9-2013-0001 (Regional MS4 Permit). The SWQMP prepared for the proposed project specifies source control, site design, and structural BMPs that would be implemented to minimize impacts to water quality. Source control BMPs include prevention of illicit discharges into the MS4; storm drain stenciling or signage; protecting trash storage areas from rainfall, runon, runoff, and wind dispersal; and on-site storm drain inlets. Site design BMPs include conserving natural areas, soils, and vegetation; minimizing impervious areas; runoff collection; and landscaping with native or drought tolerant species. The structural BMPs would involve the installation of two biofiltration basins. Biofiltration basin 1 would receive surface runoff from the uncovered parking stalls, hardscape, and driveway areas to be treated for pollutants generated on site. Biofiltration basin 2 would receive runoff from the building roof, which covers part of the parking and driveway area. Runoff from biofiltration basins 1 and 2 would be directed to a proposed vault for hydromodification and detention control (K&S Engineering 2020). With implementation of these BMPs, impacts to water quality or waste discharge requirements would be less than significant.

b) Less-than-Significant Impact: The project proposes construction of an 11,404-square-foot, two-story office building on a portion of an undeveloped, approximately 6.34-acre site. The project would introduce 0.61 acres of impervious area. The remaining area would remain impervious or be developed as permeable landscape. As such, the majority of the overall project site would remain undeveloped. This would allow for potential groundwater recharge and infiltration. However, as mentioned in the SWQMP, groundwater was not encountered in the exploratory excavations at the time of excavation. Additionally, as stated in the Geotechnical Report, free groundwater was not encountered in the exploratory boring or test pits (K&S Engineering 2020). However, fluctuations in the level of groundwater may occur due to variations in ground surface topography, subsurface stratification, rainfall, and other possible factors. Additionally, unless discovered during initial site exploration or encountered during site grading operations, it is extremely difficult to predict if or where perched or true groundwater may appear in the future. Water conditions, where suspected or encountered during construction, should be evaluated and remedied by the project civil and geotechnical consultants. However, post-construction appearances of groundwater may have to be dealt with on a site-specific basis (K&S Engineering 2020).

Further, the project would not use groundwater during construction. The Carlsbad Municipal Water District (CMWD) would serve the project's water needs. CMWD purchases water from the San Diego County Water Authority (SDCWA), which gets its water from the Colorado River, State Water Project Water, and desalinated seawater. The CMWD is a member of the North San Diego Water Reuse Coalition,

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which allows CMWD to expand beneficial reuse of local wastewater for non-drinking-water purposes, such as irrigation and industrial uses. As such, the project would not rely on groundwater supplies.

Therefore, because the amount of land proposed to be impervious is a relatively minimal, the project would not rely on groundwater during construction, and the project site is not a significant source of groundwater, impacts associated with groundwater supplies and recharge would be less than significant.

c) i. Less-than-Significant Impact: There are no streams or rivers located on the project site; however, Agua Hedionda Creek is located approximately 350 feet north of the site. The existing drainage conveyance on the project site is natural. The project site has a relatively flat pad along Palmer Way that drains to the north into Agua Hedionda Creek. Additionally, approximately 0.2 acres of the site drains to the south into Palmer Way. Project construction would involve some earth-disturbing activities, including grading, that could expose on-site soils to erosion and surface water runoff. However, inclusion of project BMPs would reduce erosion and siltation from the project site occurring from construction activities. The area proposed for development would be located on the relatively flat area of the site, furthest away from Agua Hedionda Creek. In total, only 1.41 acres of the project site, which consists of the proposed office building and associated improvements, would be developed. However, as stated in the SWQMP, only 0.71 acres out of the area proposed for development would disturb previously undeveloped land; the remaining area would consist of associated improvements along Palmer Way. The remaining 4.93-acres of the project site would not be developed and would remain the same. Therefore, impacts associated with substantial erosion or siltation on or off site would be less than significant.

c) ii—iii. Less-than-Significant Impact: As discussed in response X.a, construction of the project would likely result in more than 1 acre of land disturbance and therefore, the project would be required to prepare and implement a SWPPP in accordance with the Statewide Construction General Permit. This requires implementation of water quality BMPs to ensure that water quality standards are met and that stormwater runoff from the construction work areas does not cause degradation of water quality in receiving water bodies. Some of these BMPs include use of silt screening or fiber filtration rolls, appropriate handling and disposal of contaminants, fertilizer and pesticide application restrictions, litter control and pick up, and vehicle and equipment repair and maintenance in designated areas.

Additionally, an SWQMP has been prepared for the project. The SWQMP has been prepared consistent with the requirements of the City's BMP Design Manual and with the requirements of San Diego RWQCB Order No. R9-2013-0001 (Regional MS4 Permit). The SWQMP prepared for the proposed project specifies source control, site design, and structural BMPs that would be implemented to minimize impacts to water quality. Source control BMPs include prevention of illicit discharges into the MS4; storm drain stenciling or signage; protecting trash storage areas from rainfall, run-on, runoff, and wind dispersal; and on-site storm drain inlets. Site design BMPs include conserving natural areas, soils, and vegetation; minimizing impervious areas; runoff collection; and landscaping with native or drought tolerant species. The structural BMPs would involve the installation of two biofiltration basins. Biofiltration basin 1 would receive surface runoff from the uncovered parking stalls, hardscape, and driveway areas to be treated for pollutants generated on site. Biofiltration basin 2 would receive runoff from the building roof, which covers part of the parking and driveway area. Runoff from biofiltration basins 1 and 2 would be directed to a proposed vault for hydromodification and detention control (K&S Engineering 2020). The runoff would be connected to the existing public storm drain within Palmer Way. Although construction of the proposed office building would introduce more impervious area, the development would only result in a small increase to runoff. Additionally,

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the increase in water flow would have a minimal impact to the existing downstream storm drain system because it would be detained on site in order release the same amount as pre-project conditions (K&S Engineering 2020). As such, impacts associated with the increased rate of surface runoff and capacity of existing or planned stormwater drainage systems would be less than significant.

- c) iv. Less-than-Significant Impact: According to the Federal Emergency Management Agency, the project site is located within Flood Zone X, which is defined as an area of minimal flood hazards, typically above the 500-year flood level (FEMA 2012). Given that the project is not located within a 100-year flood level, the project would not impede or redirect flood flows. As outlined on Figure 6-2 in the General Plan (City of Carlsbad 2015a), the project site is not located within a dam inundation area. Refer to the responses above regarding proposed stormwater facilities per the SWQMP. Impacts would be less than significant.
- d) No Impact: Refer to response X.c.iv above. The proposed project would not be located within a 100-year flood hazard area. The project site is located approximately 3.5 miles inland from the Pacific Ocean. According to the California Department of Conservation, the project site is not located within a mapped area of tsunami inundation (DOC 2016). Further, the project site is not located near a large standing body of water. The closest bodies of water are Batiquitos Lagoon, located approximately 3.4 miles to the southwest, and Agua Hedionda, located approximately 2.5 miles to the northwest. Thus, the probability of inundation by seiche (or standing wave) is considered negligible. As such, no impact would occur.
- e) Less-than-Significant Impact: An SWQMP has been prepared for the proposed project and incorporated into project design, as discussed previously. The SWQMP has been prepared consistent with the requirements of the City's BMP Design Manual and with the requirements of the San Diego RWQCB Order No. R9-2013-0001 (Regional MS4 Permit). The Carlsbad Watershed Management Area Water Quality Improvement Plan was prepared by the Cities of Carlsbad, Encinitas, Escondido, Oceanside, San Marcos, Solana Beach, and Vista and the County of San Diego to improve water quality per the Regional MS4 Permit (MOE 2016). Provision of an SWQMP, and the water quality improvements contained therein, per the requirements of the Regional MS4 Permit, would ensure that the project would not conflict with or obstruct the applicable Water Quality Improvement Plan. Additionally, as described above, the proposed project would not interfere with groundwater recharge or use. The City is not located within a groundwater basin subject to the Sustainable Groundwater Management Act. Therefore, impacts would be less than significant.

	ND USE AND PLANNING uld the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Physically divide an established community?				\boxtimes
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?			\boxtimes	

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a) **No Impact:** The proposed project would be located entirely within the 6.34-acre project site, which is currently undeveloped. None of the proposed project components would potentially block or impede movements between surrounding established communities. No impact would occur.

b) Less-than-Significant Impact: The project consists of developing a two-story office building on a portion of the undeveloped site. The remaining area would remain undeveloped and the existing vegetation on site would be preserved. The site is currently zoned Industrial (M-Q) and designated as Planned Industrial (PI) in the General Plan (City of Carlsbad 2017a; City of Carlsbad 2019). The proposed project would require a General Plan land use change from Planned Industrial (PI) to Open Space (OS) for the portion of the site that would remain undeveloped. The project would adhere to goals and policies set forth in the City's General Plan and local regulations and ordinances to avoid and/or mitigate potential environmental impacts.

City of Carlsbad General Plan

The following provides a brief consistency analysis with select applicable goals and policies related to avoiding or mitigating an environmental effect.

Open Space, Conservation, and Recreation Element Goals and Policies

Goal Air Quality 4-G.13: Protect air quality within the city and support efforts for enhanced regional air quality.

Consistency: The project site is located in the SDAB. The periodic violations of NAAQS in the SDAB, particularly for O₃ in inland foothill areas, requires that a plan be developed outlining the pollution controls that will be undertaken to improve air quality. In San Diego County, this attainment planning process is embodied in the RAQS developed by the SDAPCD with regional growth projections provided by SANDAG. The RAQS outlines the SDAPCD's plans and regulatory control measures designed to attain state air quality standards for O₃. Additionally, for the SDAB, the RAQS serves as the long-term regional air quality planning document for the purpose of assessing cumulative operational emissions within the basin to ensure the SDAB continues to make progress toward NAAQS and CAAQS attainment status. As such, cumulative projects located in the San Diego region would have the potential to result in a cumulative impact to air quality if, in combination, they would conflict with or obstruct implementation of the RAQS. Similarly, individual projects that are inconsistent with the regional planning documents on which the RAQS is based would have the potential to result in cumulative impacts if they represent development beyond regional projections.

The SDAPCD has also developed the SDAB's input into the SIP, which is required under the CAA for pollutants that are designated as being in nonattainment of national air quality standards for the air basin. The SIP relies on the same information from SANDAG to develop emission inventories and emission control strategies that are included in the attainment plan for the air basin.

The proposed project relates to the SIP and/or RAQS through the land use and growth assumptions that are incorporated into the air quality planning document. These growth assumptions are based on each city's and San Diego County's general plan. Per the California Building Code, under the "Business Area" designation without fixed seating, the total building area shall be divided by the occupant load number (CBC 2019). Although the proposed office building is a combined total of 11,404 square feet, only the second story, which is 10,337 square feet, is designated for office space. As such, the project would

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generate an estimated maximum of 69 employees (CBC 2019). According to the SANDAG Series 13 Growth Forecast, the City is expected to have 77,422 jobs in 2020 and 79,877 jobs in 2025, which is an increase of 491 jobs per year (SANDAG 2013). As the project would add 69 employees it would not exceed the SANDAG projections for the City and is consistent with the underlying General Plan designations.

Operation of the project will result in emissions that were considered as a part of the RAQS growth projections. As such, the proposed project is not anticipated to conflict with either the RAQS or the SIP. Additionally, the operational emissions from the project are below the screening levels, and subsequently will not violate ambient air quality standards. Therefore, the project would be consistent with this goal by reducing potential impacts to air quality.

<u>Air Quality Policy 4-P.56:</u> Ensure that construction and grading projects minimize short-term impacts to air quality.

- a) Requiring grading projects to provide a storm water pollution prevention plan (SWPPP) in compliance with city requirements, which include standards for best management practices that control pollutants from dust generated by construction activities and those related to vehicle and equipment cleaning, fueling and maintenance;
- b) Require grading projects to undertake measures to minimize mono-nitrogen oxides (NOx) emissions from vehicle and equipment operations; and
- c) Monitor all construction to ensure that proper steps are implemented.

Consistency: The project involves the construction of an 11,404-square-foot office building with 46 parking spaces, which includes emissions associated with grading and construction. As discussed in Section III, Air Quality, daily construction emissions for the project would not exceed SDAPCD's significance thresholds for VOC, NO_x, CO, SO_x, PM₁₀, or PM_{2.5}. As such, the project would result in a less-than-significant impact related to construction emissions.

Further, emissions would be minimized through standard construction measures, SWPPP requirements, BMPs, and, when applicable, CALGreen, as required by the City; this would reduce fugitive dust debris, emissions, and other criteria pollutant emissions during grading and construction. Therefore, emissions from the construction phase would be minimal, temporary, and localized, resulting in pollutant emissions that are not anticipated to significantly contribute to an existing or projected air quality violation. Thus, the project would be consistent with this policy by reducing impacts to air quality.

<u>Habitat and Open Space Conservation Policy 4-P.12</u>: Continue participation in regional planning efforts to protect habitat and environmentally sensitive species.

Consistency: As discussed in Section IV, Biological Resources, the project has the potential to create an adverse effect on special-status wildlife and plant species. However, with implementation of MM-BIO-1 through MM-BIO-4, impacts to special-status wildlife and plant species would be reduced to less than significant. MHCP Core Area No. 5 borders the project site along the northeastern edge (Scheidt 2021). MHCP Core Area No. 5 is part of a comprehensive planning process that addresses the needs of multiple plant and animal species in Northwestern San Diego County. Due to the proximity to the MHCP, the project must comply with the Adjacency Standards contained in Section F.3 of the City's HMP.

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Further, the proposed project would require a General Plan land use change from Planned Industrial (PI) to Open Space (OS) for the portion of the site that would remain undeveloped. As such, the existing vegetation would be protected in place. By designating a large portion of the site as Open Space (OS), the project would add an incremental amount of open space to the City. Further, the area of the site proposed to be designated as Open Space would be located approximately 200 feet west of Agua Hedionda Creek. Thus, the Open Space (OS) designation would protect any potential habitat connection between Agua Hedionda Creek and the project site. Therefore, the project would be consistent with this goal by reducing potential impacts to biological resources.

Sustainability Element Goals and Policies

<u>Goal 9-G.2:</u> Undertake initiatives to enhance sustainability by reducing the community's greenhouse gas emissions and fostering green development patterns – including buildings, sites, and landscapes.

Consistency: The proposed project would create additional electricity and natural gas demand by adding a new office building. However, the office building would only be a portion, approximately 1.41 acres, of the project site. The remaining 4.93 acres of the site would be preserved as natural open space. The project would include a General Plan Amendment, rezone, and easement to designate and zone the portion of the site as open space and to permanently protect the land from development. As such, the majority of the project site would remain undeveloped. Thus, only the proposed building component would contribute to GHG emissions.

The proposed office component would be subject to the 2019 Building Energy Efficiency Standards, which apply to new construction and regulate energy consumed for heating, cooling, ventilation, water heating, and lighting. Compliance with the 2019 Building Energy Efficiency Standards would ensure that the energy efficiency of the proposed buildings is maximized to the extent feasible. For these reasons, the proposed project would not result in wasteful, inefficient, or unnecessary consumption of energy.

Additionally, the project would be required to comply with the City's CAP. Per the City's CAP, the project would implement sustainability features including the following (City of Carlsbad 2020):

- Outdoor lighting that complies with CALGreen Section A5.203.1.1.1
- On-site renewable energy provided per CALGreen Section A5.203.1.1.1, which provides for a roof-mounted photovoltaic 17.1-kilowatt direct current system
- Green Power (if offered by a local utility) 50% minimum renewable sources
- Steel framing to comply with CALGreen Section A5.213.1
- Water heating supported by at least 40% of energy from photovoltaics with the use of electric resistance water heaters
- Electric vehicle charging provided per CS-347. Two charging stations are provided with two cable stations

Therefore, the project would be consistent with this goal by reducing potential GHG emissions as a result of the proposed office building.

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<u>Climate Change and GHG Policy 9-P.1</u>: Enforce the Climate Action Plan as the City's strategy to reduce greenhouse gas emissions.

Consistency: The project would be consistent with the City's CAP. Refer to Section VIII, Greenhouse Gas Emissions.

Local Regulations and Ordinances

Tree Protection Ordinance

The City has no formal tree protection ordinance that pertains to trees located on private property. The City's Tree Ordinance pertains to protection of trees within the public right-of-way (City of Carlsbad 2000). Under existing conditions, the primary habitat types found on the project site are CSS, disturbed habitat, and southern willow scrub (Scheidt 2021). Two mature coast live oak trees were found below southern willow scrub located adjacent to the on-site drainage on the southern portion of the project site. As previously discussed in response IV.b, no improvements associated with the project are proposed in the drainage area. Thus, the area of the project site containing the coast live oak trees would be preserved as open space. Therefore, the project would be consistent with the City's Tree Ordinance.

Greenhouse Gas Emissions Ordinances

In March 2019, the City Council adopted several ordinances aimed at reducing GHGs in new construction and alterations to existing buildings. Projects requiring building permits will be subject to these ordinances, which address the following:

- Energy efficiency (Ord. No. CS-347)
- Solar photovoltaic systems (Ord. No. CS-347)
- Water heating systems using renewable energy (Ord. Nos. CS-347 and CS-348)
- Electric vehicle charging (Ord. No. CS-349)
- Transportation demand management (Ord. No. CS-350)

Therefore, because the project proposes new construction, the project would adhere to the aforementioned GHG ordinances.

SDAPCD Rule 55, Fugitive Dust Control

The project would be subject to SDAPCD Rule 55, Fugitive Dust Control. This rule requires that the proposed project take steps to restrict visible emissions of fugitive dust beyond the property line (SDAPCD 2009). Visible roadway dust as a result of active operations, spillage from transport trucks, or from trucks tracking out dirt shall be minimized by applicable erosion control measures that apply to the project. Therefore, the project would be consistent with SDAPCD Rule 55, Fugitive Dust Control.

Fire and Building Codes

The project shall comply with ignition resistant fire and building codes. Compliance with these codes will include a layered fire protection system designed to current codes and inclusive of site-specific measures. This will result in a project that is less susceptible to wildfire than the surrounding landscapes and would facilitate firefighter and medical aid response. Further, modern infrastructure will be provided, along with implementation of the latest ignition resistant construction methods and materials. All structures are required to include interior sprinklers

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consistent with Carlsbad Fire and Building Codes. In adherence to Chapter 17.04, Fire Prevention Code, of the City's Municipal Code, existing vegetation on the project site would be thinned and modified to help prevent the spread of wildfire (City of Carlsbad 2017b). In addition, Chapter 17.04 of the Municipal Code states that fire apparatus roads shall have an unobstructed width of not less than 24 feet (City of Carlsbad 2017b). Therefore, the project would be consistent with fire- and building-related codes to prevent the start and spread of wildfire.

Conclusion

The project would be consistent with goals and policies in the General Plan and local regulations and ordinances that are adopted for the purpose of avoiding or mitigating environmental effects. Therefore, no impacts associated with land use plans, policies, and regulations would occur.

	INERAL RESOURCES	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Result in the loss of availability of a known mineral resource that would be of future value to the region and the residents of the State?				\boxtimes
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?				\boxtimes

a—b) No Impact: According the City's General Plan Final Environmental Impact Report, the City is devoid of any non-renewable energy resources of economic value to the region and the residents of the state (City of Carlsbad 2015b). Mineral resources within the City are no longer being utilized and extracted as exploitable natural resources. Therefore, no mineral resource impacts will occur as a result of any project.

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	XIII. NOISE Would the project result in:		Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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?			X	
b)	Generation of excessive groundborne vibration or groundborne noise levels?			\boxtimes	
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 2 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?			X	

This section is based on the Preliminary Technical Noise Memo (Noise Memo) prepared by Dudek in July 2020 (Dudek 2020). Background and methodologies regarding the noise analysis can be found in this memo.

Existing Noise Measurements

Sound pressure level measurements were conducted near the proposed project site on June 30, 2020, to quantify and characterize the existing outdoor ambient sound levels. Table 8 provides the location, date, and time period at which these baseline noise level measurements were performed by an attending Dudek field investigator using a Rion-branded Model NL-52 sound level meter equipped with a 0.5-inch, pre-polarized condenser microphone with pre-amplifier. The sound level meter meets the current American National Standards Institute standard for a Type 1 (Precision Grade) sound level meter. The accuracy of the sound level meter was verified using a field calibrator before and after the measurements, and the measurements were conducted with the microphone positioned approximately 5 feet above the ground.

Two short-term noise level measurement locations (ST1 and ST2) that represent existing noise-sensitive receivers were selected on and near the project site. These locations are depicted as receivers ST1 and ST2 on Figure 3, Noise Measurement Locations, in the Noise Memo (Dudek 2020). The measured equivalent sound level (L_{eq}) and maximum sound level are provided in Table 8. The primary noise sources at the sites identified in Table 7 consist of traffic along adjacent roadways, the sounds of leaves rustling, and birdsong. As shown in Table 7, the measured sound pressure level ranged from approximately 55.3 A-weighted decibels (dBA) L_{eq} at ST1 to 42.1 dBA L_{eq} at ST2. Beyond the summarized information presented in Table 8, detailed noise measurement data is included in the Noise Memo (Dudek 2020).

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Table 8

Measured Baseline Outdoor Ambient Noise Levels

Site	Location/Address	Date/Time	L _{eq} (dBA)	L _{max} (dBA)
ST1	West of Palmer Way, adjacent from project site	2020-06-30, 12:00 p.m. to 12:15 p.m.	55.3	81.4
ST2	South of Sunny Creek Road	2020-06-30, 12:25 p.m. to 12:40 p.m.	42.1	47.6

Note: L_{eq} = equivalent continuous sound level (time-averaged sound level); dBA = A-weighted decibels; L_{max} = maximum sound level during the measurement interval.

Generally, the measured samples of daytime L_{eq} agree with expectations: ST1 is above 55 dBA due largely to its proximity to Palmer Way, the closest roadway to the proposed project; ST2 is near Sunny Creek Road, a transportation route with much less traffic than compared to that of Palmer Way.

Sensitive Receptors

Noise- and vibration-sensitive land uses are locations where people reside or where the presence of unwanted sound and/or vibration could adversely affect the use of the land. Residences, schools, hospitals, guest lodging, libraries, and some passive recreation areas would be considered noise and vibration sensitive and may warrant unique measures for protection from intruding noise.

Sensitive receptors near the project site include existing single-family residential uses to the north, the closest of which are located approximately 185 feet northeast from the project site boundary. These sensitive receptors represent the nearest residential land uses with the potential to be impacted by construction and operation of the proposed project. Additional sensitive receptors are located farther from the project site in the surrounding community and would be less impacted by noise and vibration levels than the above-listed sensitive receptors.

a) Less-than-Significant Impact:

Short-Term Construction Noise

Construction activities would occur during the City's allowable hours of operation. Utilizing a noise prediction model emulating and using reference data from the Federal Highway Administration Roadway Construction Noise Model as detailed in the Noise Memo, Table 9 presents estimates of construction noise level per on-site activity phase at each of two indicated assessment distances.

Table 9
Construction Noise Modeling Summary Results

	Predicted 8-hour L _{eq} (dBA)			
Construction Phase	Nearest Receiver to Project Property Line (185 feet)	Nearest Receiver to Project Geographic Center (285 feet)		
Site Preparation	72	68		
Grading	72	68		
Building Construction	68	64		
Paving	69	65		

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Table 9
Construction Noise Modeling Summary Results

	Predicted 8-hour Leq (dBA)		
	Nearest Receiver to Project	Nearest Receiver to Project	
Construction Phase	Property Line (185 feet)	Geographic Center (285 feet)	
Architectural Coating	63	59	

Note: Leq = equivalent continuous sound level (time-averaged sound level); dBA = A-weighted decibels.

Although the higher predicted construction noise levels in Table 9 are with respect to activities on or near the project boundary, these levels still would not exceed the Federal Transit Administration guidance threshold of 80 dBA 8-hour L_{eq} at off-site residential receptors. The highest noise levels from project construction are predicted to occur during site preparation and grading activities when noise levels from construction would be as high as 72 dBA L_{eq} at the nearest existing residences, approximately 185 feet away. At typical distances (which includes equipment operation distributed across the site, not just at the closest point to adjacent residences), construction noise would range from approximately 58 to 68 dBA L_{eq} . Therefore, on the basis of these predicted levels being less than the Federal Transit Administration guidance threshold, temporary construction-related noise impacts attributed to the proposed project would be less than significant.

Long-Term Operational Noise

An increase or decrease in noise level of at least 3 dB is required before any noticeable change in community response would be expected (Caltrans 2013). Based on application of the Federal Highway Administration Traffic Noise Model to existing and plus-project proximate roadway traffic volumes, Table 10 shows that at both listed representative receivers, the addition of proposed project traffic to the roadway network would result in a community noise equivalent level increase of less than 1 dB, which is an indiscernible level of change for the average healthy human ear. Thus, a less-than-significant impact is expected for proposed project-related off-site traffic noise increases affecting existing residences in the vicinity.

Table 10
Off-Site Roadway Traffic Noise Modeling Results

Modeled Receiver Tag (Location Description)	Existing (2020) Noise Level (dBA CNEL)	Existing with Project Noise Level (dBA CNEL)	Maximum Project- Related Noise Level Increase (dB)
ST1 West of Palmer Way, adjacent to project site	55.7	56.0	0.3
ST2 Nearest Resident	29.7	29.8	0.1

Note: dBA = A-weighted decibel; CNEL = community noise equivalent level; dB = decibel.

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Stationary Operations Noise

The proposed project is expected to feature stationary producers of noise associated with on-site operations that are distinct from the transportation noise studied in the preceding section. The assumed major on-site operating noise sources are as follows:

 The 11,404-square-foot office building would feature 10 packaged air-conditioner units on its roof, which this analysis assumes would be something akin to 4-ton (i.e., of refrigeration or cooling capacity) units resembling Carrier CA16NA 048 models and each having an individual reference sound power level of 78 dBA (76 dBA if equipped with sound shield) (Carrier Corporation 2012).

Table 11 shows the estimated combination of the on-site operational noise sources and the applicable City noise thresholds. No exceedances with respect to the municipal standards are expected; thus, operational noise impact from stationary sources should be less than significant.

Table 11
Predicted Project Stationary Operations Noise at Nearest Sensitive Receptors

Receptor	Nearest Receptor- North of Site (dBA)
Predicted Stationary Ops Noise Level (Leq hour)	41
Nighttime hourly Leq Limit (commercial zone)	45
Exceedance?	No

Note: Lea = equivalent continuous sound level (time-averaged sound level); dBA = A-weighted decibels.

b) Less-than-Significant Impact: Groundborne vibration attenuates rapidly, even over short distances. The attenuation of groundborne vibration as it propagates from source to receptor through intervening soils and rock strata can be estimated with expressions found in Federal Transit Administration and California Department of Transportation guidance. By way of example, for a bulldozer operating on site and as close as the northern project boundary (i.e., 185 feet from the nearest receiving sensitive land use) the estimated vibration velocity level would be 0.004 inches per second peak particle velocity (PPV) per the equation as follows (FTA 2006):

$$PPVrcvr = PPVref * (25/D)1.5 = 0.004 = 0.089 * (25/185)1.5$$

In the above equation, PPVrcvr is the predicted vibration velocity at the receiver position, PPVref is the reference value at 25 feet from the vibration source (the bulldozer), and D is the actual horizontal distance to the receiver. Therefore, as this predicted PPV for the nearest community receiver is less than the California Department of Transportation—based guidance threshold of 0.2 inches per second PPV for annoyance, the impact of vibration-induced annoyance to occupants of nearby existing homes would be less than significant.

c) Less-than-Significant Impact: There are no private airstrips within the vicinity of the project site. The closest airport to the project site is the McClellan Palomar Airport, approximately 0.7 miles southeast of the site. According to the McClellan Palomar Airport Noise Compatibility Program, the project site is not located within any identified noise contours and would therefore not expose people residing or working

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in the project area to excessive noise levels (San Diego County ALUC 2010). Impacts from aviation overflight noise exposure would be less than significant.

	PULATION AND HOUSING uld the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Induce substantial unplanned population growth in an area either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?			X	
b)	Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				×

a) Less-than-Significant Impact: The project involves the construction of an 11,404-square-foot, two-story office building on a portion of an undeveloped, approximately 6.34-acre site. The remaining 4.93 acres of the site would be undeveloped and the existing vegetation on site would be preserved. No residential use or other land uses typically associated with directly inducing population growth would be included as part of the project. The number of workers to be employed at the proposed office building was derived by using the "Business Area" occupant load number from Chapter 10 of the 2019 California Building Code. The occupant load number used is 150 (CBC 2019). Per the California Building Code, under the Business Area designation without fixed seating, the total building area shall be divided by the occupant load number (CBC 2019). Although the proposed office building is a combined total of 11,404 square feet, only the second story, which is 10,337 square feet, is designated for office space. As such, the project would generate an estimated maximum of 69 employees (CBC 2019).

It is anticipated that construction workers would come from the local labor force, and given the temporary nature of the construction work, it is unlikely construction workers would relocate to the area as a result of the project. However, because the project is not a non-residential use that typically induces substantial population growth (i.e., universities, large business centers, or other uses that result in substantial relocation of employees or stimulate substantial growth of the area through economic means), it is assumed that the project would not likely induce substantial population growth through employees relocating to the area. However, this analysis conservatively assumes that all 69 new permanent employees would relocate to the area.

SANDAG's 2050 Regional Growth Forecast uses several factors to forecast population, housing, and employment growth in San Diego County; one such factor is jurisdictional General Plan housing projections and long-term land use planning. SANDAG projects the region's population will grow by nearly one million people by 2050. The growth in population will drive job growth and housing demand within the region. The growth in population is projected to add nearly 500,000 jobs and more than 330,000 housing units by 2050 (SANDAG 2013). The regional growth forecasts are based on the underlying land use designations. The project site has a land use designation of (PI) Planned Industrial. The proposed office building would

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be consistent with the land use designation. However, the portion of the site proposed for preservation would have a land use designation change from (PI) Planned Industrial to (OS) Open Space. As such, the project would be consistent with the land use designation and is accounted for in the planned growth of the region. Additionally, The SANDAG 2050 Subregional Growth Forecast states that the City's population is projected to grow by 17.8% by 2050. The City's housing stock is projected to grow by 13% by 2050, resulting in approximately 50,212 total housing units; multifamily housing units are expected to account for approximately 82% of the new housing stock developed in the San Diego region by 2050 (SANDAG 2013). As such, employees generated from the project would be accounted for within the planned growth of the SANDAG 2050 Regional Growth Forecast and the Subregional Growth forecast of the City. Thus, impacts would be less than significant.

b) No Impact: The project site is currently undeveloped land. There are no existing residential uses on the project site. Therefore, the project would not displace any existing housing or population, and no impact would occur.

XV. PUBLIC SERVICES Would the project result in substantial adverse physical imp associated with the provision of new or physically altered go facilities, a need for new or physically altered government faconstruction of which could cause significant environmental order to maintain acceptable service ratios, response times, performance objectives for any of the public services:	vernment cilities, the impacts, in	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Fire protection?			\boxtimes	
b) Police protection?			\boxtimes	
c) Schools?			\boxtimes	
d) Parks?			\boxtimes	
e) Other public facilities?			\boxtimes	

a) Less-than-Significant Impact: The project site is currently served by the Carlsbad Fire Department (CFD), which provides initial response to all structural fire, medical, and associated emergencies within the 38 square miles of the City's boundaries. CFD has six fire stations that are fully equipped with the latest firefighting apparatuses and highly trained personnel to cover the emergency calls generated by the City's population of approximately 115,000 persons. In the event of an emergency, the project site would be served by Fire Station 5 (2540 Orion Way), located approximately 0.3 miles southeast of the site. The project site is already within the CFD service area, and once operational, the project would continue to be served by CFD. As previously discussed in Section XIV, Population and Housing, the project would not induce substantial population growth in the City. Although the project would potentially result in an incremental increase in calls for service to the project site in comparison to the existing conditions, this increase is expected to be nominal and not to result in the need for new CFD facilities.

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As discussed in Section IX, Hazards and Hazardous Materials, the entire project site is located in a high fire threat FHSZ. The types of potential ignition sources that currently exist in the area include vehicle and roadway machinery associated with various land uses in the vicinity, as well as off-site residences. By developing a two-story office building, the project would introduce potential ignition sources to the project site. However, the project would also include the conversion of fuels on the landscape to lower flammability. Upon completion of construction, the project site would include better access to developed portion of the site, a consistently managed and maintained landscape, higher site awareness/monitoring, and generally a reduction in the receptiveness of the area's landscape to ignition. The project shall comply with ignition resistant fire and building codes. Compliance with these codes will include a layered fire protection system designed to current codes and inclusive of site-specific measures. This will result in a project that is less susceptible to wildfire than surrounding landscapes and that would facilitate firefighter and medical aid response. Refer to Section IX for further details.

Therefore, the project would be adequately served by the existing fire protection services provided by the CFD, and with adherence to the City's ignition resistant fire and building codes and implementation of site-specific measures, the office building component would be a reduced fire hazard. Therefore, impacts associated with the construction or expansion of fire protection facilities would be less than significant.

- **b)** Less-than-Significant Impact: The project site is currently served by the Carlsbad Police Department (CPD) and would not require the expansion of the service area. The City's Police Department (2560 Orion Way) is located 0.4 miles southeast of the project site. The project site is already within the CPD service area, and once operational, the project would continue to be served by CPD. As previously discussed in Section XIV, the project would not induce substantial population growth in the City. Although the project would potentially result in an incremental increase in calls for service to the project site in comparison to the existing conditions, this increase is expected to be nominal and not to result in the need for new CPD facilities. Overall, it is anticipated that the project would be adequately served by existing CPD facilities, equipment, and personnel. Therefore, impacts associated with the construction or expansion of police protection facilities would be less than significant.
- c) Less-than-Significant Impact: Elementary through high school education in the City is provided by the Carlsbad Unified School District. As previously mentioned, the project would not induce substantial population growth in the City. As such, a significant increase in school-age children requiring public education is not expected to occur, and there would be no need for the development of additional schools. Further, pursuant to Education Code Section 17620 and Government Code Section 65995, the project would be subject to a School Facilities Fee of \$0.66 per square foot of new commercial/industrial development to be paid to Carlsbad Unified School District (CUSD 2020). Payment of the fees would adequately mitigate any potential impacts to school facilities associated with the project and potential student generation. Therefore, impacts associated with the construction or expansion of school facilities would be less than significant.
- d) Less-than-Significant Impact: As discussed in Section XIV, the number of workers to be employed at the proposed office building would be an estimated maximum of 69 employees. Under a conservative analysis, it is assumed that all 69 employees would relocate to the area. However, the growth in population generated by the project would be nominal and would be accounted for in SANDAG's 2050 Regional Growth Forecast. As such, an increase in patronage at park facilities is not expected. Upon buildout of the City and assuming completion of currently planned parks, the City will have a parkland

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surplus of 64.9 acres citywide (City of Carlsbad 2015a). Further, the project would be subject to the 1975 Quimby Act, which authorizes cities to require the developer to set aside land or pay fees for park improvements. Therefore, impacts associated with the construction or expansion of park facilities would be less than significant.

e) Less-than-Significant Impact: As previously mentioned, the project would not induce substantial population growth in the City. The number of employees generated from the proposed office building would be minimal compared to the anticipated growth in the City determined by SANDAG's 2050 Growth Forecast. As such, a substantial increase in patronage at libraries, community centers, and other public facilities is not expected. Therefore, impacts associated with other public facilities would be less than significant.

XVI.RE	CREATION	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?			\boxtimes	
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?			\boxtimes	

a-b) Less-than-Significant Impact: The project would not require the construction or expansion of recreational facilities. As discussed in Section XIV, the number of workers to be employed at the proposed office building would be an estimated maximum of 69 employees (CBC 2019). Under a conservative analysis, it is assumed that all 69 employees would relocate to the area. However, the growth in population generated by the project would be nominal and would be accounted for in SANDAG's 2050 Regional Growth Forecast. According to the City's General Plan, the City currently has 13 community parks totaling 254.6 acres, 27 special use areas (school fields, parks, community centers, etc.) totaling 81.1 acres, and five special resource areas (beaches, lakes, lagoons, etc.) totaling more than 1,300 acres (City of Carlsbad 2015a). Upon buildout of the City and assuming completion of currently planned parks, the City will have a parkland surplus of 64.9 acres citywide (City of Carlsbad 2015a). Further, the project would be subject to the 1975 Quimby Act, which authorizes cities to require the developer to set aside land or pay fees for park improvements. Therefore, impacts associated with recreation would be less than significant.

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XVII.	TRANSPORTATION uld the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?			\boxtimes	
b)	Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?			\boxtimes	
c)	Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			\boxtimes	
d)	Result in inadequate emergency access?			\boxtimes	

a) Less-than-Significant Impact: Pursuant to SB 743 and CEQA Guidelines Section 15064.3 subdivision (b), VMT is the program for measuring and addressing vehicular circulation system facilities under CEQA. Analysis of LOS is no longer the metric for determining transportation environmental impacts. VMT is addressed in response (b) below.

The Level 1 Traffic Impact Analysis (TIA) prepared for the project (MTC 2022c) provides a full analysis of the designated study area for the project as required by the City's Transportation Impact Analysis Guidelines (2008). Through this analysis, project consistency with the City's transportation, pedestrian, bicycle, and transit policies defined in the General Plan Mobility Element is determined. Implementation of the project would include improvements to Palmer Way along the project's street frontages, including a new sidewalk, crosswalks, and ramps. The proposed sidewalk would span the entirety of Palmer Way from the corner of Palmer Way and Cougar Drive to Palmer Way and Impala Drive. In addition, improvements would include a marked crosswalk across Palmer Way that connects two new pedestrian ramps at the corner of Palmer Way and Impala Drive as well as one new pedestrian ramp at the corner of Palmer Way across from Cougar Drive. As such, the project would introduce improvements to Palmer Way that would enhance pedestrian mobility needs by enabling connectivity to the businesses in the vicinity of the project site and enhancing accessibility to the nearest transit stop. As such, the project would support the City's General Plan Mobility Element. As the City's Transportation Impact Analysis Guidelines embody the requirements of the City of Carlsbad with regard to the policies addressing the full range of circulation system requirements and improvements (including transit, roadway, bicycle, and pedestrian facilities), the project would be consistent with these plans and policies, and the project impacts would be less than significant.

b) Less-than-Significant Impact: In 2013, Senate Bill 743 (SB 743) was signed into law requiring the adoption of new metrics for analyzing transportation impacts under CEQA as an alternative to level of service (LOS). Under SB 743, a project's effect on automobile delay will no longer constitute a significant environmental impact. In response to SB 743, the Office of Planning and Research (OPR) proposed changes to the CEQA Guidelines in the form of new Section 15064.3, which was approved and became effective in

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December 2018. Under Section 15064.3, VMT generally is the most appropriate measure of transportation impacts and a project's VMT exceeding an applicable threshold of significance may indicate a significant impact. (Section 15064.3, subd. (b).) In compliance with SB 743, the City adopted VMT thresholds of significance and screening criteria in June 2020, as well as prepared VMT Analysis Guidelines, which provide direction regarding the mythologies and thresholds to be used for VMT analysis for projects located within the City of Carlsbad. A project specific VMT analysis was prepared based on the criteria outlined in the City's VMT Analysis Guidelines (MTC 2022b).

According to the City's VMT Analysis Guidelines, an office project would have a significant transportation impact if the project VMT per employee exceeds a level 15% below the regional average VMT per employee. Under this threshold, if the project's VMT per employee is 15% or more below the regional average VMT per employee, the project's impacts would be less than significant; conversely, if the project's VMT per employee is less than 15% below the regional average VMT per employee, the impact would be considered significant.

Typical office land use projects generating less than 2,400 daily trips would use the City of Carlsbad's VMT/capita and VMT/employee analysis maps. SANDAG recently released the San Diego Region SB743 VMT Maps, which are based on the Activity Based Model (ABM2+) forecast and contain VMT/capita and VMT/employee at the Traffic Analysis Zone (TAZ) level. As a result, the VMT/employee of the project is estimated based on the results of the ABM2+ forecast for the TAZ in which the project is located.

The project is located in TAZ 970 and results in a VMT per employee of 18.4, which is 97.6% of the regional average of 18.9 (MTC 2022b). Thus, for purposes of this analysis, the starting point for determining the project's VMT per employee is 18.4. To this number, an adjustment is then made to account for the TDM program to be implemented by the project (refer to the Project Description above). Based on analysis conducted for the project, implementation of the project's TDM program would result in a 12.9% reduction in project-generated VMT (MTC 2022b). Accounting for the 12.9% reduction in VMT attributable to the TDM program, the project would generate a net 16.0 VMT per employee (18.4 * (1-12.9%) = 16.0). This amount, 16.0, is 15.3% below the regional average of 18.9 VMT per employee (1 - (16.0 / 18.9) = 15.3%). Refer to the *Valley View VMT Analysis* for additional information (MTC 2022b).

Accordingly, the project's VMT/employee is 15% or more below the regional average and impacts would be less than significant.

- c) Less-than-Significant Impact: The proposed project would include two new driveways off Palmer Way; the first driveway would be a 25-foot-wide passenger vehicle driveway at the northwestern corner of the project site and the other would be a 35-foot-wide passenger driveway at the southwestern corner of the project site. The driveways would be connected by a single drive aisle providing through access to the paved employee parking garage. All project circulation improvements would be designed and constructed to City standards, and therefore, would not result in design hazards. Therefore, it would not increase hazards due to an incompatible use, and impacts would be less than significant.
- d) Less-than-Significant Impact: As previously discussed in response XVII.b, access to the project site would be through two new driveways off Palmer Way; the first driveway would be a 25-foot-wide passenger vehicle driveway at the northwestern corner of the project site and the other would be a 35-foot-wide passenger driveway at the southwestern corner of the project site. The driveways would be connected by a single drive aisle providing through access to the paved employee parking garage. The

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project has been designed to satisfy the emergency requirements of the CFD and CPD. Pursuant to Chapter 21.45 of the City Municipal Code, General Development Standards, drive aisles required for emergency access shall be a minimum of 20 feet wide (City of Carlsbad 2017b). In addition, Chapter 17.04, Fire Prevention Code, of the City Municipal Code states that fire apparatus roads shall have an unobstructed width of not less than 24 feet (City of Carlsbad 2017b). Thus, because the project site would have driveways wider than the widths mentioned above, there would be no conflict with the City's Municipal Code regarding emergency vehicle access.

Furthermore, the City is a participant in USDCESO. The USDCESO Operational Area Emergency Plan (October 2010) contains evacuation routes resulting from a variety of emergencies (USDCESO and County of San Diego 2010). Primary evacuation routes consist of the major freeways, highways, and prime arterials within San Diego County. The closest evacuation route would be El Camino Real, designated by the City's General Plan as an arterial road, located approximately 470 feet west of the site (City of Carlsbad 2015a). Therefore, impacts associated with an adopted emergency response plan or emergency evacuation plan would be less than significant.

sigr Coc tha lan	TRIBAL CULTURAL RESOURCES unuld the project cause a substantial adverse change in the inficance of a tribal cultural resource, defined in Public Resources de section 21074 as either a site, feature, place, cultural landscape t is geographically defined in terms of the size and scope of the dscape, sacred place, or object with cultural value to a California cive American tribe, and that is:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or			×	
b)	A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.		X		

CEQA was amended in 2014 through AB 52, which created a new category of "tribal culture resources" that must be considered under CEQA and applies to all projects that file a notice of preparation, notice of negative declaration, or mitigated negative declaration (MND) on or after July 1, 2015. AB 52 requires lead agencies to provide notice to and begin consultation with California Native American tribes that are traditionally and culturally affiliated with the geographic area of a project if that tribe has requested, in writing, to be kept informed of projects by the lead agency prior to the determination of whether a negative declaration, mitigated negative declaration, or environmental impact report will be prepared. If a tribe requests consultation within 30 days upon receipt of the notice, the lead agency must consult with the tribe. AB 52 also specifies mitigation measures that may be considered to avoid or minimize impacts

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to tribal cultural resources. Specifically, California Public Resources Code, Section 21074, provides the following guidance:

- (a) Tribal Cultural Resources are either of the following:
 - (1) Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:
 - (A) Included or determined to be eligible for inclusion in the California Register of Cultural Resources.
 - (B) Included in a local register of cultural resources as defined in subdivision (k) of §5020.1.
 - (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 §5024.1. In applying the criteria set forth in subdivision (c) of §5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.
- (b) A cultural landscape that meets the criteria of subdivision (a) is a tribal cultural resource to the extent that the landscape is geographically defined in terms of the size and scope of the landscape.
- (c) A historical resource described in Section 21084.1, a unique archaeological resource as defined in subdivision (g) of Section 21083.2, or a "nonunique archeological resource" as defined in subdivision (h) of Section 21083.2 may also be a tribal cultural resource if it conforms with the criteria of subdivision (a).
- a) Less-than-Significant Impact: As discussed in Section V, Cultural Resources, the record search performed for the project site in 2008 found that within a 1-mile radius of the project site, 27 studies have been conducted, and 19 cultural resource sites and 1 isolate have been recorded. One study has been conducted in the project site. However, no previously recorded sites are recorded within the project site (Gallegos 2008). The update to the Cultural Survey did not identify any cultural resource sites (Gallegos 2020). Therefore, there is no change in findings in the update to the Cultural Survey. Additionally, no historical sites were identified within the project site based on the review of historical maps (Gallegos 2020). Therefore, impacts associated with historical resources are less than significant.
- b) Less-than-Significant Impact with Mitigation Incorporated: The project is subject to compliance with AB 52 (California Public Resources Code, Section 21074), which requires consideration of impacts to tribal cultural resources as part of the CEQA process. AB 52 requires the City, as the lead agency responsible for CEQA compliance for the project, to notify any groups (who have requested notification) of the project who are traditionally or culturally affiliated with the geographic area of the project. Because AB 52 is a government-to-government process, all records of correspondence related to AB 52 notification and any subsequent consultation are on file with the City. In accordance with AB 52, on July 15, 2021, , the City sent notification letters to the tribal representatives that have formally requested such notice under AB 52. To date, responses from the San Luis Rey Band of Mission Indians, Campo Band of Mission Indians, and the Rincon Band of Luiseño Indians were received. Additionally, in accordance with Senate Bill (SB) 18, the City sent notification letters to tribal representatives on July 27, 2021.

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As discussed in Section V, the record search performed for the project site in 2008 found that within a 1-mile radius of the project site, 27 studies have been conducted, and 19 cultural resource sites and 1 isolate have been recorded. One study has been conducted in the project site. However, no previously recorded sites are recorded within the project site (Gallegos 2008). The update to the Cultural Survey did not identify any cultural resource sites (Gallegos 2020). Therefore, there is no change in findings in the update to the Cultural Survey. Further, the portion of the project site along Palmer Way has been previously graded and consists of disturbed soil. As such, it is possible that any archaeological resources that may have once been located on the graded portion of the project site could have been previously disturbed. Nonetheless, it is always possible that intact archaeological deposits, including tribal cultural resources, are present at subsurface depths that were not impacted by previous grading activities. For this reason, the project site should be treated as potentially sensitive for archaeological resources. MM-CUL-1 through MM-CUL-12 are incorporated to reduce potential impacts to unanticipated tribal cultural resources. With incorporation of MM-CUL-1 through MM-CUL-12, impacts associated with tribal cultural resources would be less than significant.

	ITILITIES AND SERVICE SYSTEMS uld the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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 would cause significant environmental effects?			\boxtimes	
b)	Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?			\boxtimes	
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?			X	
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?			\boxtimes	
e)	Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?				×

a) Less-than-Significant Impact:

Water Facilities

The project proposes the construction of a two-story office building on an undeveloped site. As such, the project would increase the water use intensity of the site. As part of the project, new on-site water

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lines would be installed and would connect to existing lines within Palmer Way. During operation, the projected water use from the office component would use approximately 2,623 gallons of water per day (KMA 2020). CMWD projects that demands for potable water will be 18,007 acre-feet per year (AFY) in 2020 and 19,768 AFY by 2040 (CMWD 2016). The CMWD anticipates that the City will have total water supplies of 28,526 AFY in the year 2020 and 30,474 AFY by 2040 (CMWD 2016). Water storage for the CMWD is provided by Maerkle Reservoir and 10 additional reservoirs within the distribution system. Maerkle Reservoir is the major treated water storage facility for the CMWD, with a capacity of approximately 600 acre feet or 195 million gallons (CMWD 2016). Further, as discussed in response XIX.b of this section, the project would have sufficient water supplies during normal, dry, and multiple dry years. Therefore, the project's nominal contribution to the total water demand would be served by existing water facilities serving the project area without requiring new or expanded facilities.

Wastewater Treatment Facilities

The project site would be served by the City for sewer services. The proposed project would discharge wastewater under the jurisdiction of the City's Wastewater Division, which delivers its wastewater to Encina Wastewater Authority. The Encina Wastewater Authority treats approximately 22 million gallons per day of wastewater with a capacity of over 40 million gallons per day (EWA 2017). During operation, the office component of the project would generate approximately 1,394 gallons of wastewater per day (KMA 2020). Therefore, Encina Wastewater Authority has adequate capacity to serve the project's demand for the office building component. The proposed project would not impede or alter the Encina Wastewater Authority's ability to treat wastewater and remain in compliance with RWQCB discharge requirements. Therefore, impacts associated with wastewater treatment facilities would be less than significant.

Stormwater Drainage Facilities

The project would include connections to the existing City's stormwater conveyance system, which has the capacity to accept the project's stormwater contributions. While the proposed project would alter the amount of impervious surfaces on the project site compared to the existing condition, a SWQMP was prepared for the project and specifies BMPs that would be implemented during construction and operations of the project. The structural BMPs would ensure runoff from large storm events would not exceed the capacity of the stormwater drainage system. Refer to Section X for further details. The construction of these facilities is already analyzed in this MND and would not cause significant environmental effects. Therefore, impacts associated with stormwater drainage facilities would be less than significant.

Natural Gas and Electric Power Facilities

Construction

Electricity

Temporary electric power for as-necessary lighting and electronic equipment (such as computers inside temporary construction trailers) would be provided by SDG&E. The electricity used for such activities would be temporary and substantially less than that required for project operation, and would have a negligible contribution to the project's overall energy consumption. Refer to Section VI, Energy, for further details.

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Natural Gas

Natural gas is not anticipated to be required during construction of the proposed project. Fuels used for construction would primarily consist of diesel and gasoline. Any minor amounts of natural gas that may be consumed as a result of project construction would be substantially less than that required for project operation and would have a negligible contribution to the project's overall energy consumption. Refer to Section VI for further details.

Operation

Electricity

Operation of the project upon buildout would require electricity for multiple purposes, including cooling, lighting, appliances, and various equipment. Additionally, the supply, conveyance, treatment, and distribution of water and wastewater would indirectly result in electricity usage. Electricity during operation would be provided by SDG&E. Refer to Section VI for further details.

Natural Gas

Project operation would require natural gas for various purposes, including natural gas appliances and for space heating. However, the project would rely on electric water heaters. Refer to Section VI for further details.

Therefore, impacts associated with natural gas and electrical power facilities during construction and operation activities would be less than significant.

<u>Telecommunications Facilities</u>

The City is served by multiple telephone service providers. Since the project site is in an urbanized area and is surrounded by commercial, light-industrial, office, and single-family residential uses, there are existing telecommunication facilities that would be able to serve the project site. Once the project is completed, future employees would be able to connect to existing telecommunication services without the need for expansion or construction of new facilities. Therefore, impacts associated with telecommunications facilities would be less than significant.

b) Less-than-Significant Impact: As discussed in response XIX.a, the CMWD would serve the project's water needs. CMWD purchases water from the SDCWA, which gets its water from the Colorado River, State Water Project Water, and desalinated seawater. The CMWD is a member of the North San Diego Water Reuse Coalition, which allows CMWD to expand beneficial reuse of local wastewater for non-drinking water purposes, such as irrigation and industrial uses. CMWD also assumes ongoing conservation and increased recycled water use, which will reduce potable water demands. The proposed project would introduce a new office building to the project site. As such, water use intensity on the site would increase. During operation, the projected water use from the office component would be approximately 2,623 gallons of water per day (KMA 2020). Table 12 shows the projected water supplies for the years 2020–2040.

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Table 12
Projected Water Supplies (AFY)

Source	2020	2025	2030	2035	2040
SDCWA Purchases	15,507	16,677	16,965	17,244	17,268
Seawater Desalination	2,500	2,500	2,500	2,500	2,500
Recycled Water	10,519	10,519	10,519	10,706	10,706
Total Water Supplies	28,526	29,696	29,984	30,450	30,474

Source: CMWD 2016.

Note: AFY = acre-feet per year; SDCWA = San Diego County Water Authority.

As shown in Table 12, total water supply for the City is expected to increase from 2020 to 2040. Additionally, the 2015 Urban Water Management Plan demand analysis demonstrates that, with existing and anticipated conservation efforts, CMWD is on track to meet its 2020 gallons per capita per day target of 207 gallons per capita per day (CMWD 2016). As such, CMWD currently has no immediate concern with the availability of water supply to the City.

However, customer demands do vary with local rainfall. In general, water demands tend to increase in dry years, primarily due to increased water activities such as landscape irrigation. Thus, to assess the reliability of water supply service, every urban water supplier is required to assess its water service under normal, dry, and multiple-dry-year scenarios. Table 13 provides water demand and supplies for dry- and multiple-dry-year scenarios for the CMWD.

Table 13
Demand and Supply Assumptions

	Normal Single-Dry		Multiple-Dry Water Years			
Source	Water Year	Water Year	Year 1	Year 2	Year 3	
		Demands				
Potable Water	100%	107%	106%	111%	116%	
Recycled Water	100%	107%	106%	111%	116%	
Total Percent of Nor	mal Demands	107%	106%	111%	116%	
		Supplies				
SDCWA Purchases	100%	108%	103%	105%	107%	
Seawater Desalination	100%	100%	100%	100%	100%	
Recycled Water	100%	100%	100%	100%	100%	
Total Percent of Normal Po	107%	106%	111%	Variable (107%-116%)		

Source: CMWD 2016.

Notes: SDCWA = San Diego County Water Authority.

Table represents hydrologic demands projected to change, as a percentage of normal.

As shown in Table 13, water demands will vary depending on the hydrologic conditions. Supply availability will also vary within each hydrologic scenario. CMWD's local supply will remain consistent with the

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projected normal year supplies regardless of hydrologic scenario because they are drought-proof supplies (CMWD 2016). Supply from SDCWA will vary depending on SDCWA's supply mix and demands from its member agencies. CWMD will purchase enough water from SDCWA to meet potable demands that cannot be met from local supplies. Any increase in potable demand must be met with increased purchases from SDCWA. Therefore, impacts associated with sufficient water supplies would be less than significant.

- c) Less-than-Significant Impact: A significant impact would occur if the wastewater treatment provider indicates that a project would increase wastewater generation to such a degree that the capacity of the facilities currently serving the project site would be exceeded. As mentioned in response XIX.a, wastewater generated from the project site would be treated at Encina Wastewater Authority. The Encina Wastewater Authority treats approximately 22 million gallons per day of wastewater, with a capacity of over 40 million gallons per day (EWA 2017). During operation, the office component of the project would generate approximately 1,394 gallons of wastewater per day (KMA 2020). Therefore, Encina Wastewater Authority has adequate capacity to serve the project's demand for the office building component. The proposed project would not impede or alter the Encina Wastewater Authority's ability to treat wastewater and remain in compliance with RWQCB discharge requirements. Therefore, impacts would be less than significant.
- d) Less-than-Significant Impact: The project would produce waste during construction and operation, typical of that of a normal office development. The project does not include any uses that would otherwise generate excessive solid waste during either construction or the operational life of the project. Construction would be a short-term and temporary source of waste. Waste generated from construction would typically include wood/lumber, steel, concrete, various debris, etc. Operation would result in a long-term source of solid waste. It is expected that the project would generate 10.6 tons of waste per year (Dudek 2021). Waste Management of North County provides service for the City. The City's solid waste that is not diverted from the City is hauled to two landfills in San Diego County: Otay Landfill and Sycamore Landfill (City of Carlsbad 2015a). Otay Landfill has a remaining capacity of approximately 21,194,008 cubic yards, and Sycamore Landfill has a remaining capacity of approximately 113,972,637 cubic yards (CalRecycle 2019). Additionally, all collection, transportation, and disposal of solid waste generated by the project would comply with all applicable federal, state, and local statutes and regulations. In particular, AB 939, the Integrated Waste Management Act of 1989, requires that at least 50% of solid waste generated by a jurisdiction be diverted from landfill disposal through source reduction, recycling, or composting. Regional agencies, counties, and cities are required to develop a waste management plan that would achieve a 50% diversion from landfills (California Public Resources Code, Section 40000 et seq.). Given the estimated remaining capacity and the continued state and local efforts and regulations to reduce waste streams to landfills, the project would be adequately served by existing landfills. Impacts would be less than significant.
- **e) No Impact:** During construction and operation, the project would be required to comply with applicable federal, state, and local regulations regarding the proper disposal of solid waste, including the Carlsbad Municipal Code as it relates to solid waste and recycling. Therefore, no impacts would occur.

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xx.	WILDFIRE If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Substantially impair an adopted emergency response plan or emergency evacuation plan?			\boxtimes	
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?			\boxtimes	
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?			X	
d)	Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?			X	

The project site is not located in or near a state responsibility area. None of the incorporated City of Carlsbad is located within a state responsibility area (CAL FIRE 2007). However, the entire project site is located a very high threat FHSZ and is encompassed by a very high threat FHSZ in all directions (City of Carlsbad 2015a). As such, a Fire Protection Plan (FPP) was prepared for the project by Environs Landscape Architecture in May 2018 to provide measures for fire prevention (Environs 2018).

a) Less-than-Significant Impact: As discussed in Section IX, access to the project site will be through two new driveways off Palmer Way; the first driveway would be a 25-foot-wide passenger vehicle driveway at the northwestern corner of the project site and the other would be a 35-foot-wide passenger driveway at the southwestern corner of the project site. The driveways would be connected by a single drive aisle providing through access to the paved employee parking garage. The project has been designed to satisfy the emergency requirements of the CFD and CPD. Pursuant to Chapter 21.45 of the City Municipal Code, General Development Standards, drive aisles required for emergency access shall be a minimum of 20 feet wide (City of Carlsbad 2017b). In addition, Chapter 17.04, Fire Prevention Code, of the City Municipal Code states that fire apparatus roads shall have an unobstructed width of not less than 24 feet (City of Carlsbad 2017b). Thus, because the project site would have driveways wider than the widths mentioned above, there would be no conflict with the City's Municipal Code regarding emergency vehicle access.

Furthermore, the City is a participant in USDCESO. The USDCESO Operational Area Emergency Plan (October 2010) contains evacuation routes resulting from a variety of emergencies (USDCESO and County of San Diego 2010). Primary evacuation routes consist of the major freeways, highways, and prime arterials within San Diego County. The closest evacuation route would be El Camino Real, designated by the City's General Plan as an arterial road, located approximately 470 feet west of the site (City of Carlsbad

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2015a). Therefore, impacts associated with an adopted emergency response plan or emergency evacuation plan would be less than significant.

b) Less-than-Significant Impact: The project proposes construction of an office building on a portion of vacant, previously graded land. The remaining project site would not be developed and existing vegetation would be preserved. The surrounding area is largely characterized by a mix of existing development and undeveloped land. Primary development exists across Palmer Way to the west of the project site and includes a variety of commercial and light industrial development properties. Located to the south is a mix of undeveloped land, spreading steep slope areas, and light industrial development properties on flat land along Impala Drive. On the northwest boundary of the project site is a landscape business office, trailers, and shed-like structures. The eastern and northeastern areas surrounding the project site consist mostly of undeveloped land with scattered agriculture residential uses located along steep slopes. The nearest residential use to the project site is located approximately 180 feet to the east upon a 40% slope (Figure 8). As previously discussed in Section IX, entire project site is located in a very high threat FHSZ. Thus, as a result from slope, prevailing winds, and other factors, the project may exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire.

The types of potential ignition sources that currently exist in the area include vehicle and roadway machinery associated with various land uses in the vicinity, as well as off-site residences. By developing a two-story office building, the project would introduce potential ignition sources to the project site. However, the project would also include the conversion of fuels on the landscape to lower flammability. Upon completion of construction, the project site would include better access to developed portion of the site, a consistently managed and maintained landscape, higher site awareness/monitoring, and generally a reduction in the receptiveness of the area's landscape to ignition. The project shall comply with ignition resistant fire and building codes. Compliance with these codes will include a layered fire protection system designed to current codes and inclusive of site-specific measures. This will result in a project that is less susceptible to wildfire than surrounding landscapes and would facilitate firefighter and medical aid response. Further, modern infrastructure will be provided, along with implementation of the latest ignition resistant construction methods and materials. All structures are required to include interior sprinklers consistent with Carlsbad Fire and Building Codes. In adherence to Chapter 17.04 of the City's Municipal Code, existing vegetation on the project site would be thinned and modified to help prevent the spread of wildfire (City of Carlsbad 2017b).

As detailed in the FPP created for the project (Environs 2018), the project site would contain three fire FMZs around the proposed office building, which would act as defensible areas where vegetation would be maintained to slow down the spread of fire to and from the building (Figure 6). The FMZs would be categorized as FMZ A or FMZ B. FMZ A areas are identified as manufactured slopes abutting hazardous native vegetation and FMZ B areas are natural slopes with native vegetation where removal of native vegetation is restricted. Within each FMZ area, a subcategory would apply (Zone A-1, A-2, A-3, B-1, B-2, and B-3), and they would be individually subject to modification requirements. Refer to Figure 7, Fuel Modification Zones, for specific zone information. Maintenance of FMZs shall be coordinated by the owner of the property with the City and shall abide by specifications set out in the Open Space Element of the General Plan and the Preserve Management Plan to establish a long-term maintenance plan and schedule. Therefore, with adherence to ignition resistant fire and building codes and implementation of the FMZs outlined in the FPP, impacts would be less than significant.

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c) Less-than-Significant Impact: The project would involve the construction of a two-story office building on a portion of vacant, previously graded land. The remaining project site would not be developed and existing vegetation would be preserved. The project site would be served by existing utilities such as CMWD for water services and the City for sewer services. The project would include new on-site water and sewer lines that would connect to the existing lines within Palmer Way. Additionally, the project would be served electricity by SDG&E by connecting to existing off-site infrastructure within Palmer Way. It is not anticipated that the project would exacerbate fire risk, since pavement would serve as a fuel break, and the project site would have FMZs on the entire east side and portions on the north and south sides, which would act as defensible areas where vegetation would be maintained to slow down the spread of fire to and from the building. Further, the west and southeast sides of the project site contain existing development with commercial and light industrial uses. Therefore, impacts associated with installation or maintenance of associated infrastructure resulting in exacerbated fire risk would be less than significant.

d) Less-than-Significant Impact: The project would comply with the site plan review and permitting requirements of the City. As mentioned in Section VII, Geology and Soils, the City does not include any areas identified as being susceptible to landslides and the overall risk of landslides is low (City of Carlsbad 2015b). However, areas with steep slopes that have 25% or greater incline/decline have increased landslide risk. The proposed office building would be located on the western edge of the project site where the land is generally flat with gentle slopes. The portion of the project site proposed for development would be graded and introduce more impervious area than existing conditions. The remaining area of the project site would remain undeveloped and the existing vegetation would be preserved and maintained. This component of the project would span steep slopes with a maximum decline of 40%.

Within the 40% slope, a residential use would be located approximately 180 feet to the east of the project site (Figure 8). Erosion control measures, as specified in the project's FPP, require specific planting standards for steep slope areas. Refer to the project's FPP for more details regarding the planting standards. Further, as discussed in Section X, runoff generated from the developed area of the project site would drain to the proposed biofiltration basins for cleansing purposes and would be conveyed to a proposed underground vault for detention and hydromodification. The runoff would be connected to the existing public storm drain within Palmer Way. Although construction of the proposed office building would introduce more impervious area, the development would only result in a small increase to runoff. The increase in water flow would have a minimal impact to the existing downstream storm drain system because it would be detained on site to release the same amount as existing conditions. Additionally, per the Soils Engineer recommendation stated in the project's SWQMP, all runoff would be directed toward Palmer Way and away from steep slope areas to prevent potential slope landslides. As such, the project would not expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes. Therefore, impacts would be less than significant.

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XXI.	MANDATORY FINDINGS OF SIGNIFICANCE Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Does the project have the potential to 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?		X		
b)	Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)		×		
c)	Does the project have environmental effects, which will cause the substantial adverse effects on human beings, either directly or indirectly?		X		

a) Less-than-Significant Impact with Mitigation Incorporated: As discussed in Section IV, the proposed project would potentially result in significant impacts to vegetation, special-status wildlife, wetland habitat, and other sensitive natural communities, jurisdictional areas, and the Carlsbad HMP area. However, with incorporation of MM-BIO-1 through MM-BIO-4, all potentially significant impacts would be reduced to a level below significance. The proposed project would not substantially degrade the quality of the environment or impact fish or wildlife species or plant communities.

As discussed in Section V, potential impacts regarding inadvertent discovery of cultural resources could occur during construction of the project. However, implementation of MM-CUL-1 through MM-CUL-12 would ensure that impacts would be less than significant. Overall, impacts would be less than significant with the incorporation of mitigation.

As discussed in Section XVIII, the project is subject to compliance with AB 52 (California Public Resources Code, Section 21074), which requires consideration of impacts to tribal cultural resources as part of the CEQA process. AB 52 requires the City, as the lead agency responsible for CEQA compliance for the project, to notify any groups (who have requested notification) of the project who are traditionally or culturally affiliated with the geographic area of the project. Because AB 52 is a government-to-government process, all records of correspondence related to AB 52 notification and any subsequent consultation are on file with the City. In accordance with AB 52, on July 15, 2021, the City sent notification letters to the tribal representatives that have formally requested such notice under AB 52. Refer to Section XVIII for a summary of consultation under AB 52. Implementation of MM-CUL-1 through MM-CUL-12 would ensure

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the protection and preservation of tribal cultural resources and therefore would reduce impacts to less than significant. Overall, impacts would be less than significant with the incorporation of mitigation.

- b) Less-than-Significant Impact with Mitigation Incorporated: As provided in the analysis in this MND, the proposed project would not result in significant impacts to aesthetics, agriculture and forestry resources, air quality, energy, geology and soils, GHG emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, noise, population and housing, public services, recreation, transportation, utilities and service systems, and wildfire. Mitigation measures recommended for biological resources, cultural and tribal cultural resources, and geology and soils would reduce impacts to below a level of significance. The proposed project would incrementally contribute to cumulative impacts for projects occurring within the City. With mitigation, however, implementation of the proposed project would not result in any residually significant impacts that could contribute to a cumulative impact. In the absence of residually significant impacts, the incremental accumulation of effects would not be cumulatively considerable and would be less than significant.
- c) Less-than-Significant Impact with Mitigation Incorporated: The potential for adverse direct or indirect impacts to human beings was considered throughout this MND. Based on this evaluation, there is no substantial evidence that construction or operation of the project with the proposed mitigation measures incorporated would result in a substantial adverse effect on human beings. Impacts would be less than significant with incorporation of mitigation measures.

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LIST OF MITIGATION MEASURES (If Applicable)

MM-BIO-1

Mitigation for impacts to 0.68 acre of Coastal Sage Scrub requires mitigation at a 2:1 mitigation ratio. Mitigation shall be provided through the onsite preservation of 4.70 acres of Coastal Sage Scrub habitat. Mitigation for impacts to 0.75 acre of Disturbed Habitat shall be provided by paying a per acre in-lieu mitigation fee prior to final map approval, issuance of a grading permit, or clearing of any habitat, whichever occurs first. Note that a final, current mitigation fee will be determined by the Carlsbad City Council.

MM-BIO-2

Prior to final map approval, issuance of a grading permit, or clearing of any habitat, whichever occurs first, the project applicant shall perform the following, each of which shall be approved by the City:

- Record a conservation easement, as defined by California Civil Code, Section 815.1, or other protective measure for all on-site mitigation land including 4.93 acres of open space.
- Select a qualified, City-approved, conservation entity to manage the conserved land.
 Prepare a preserve management plan, which will be approved by the City of Carlsbad.
- Prepare a Property Analysis Record, or acceptable alternative, to estimate costs of inperpetuity management and monitoring or otherwise provide for an estimate of funding needed.
- Provide a non-wasting endowment or other funding sources acceptable to the City of Carlsbad at a qualified third-party financial institution based on the Property Analysis Record to sufficiently cover the costs of in-perpetuity management and monitoring.

MM-BIO-3

In order to prevent impacts of the proposed development on the City of Carlsbad's Habitat Management Plan (HMP) preserve area off site, the proposed project shall comply with the adjacency standards outlined in the Carlsbad HMP. Prior to the issuance of the first grading permit, the project plans shall reflect the adjacency standards as follows:

a. Fire Management

Fire management for the proposed project shall be addressed through the designation of the fuel modification zones (FMZs). All FMZ areas shall be incorporated within the development boundaries and shall be addressed with the preparation of a fire protection plan.

b. Erosion Control

Standard best management practices will be implemented to avoid, reduce, contain, and clean up toxic chemicals and polluted stormwater runoff and prevent them from contaminating groundwater and off-site wetlands and non-wetland waters. In addition, no new surface drainage shall be directed into the open space areas.

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c. Landscaping Restrictions

Landscape planting palettes for the proposed project shall not use non-native, invasive plant species that can displace native species in natural communities. These plant species are identified in the Carlsbad HMP but the list of invasive species that will be avoided is not limited to the species on the Carlsbad HMP list. None shall be utilized on site and no potentially invasive species shall be planted in or within 100 feet of the HMP. Additionally, the project shall not use horticultural regimes (irrigation, fertilization, pest control, and pruning) that can alter site conditions in natural areas. Irrigation of the landscaping shall be designed and scheduled to avoid runoff into the proposed open space. Further, the project shall avoid genetic contamination from the introduction of native cultivars not collected on site or in proximity to the site.

d. Fencing, Signs, and Lighting

To control and direct humans, domestic animals, and wildlife, fencing shall be installed on the project site. Signs shall be placed near the entrance and along other appropriate locations. No lighting shall be permitted in the preserve except where essential for roadways, facility use, and safety. Along preserve edges, major highway lighting shall be limited to low pressure sodium sources directed away from the preserve areas. No access or public entrance shall lead to the HMP from the project site. Cut-off shields shall be used on all lighting structures adjacent to the HMP preserve, and lighting shall meet the minimum lumen requirements for commercial parking areas. Lighting shall also be controlled by a dusk-to-dawn sensor to ensure the parking area is not being lit during unnecessary hours. Additionally, parking stalls adjacent to sensitive habitat shall be screened by a 3-foot-high solid concrete screen wall.

e. Predator and Exotic Species Control

Non-native plant and animal species have few natural predators or other ecological controls on their population sizes, and they sometimes thrive under conditions created by humans. These species may aggressively outcompete native species or otherwise harm sensitive species. Therefore, the project shall implement special management measures to control exotic species and non-native predators.

MM-BIO-4

Clearing, grading, and modification activities are generally prohibited during the bird breeding season (February 15–August 31). Other construction activities will also be avoided during the breeding season if feasible. If vegetation clearing or construction cannot be avoided during the breeding season, then a qualified biologist shall conduct preconstruction surveys no more than 3 days prior to the start of construction activities. If a nest is found, a no-work buffer zone shall be established around the nest until the young have fledged, as determined by a qualified biologist. The width of the buffer zone shall be 500 feet for the California gnatcatcher. For other species, the width of the buffer zone shall be determined by a qualified biologist based on the species and as approved by the City of Carlsbad.

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MM-CUL-1

An archaeological monitor shall be present for initial ground-disturbing activities associated with the proposed project in the event unanticipated discoveries are made. If human remains are discovered, California Health and Safety Code Section 7050.5, states that further disturbances and activities shall stop in any area or nearby area suspected to overlie remains, and the County coroner shall be contacted. At this time, the person who discovered the remains will contact the City of Carlsbad so that they may work with the most likely descendent on the respectful treatment and disposition of the remains.

MM-CUL-2

Prior to the commencement of any ground disturbing activities, the project developer shall enter into a Pre-Excavation Agreement, otherwise known as a Tribal Cultural Resources Treatment and Tribal Monitoring Agreement, with the San Luis Rey Band of Mission Indians or other Luiseño tribe. This agreement will contain provisions to address the proper treatment of any tribal cultural resources and/or Luiseño Native American human remains inadvertently discovered during the course of the project. The agreement will outline the roles and powers of the Luiseño Native American monitors and the archaeologist. A copy of said archaeological contract and Pre-Excavation Agreement shall be provided to the City of Carlsbad prior to the issuance of a grading permit.

MM-CUL-3

A Luiseño Native American monitor shall be present during all ground disturbing activities. Ground disturbing activities may include, but are not be limited to, archaeological studies, geotechnical investigations, clearing, grubbing, trenching, excavation, preparation for utilities and other infrastructure, and grading activities.

MM-CUL-4

Any and all uncovered artifacts of Luiseño Native American cultural importance shall be treated with dignity and respect and be reburied on-site within an appropriate location protected by open space or easement, etc., where the cultural items will not be disturbed in the future, or shall be returned to the Most Likely Descendant, whichever is most applicable, and shall not be curated, unless ordered to do so by a federal agency or a court of competent jurisdiction.

MM-CUL-5

The Luiseño Native American monitor shall be present at the project's on-site preconstruction meeting to consult with grading and excavation contractors concerning excavation schedules and safety issues, as well as consult with the principal archaeologist concerning the proposed archaeologist techniques and/or strategies for the project.

MM-CUL-6

Luiseño Native American monitors and archaeological monitors shall have joint authority to temporarily divert and/or halt construction activities. If tribal cultural resources are discovered during construction, all earth moving activity within and around the immediate discovery area must be diverted until the Luiseño Native American monitor and the archaeologist can assess the nature and significance of the find.

MM-CUL-7

If a significant tribal cultural resource(s) and/or unique archaeological resource(s) are discovered during ground disturbing activities for this project, the San Luis Rey Band of Mission Indians shall be notified and consulted regarding the respectful and dignified treatment of those resources. Pursuant to California Public Resources Code Section 21083.2(b) avoidance is the preferred method of preservation for archaeological and tribal

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cultural resources. If however, the Applicant is able to demonstrate that avoidance of a significant and/or unique cultural resource is infeasible and a data recovery plan is authorized by the City of Carlsbad as the lead agency, the San Luis Rey Band of Mission Indians shall be consulted regarding the drafting and finalization of any such recovery plan.

MM-CUL-8

When tribal cultural resources are discovered during the project, if the archaeologist collects such resources, a Luiseño Native American monitor must be present during any testing or cataloging of those resources. If the archaeologist does not collect the tribal cultural resources that are unearthed during the ground disturbing activities, the Luiseño Native American monitor shall follow the procedures in CUL-4.

MM-CUL-9

If suspected Native American human remains are encountered, California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the San Diego County Medical Examiner has made the necessary findings as to origin. Further, pursuant to California Public Resources Code Section 5097.98(b) remains shall be left in place and free from disturbance until a final decision as to the treatment and disposition has been made. Suspected Native American remains shall be examined in the field and kept in a secure location at the site. A Luiseño Native American monitor shall be present during the examination of the remains. If the San Diego County Medical Examiner determines the remains to be Native American, the Native American Heritage Commission (NAHC) must be contacted by the Medical Examiner within 24 hours. The NAHC must then immediately notify the "Most Likely Descendant" about the discovery. The Most Likely Descendant shall then make recommendations within 48 hours, and engage in consultation concerning treatment of remains as provided in Public Resources Code 5097.98.

MM-CUL-10

In the event that fill material is imported into the project area, the fill shall be clean of tribal cultural resources and documented as such. If fill material is to be utilized and/or exported from areas within the project site, then that fill material shall be analyzed and confirmed by an archeologist and Luiseño Native American monitor that such fill material does not contain tribal cultural resources.

MM-CUL-11

No testing, invasive or non-invasive, shall be permitted on any recovered tribal cultural resources without the written permission of the San Luis Rey Band of Mission Indians.

MM-CUL-12

Prior to the release of the grading bond, a monitoring report and/or evaluation report, if appropriate, which describes the results, analysis and conclusions of the monitoring program shall be submitted by the archaeologist, along with the Luiseño Native American monitor's notes and comments, to the City of Carlsbad for approval, and shall be submitted to the South Coastal Information Center. Said report shall be subject to confidentiality as an exception to the Public Records Act and will not be available for public distribution.

MM-GEO-1

Due to the possibility of uncovering highly and moderately sensitive paleontological resources, project construction that will impact the Point Loma Formation and the Lusardi Formation shall require a paleontological resource mitigation program during subsurface

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excavation activity. In the event that paleontological resources (fossils remains) are exposed during construction activities for the project, all construction work occurring within 50 feet of the find shall immediately stop until a Qualified Paleontologist, as defined by the Society of Vertebrate Paleontology's 2010 guidelines, can assess the nature and importance of the find. Depending on the significance of the find, the Qualified Paleontologist may record the find and allow work to continue or may recommend salvage and recovery of the resource. All recommendations shall be made in accordance with the Society of Vertebrate Paleontology's 2010 guidelines, and shall be subject to review and approval by the City of Carlsbad. Work in the area of the find may only resume upon approval of a Qualified Paleontologist. If it is determined that specific locations of excavation would be located in soils that have no potential for paleontological resources to be present, the Qualified Paleontologist may allow for monitoring to be suspended at these locations.

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EARLIER ANALYSES

Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, one or more effects have been adequately analyzed in an earlier EIR or negative declaration (Section 15063(c)(3)(D)). In such cases, a discussion should identify the following on attached sheets:

- a) Earlier analyses used. Identify earlier analyses and state where they are available for review.
- b) Impacts adequately addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
- c) Mitigation measures. For effects that are "Less Than Significant with Mitigation Incorporated," describe the mitigation measures, which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

EARLIER ANALYSES USED AND SUPPORTING INFORMATION SOURCES

The following documents were used in the analysis of this project and are on file in the City of Carlsbad Planning Division located at 1635 Faraday Avenue, Carlsbad, California, 92008.

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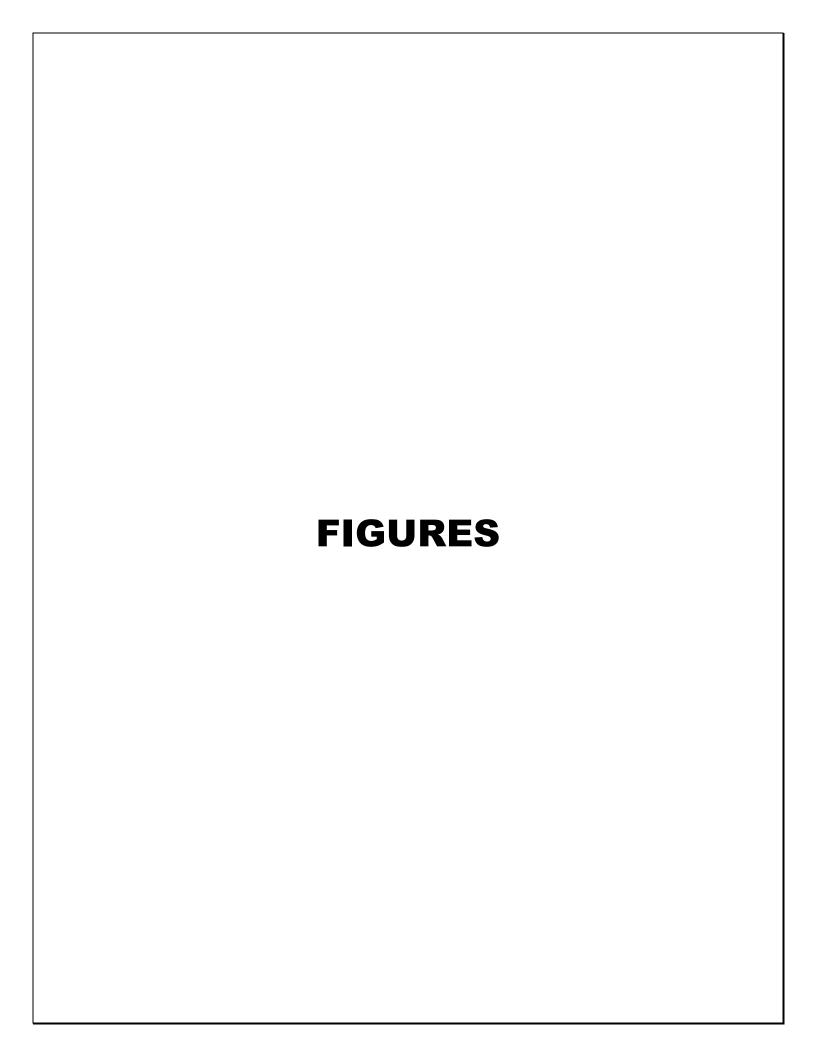
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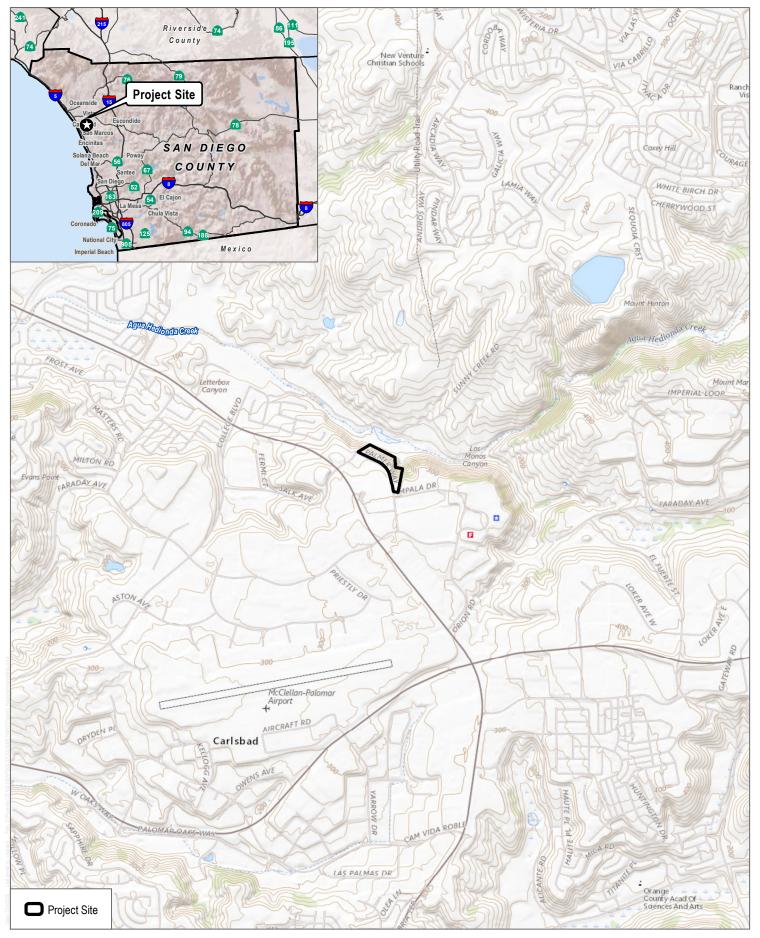
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SOURCE: USGS US Topo Series San Luis Rey and Encinitas Quadrangles

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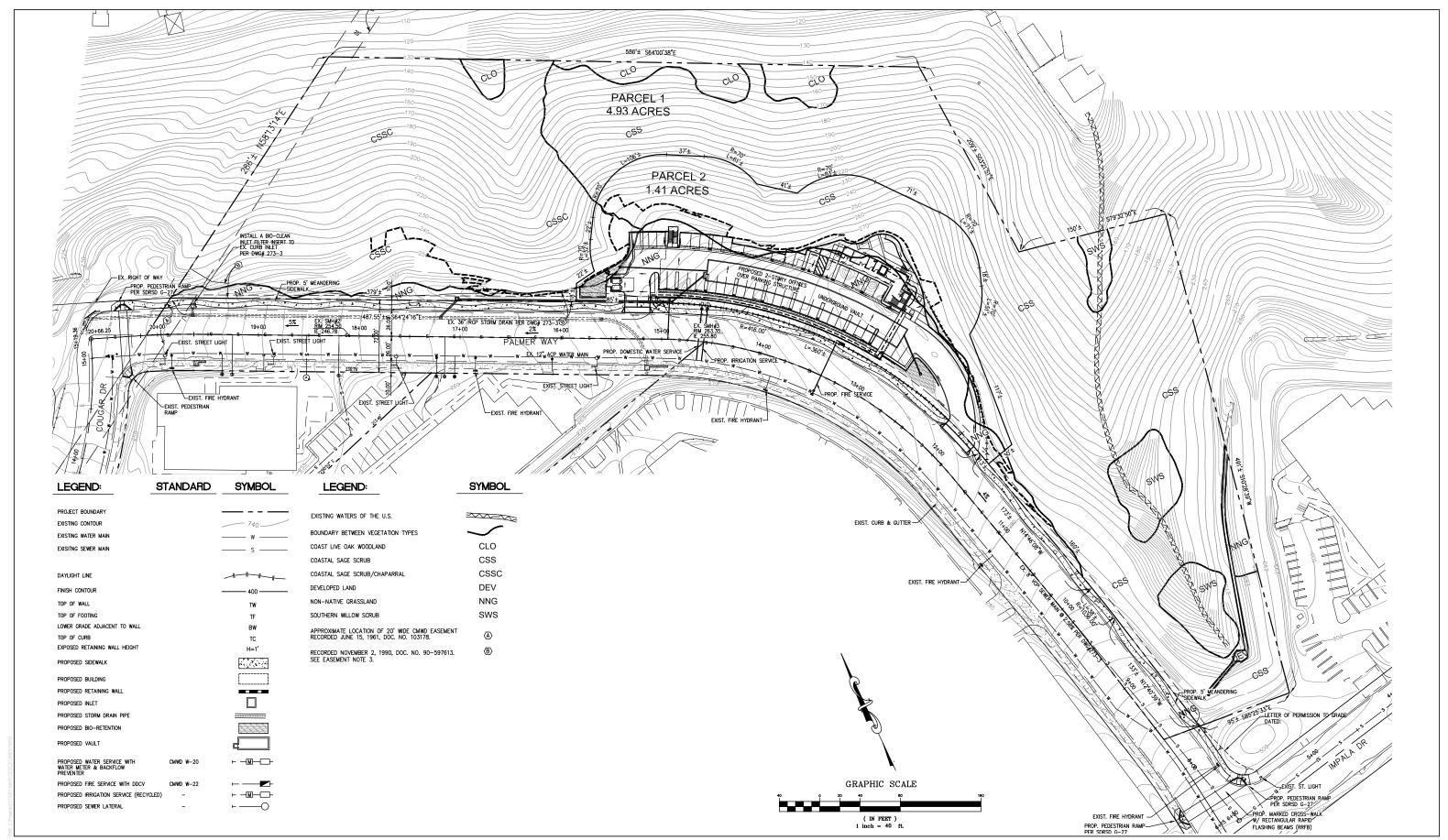
FIGURE 1 Regional and Vicinity Map



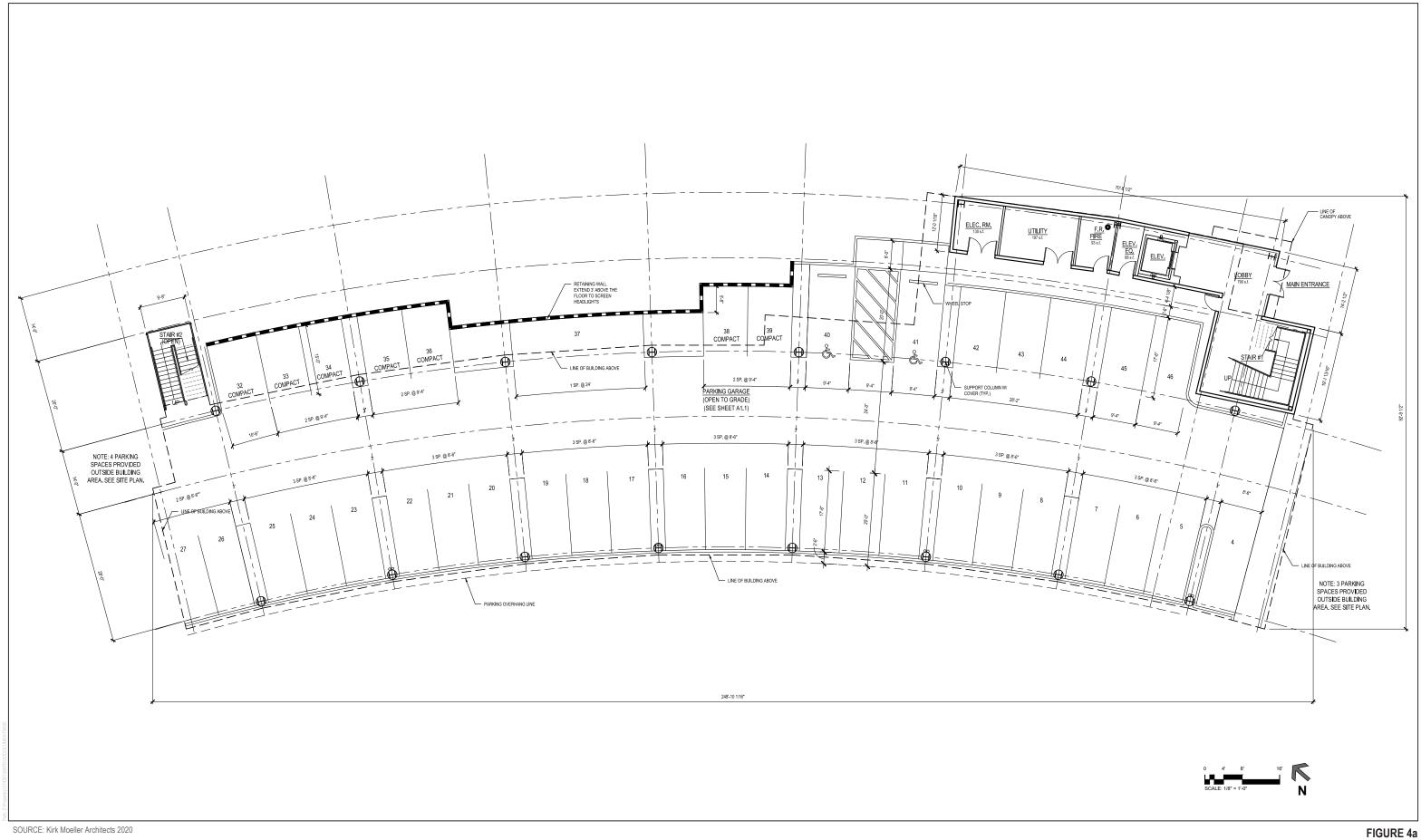
SOURCE: SanGIS 2017; Open Street Maps 2019



FIGURE 2
Project Site
Valley View Project

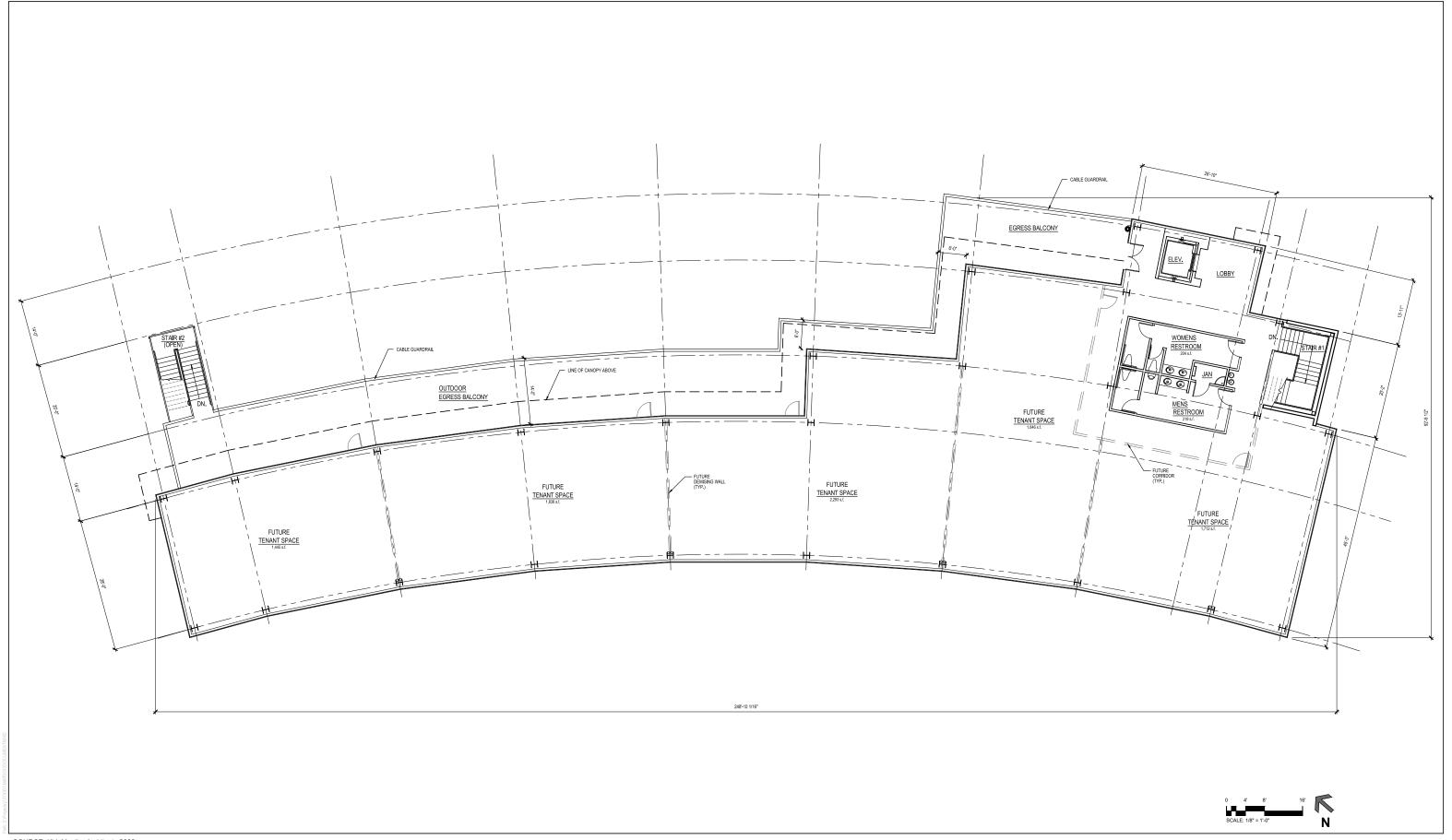


SOURCE: K & S Engineering 2020



SOURCE: Kirk Moeller Architects 2020

Valley View Project



SOURCE: Kirk Moeller Architects 2020

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FIGURE 4b



FIGURE 5a
Project Visual Renderings – Front View
Valley View Project



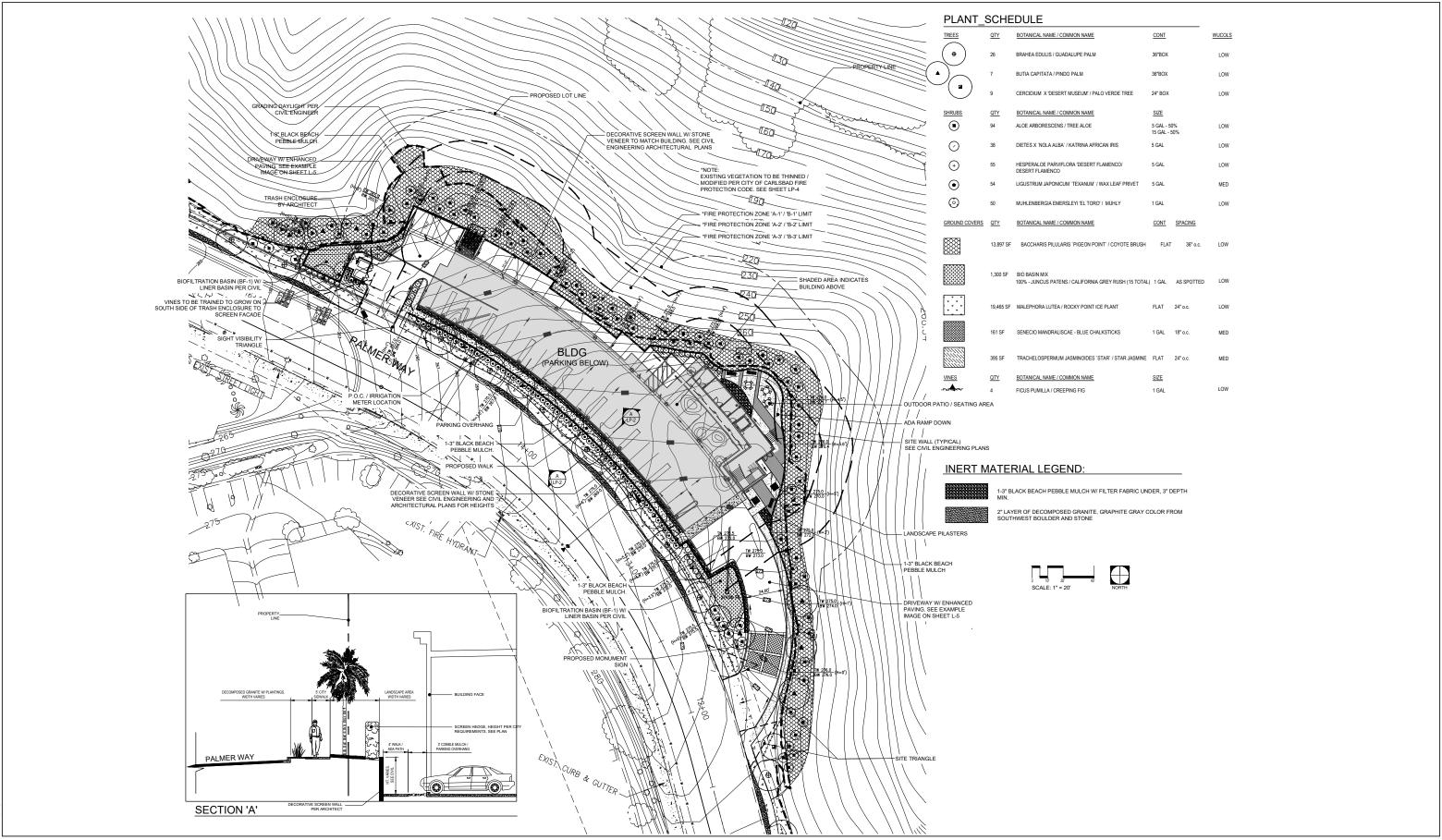
FIGURE 5b
Project Visual Renderings – Front View at Night



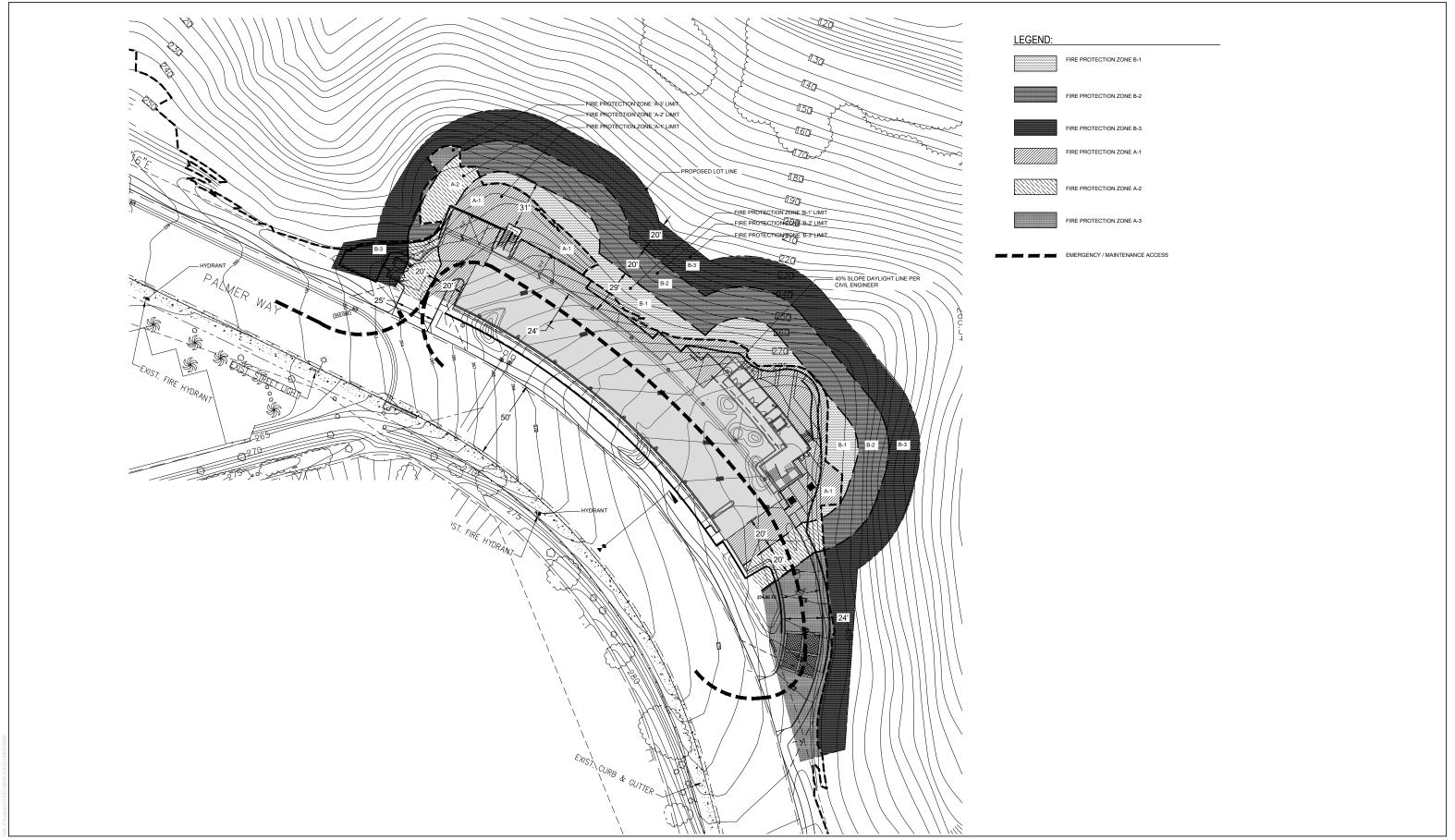
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FIGURE 5c

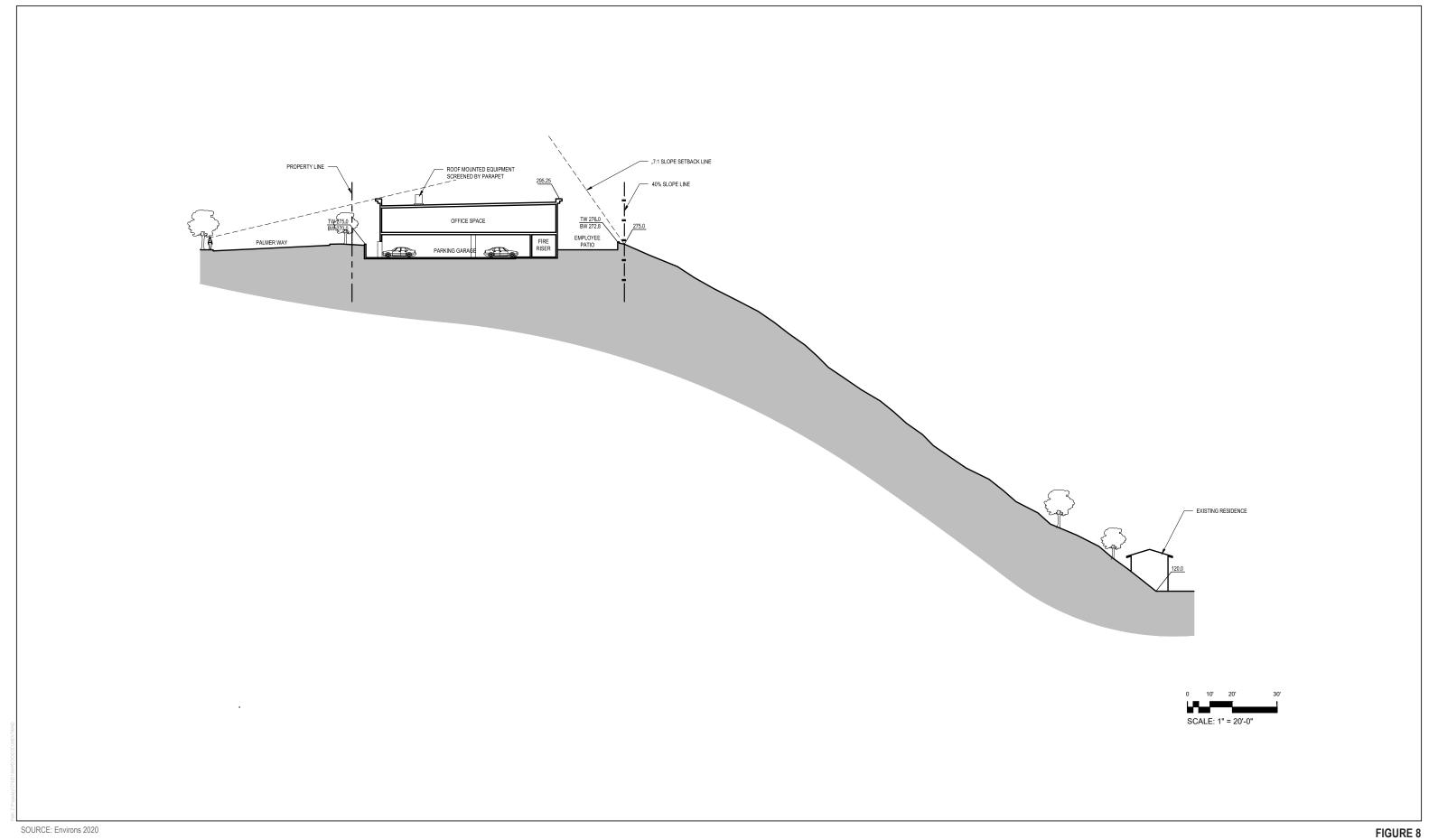


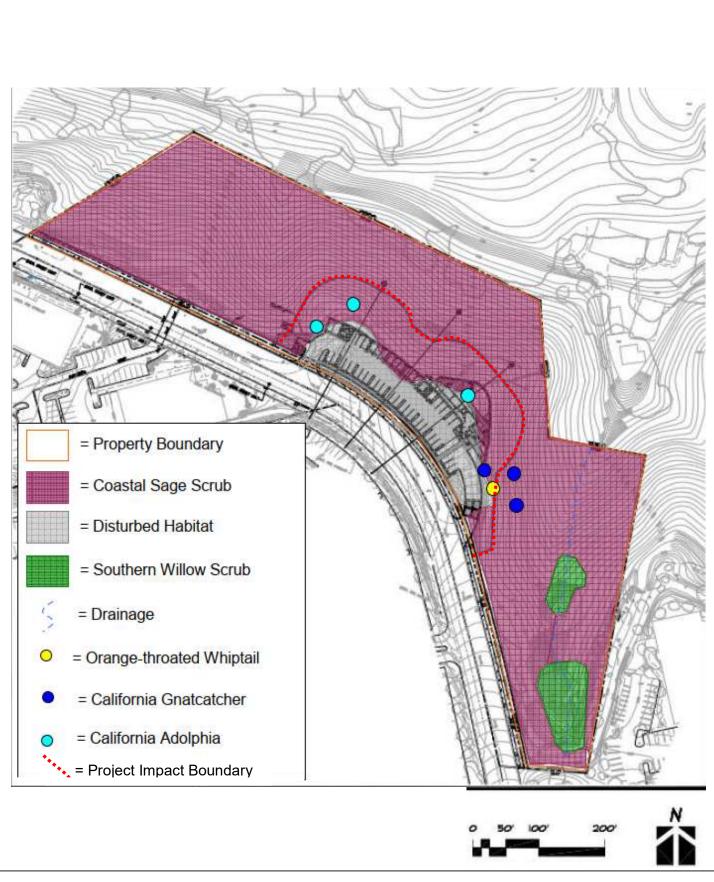


SOURCE: Environs 2020



SOURCE: Environs 2020





SOURCE: Scheidt 2021

