Initial Study

Lakewood Branch Library Facility and Learning Center

Prepared by the City of

Sunnyvale

In Consultation with

DAVID J. POWERS & ASSOCIATES, INC.
ENVIRONMENTAL CONSULTANTS & PLANNERS

October 2023

Lakewood Branch Library Facility and Learning Center Project Draft Mitigated Negative Declaration

Project: Lakewood Branch Library Facility and Learning Center Project

Lead Agency:

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Project Proponent:

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Department of Public Works
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Availability of the Initial Study:

The Initial Study for this Mitigated Negative Declaration is attached and available for review on the City's website at the following web address: https://www.sunnyvale.ca.gov/business-and-development/planning-and-building/ceqa-environmental-notices

Project Location and Description:

The approximately 2.4-acre project site is located at 750 Lakechime Drive, within Lakewood Elementary School property, in the City of Sunnyvale. A portion of the project site includes Lakewood Park. Lakewood Elementary School and Lakewood Park are surrounded by residential land uses.

The project proposes to construct a new library facility and learning center within Lakewood Elementary School property, with some proposed site improvements occurring on the adjacent Lakewood Park property. The project would consist of a 22,771 square foot, single-story library and learning center building that would also include a small kitchen, community room, and storage. The library would be a maximum height of 34 feet, with shorter masses at 22 to 24 feet in height at the top of the parapet. The project would also expand the existing surface parking lot on the site through the removal of the former swimming pool. The proposed facility will include joint use areas that will be shared by both the library and learning center staff and patrons. There is a joint use agreement between the City of Sunnyvale, Sunnyvale School District, and Fremont Union High School District.

Refer to the Initial Study for additional details on the project components.

Proposed Findings:
The City has prepared the attached Initial Study and determined that the analysis in the Initial Study identifies potentially significant project effects, but:

1. Mitigation measures incorporated into the project by the City would avoid or mitigate the effects to a point where no significant effects would occur; and
2. There is no substantial evidence, in light of the whole record before the agency, that the project with implementation of mitigation measures may have a significant effect on the environment. Pursuant to California Environmental Quality Act (CEQA) Guidelines Sections 15064(f)(3) and 15070(b), a Mitigated Negative Declaration has been prepared for the project.

Basis of Findings:
Based on the environmental evaluation presented in the attached Initial Study, the project would not cause significant adverse effects related to aesthetics, agricultural and forestry resources, energy, greenhouse gas emissions, hydrology and water quality, land use/planning, mineral resources, population/housing, public services, recreation, transportation, utilities/service systems, and wildfire. The project does not have impacts that are individually limited, but cumulatively considerable. The environmental evaluation has determined that the project would have potentially significant impacts on air quality, biological resources, cultural resources (including tribal cultural resources), geology/soils, hazards/hazardous materials, and noise/vibration and the implementation of the mitigation measures listed below would reduce impacts to a less than significant level.

Mitigation Measures:

Air Quality

MM AIR-3.1: The project shall implement the below measures to meet BAAQMD single-source health risks thresholds for diesel particulate matter (DPM) and fugitive particulate matter ($PM_{2.5}$).

- The project shall develop a plan demonstrating that the off-road equipment used onsite to construct the project would achieve a fleet-wide average 69-percent reduction in diesel particulate matter (DPM) exhaust emissions or greater. One feasible plan to achieve this reduction would include the following:
    - All diesel-powered off-road equipment, larger than 25 horsepower, operating on the site for more than two days continuously shall meet, at a minimum, meet U.S. EPA particulate matter emissions standards for Tier 3 engines with CARB-certified Level 3 Diesel Particulate Filters or equivalent. Equipment that is electrically powered or uses non-diesel fuels would also meet this requirement.

Biological Resources

MM BIO-1.1: Construction shall be scheduled to avoid the nesting season to the extent feasible. The nesting season for most birds, including most raptors, in the San Francisco Bay area extends from February 1 through August 31.

If it is not possible to schedule construction and tree removal between September and January, then pre-construction surveys for nesting birds shall be completed by a qualified ornithologist to ensure that no nests shall be disturbed during project implementation. This survey shall be completed no more than 14 days prior to the initiation of grading, tree removal, or other demolition or construction activities during the early part of the breeding season (February through April) and no more than 30 days prior to the initiation of these activities during the late part of the breeding season (May through August).

During this survey, the ornithologist shall inspect all trees and other possible nesting habitats within and immediately adjacent to the construction area for nests. If an active nest is found sufficiently close to work areas to be disturbed by construction, the ornithologist, in consultation with CDFW, shall determine the extent of a construction-free buffer zone to be established around the nest to ensure that nests of bird species protected by the MBTA or Fish and Game code shall not be disturbed during project construction.

A final report of nesting birds, including any protection measures, shall be submitted to the Director of Community Development prior to the start of grading or tree removal.

Cultural Resources/Tribal Cultural Resources

MM CUL-1.1: In the event that buried, or previously unrecognized archaeological deposits or materials of any kind are inadvertently exposed during any construction activity, work within 50 feet of the find shall cease until a qualified archaeologist can assess the find and provide recommendations for further treatment, if warranted. Construction and potential impacts to the area(s) within a radius determined by the archaeologist shall not recommence until the assessment is complete.

MM CUL-1.2: In the event of the discovery of human remains during construction, there shall be no further excavation or disturbance of the site within a 50-foot radius of the remains or any nearby area reasonably suspected to overlie adjacent remains. The Santa Clara County Coroner shall be notified and shall make a determination as to whether the remains are Native American. If the Coroner determines that the remains are not subject to his authority, the Coroner shall notify the Native American Heritage Commission who shall attempt to identify descendants of the deceased Native American. If no satisfactory agreement can be reached as to the

disposition of the remains pursuant to State law, then the land owner shall re-inter the human remains and items associated with Native American burials on the property in a location not subject to further subsurface disturbance.

Noise/Vibration

MM NOI-1.1: The project shall prepare a noise control plan in consultation with a qualified noise consultant implementing the following measures to reduce the generation of construction noise:

- Equipment and trucks used for construction shall use the best available noise control techniques (e.g., improved mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures, and acoustically attenuating shields or shrouds);
- Impact tools (e.g., jackhammers, pavement breakers, and rock drills) used for construction shall be hydraulically or electrically powered wherever possible to avoid noise associated with compressed air exhaust from pneumatically powered tools; and
- Stationary noise sources shall be located as far from adjacent receptors as possible, and they shall be muffled and enclosed within temporary sheds, incorporate insulation barriers, or include other measures.

MM NOI-2.1: The following measures shall be implemented where vibration levels due to construction activities would exceed 0.25 inches per second (in/sec) peak particle velocity (PPV) at nearby buildings:

- Prohibit the use of heavy vibration-generating construction equipment within 25 feet of adjacent buildings.
- Use a smaller vibratory roller, such as the Caterpillar model CP433E vibratory compactor, when compacting materials within 25 feet of adjacent buildings. Only use the static compaction mode when compacting materials within 15 feet of educational buildings.
- Avoid dropping heavy equipment and use alternative methods for breaking up existing pavement, such as a pavement grinder, instead of dropping heavy objects, within 25 feet of adjacent educational buildings.
- Designate a person responsible for registering and investigating claims of excessive vibration. The contact information of such person shall be clearly posted on the construction site.

Public Review Period
Before 5:00 pm on November 28, 2023 any person may:

1. Review the Draft Mitigated Negative Declaration (MND) as an informational document; or
2. Submit written comments regarding the analysis in the Draft MND. Written comments should be submitted to Nathan Scribner, Assistant City Engineer, Department of Public Works, 456 West Olive Avenue, City of Sunnyvale, or via email to nscribner@sunnyvale.ca.gov. Before the MND is adopted, staff will prepare written responses to any comments, and revise the Draft MND, if necessary, to reflect any concerns raised during the public review period. All written comments will be included as part of the Final MND.

Charles Taylor Digitally signed by Charles Taylor
Date: 2023.11.02 15:34:21 -07'00'

Chip Taylor
Director of Public Works

Circulation period: Nov. 8 – Nov. 28

TABLE OF CONTENTS

Section 1.0 Introduction and Purpose 1
1.1 Purpose of the Initial Study 1
1.2 Public Review Period 1
1.3 Consideration of the Initial Study and Project 1
1.4 Notice of Determination 1
Section 2.0 Project Information 2
2.1 Project Title 2
2.2 Lead Agency Contact 2
2.3 Project Applicant 2
2.4 Project Location 2
2.5 Assessor's Parcel Number 2
2.6 General Plan Designation and Zoning District 2
Section 3.0 Project Description 3
3.1 Existing Conditions 3
3.2 Proposed Development 3
Section 4.0 Environmental Setting, Checklist, and Impact Discussion 11
4.1 Aesthetics 12
4.2 Agriculture and Forestry Resources 19
4.3 Air Quality 22
4.4 Biological Resources 35
4.5 Cultural Resources 43
4.6 Energy 47
4.7 Geology and Soils 51
4.8 Greenhouse Gas Emissions 58
4.9 Hazards and Hazardous Materials 65
4.10 Hydrology and Water Quality 71
4.11 Land Use and Planning 81
4.12 Mineral Resources 83
4.13 Noise 85
4.14 Population and Housing 96
4.15 Public Services 98
4.16 Recreation 103
4.17 Transportation 105

4.18 Tribal Cultural Resources 116
4.19 Utilities and Service Systems 119
4.20 Wildfire 127
4.21 Mandatory Findings of Significance 129
Section 5.0 References 137
Section 6.0 Lead Agency and Consultants 142
6.1 Lead Agency 142
6.2 Consultants 142
Section 7.0 Acronyms and Abbreviations 143

TABLE OF CONTENTS

Figures

Figure 3.2-1: Regional 4
Figure 3.2-2: Vicinity 5
Figure 3.2-3: Aerial 6
Figure 3.2-4: Site Plan 8
Figure 3.2-5: Building Elevations – North and East 9
Figure 3.2-6: Building Elevations – South and West 10
Figure 4.3-1: Project Site and Locations of Off-Site Sensitive Receptors and TAC Impacts 32
Figure 4.10-1: Project Site Flood Zones 74

Photos

Photo 1: View of the project site from across Lakechime Drive. 14
Photo 2: View of the existing community swimming pool on the project site. 14
Photo 3: View of the swimming pool and baseball field. 15
Photo 4: View of the adjacent Lakewood Elementary school from the project site. 15
Photo 5: View of the surrounding neighborhood across Lakechime Drive, facing northwest. 16
Photo 6: View of the surrounding neighborhood across Lakechime Drive, facing northeast. 16

Tables

Table 4.3-1: Health Effects of Air Pollutants 22
Table 4.3-2: BAAQMD Air Quality Significance Thresholds 27
Table 4.3-3: Construction Period Emissions 28
Table 4.3-5: Construction Risk Impacts at the Offsite MEI 33
Table 4.4-1: Tree Quantity Summary 38
Table 4.4-2: City of Sunnyvale Tree Replacement Guidelines 41
Table 4.7-1: Nearby Faults 53
Table 4.8-1: Annual Project GHG Emissions (CO_2e) in Metric Tons 64
Table 4.13-1: Groundborne Vibration Impact Criteria 86
Table 4.13-2: Typical Ranges of Construction Noise Levels at 50 Feet, L_{eq} (dBA) 89
Table 4.13-3: Construction Equipment 50-foot Noise Emission Limits 90
Table 4.13-4: Summary of Short-Term Noise Measurements (dBA) 94

Table 4.17-1: Existing Level of Service 108
Table 4.17-2: Project Trip Generation Estimates 110
Table 4.17-3: Study Intersections Level of Service – Existing Plus Project Conditions 111
Table 4.17-4: Study Intersections Level of Service – Background Plus Project Conditions 111
Table 4.17-5: Cumulative Conditions Intersection Levels of Service Results 112

Appendices

Appendix A: Air Quality Report
Appendix B: Arborist Report
Appendix C: Bird Safe Design Memo
Appendix D: Geotechnical Investigation
Appendix E: Noise and Vibration Assessment
Appendix F: Traffic Impact Analysis

SECTION 1.0 INTRODUCTION AND PURPOSE

1.1 PURPOSE OF THE INITIAL STUDY

The City of Sunnyvale, as the Lead Agency, has prepared this Initial Study for the Lakewood Branch Library Facility and Learning Center Project in compliance with the California Environmental Quality Act (CEQA), the CEQA Guidelines (California Code of Regulations Title 14, Section 15000 et. seq.), and the regulations and policies of the City of Sunnyvale, California. For this project, the Sunnyvale School District is the Responsible Agency under CEQA as the site is on the school district's property. Responsible agencies have discretionary approval authority over a portion of a CEQA project.

The project proposes to demolish an existing, nonoperational public swimming pool and build a library. This Initial Study evaluates the environmental impacts that might reasonably be anticipated to result from implementation of the proposed project.

1.2 PUBLIC REVIEW PERIOD

Publication of this Initial Study marks the beginning of a 20-day public review and comment period. During this period, the Initial Study will be available to local, state, and federal agencies and to interested organizations and individuals for review. Written comments concerning the environmental review contained in this Initial Study during the 20-day public review period should be sent to:

Nathan Scribner
Assistant City Engineer
Department of Public Works
City of Sunnyvale
Phone: 408-730-7605
Email: nscribner@sunnyvale.ca.gov

1.3 CONSIDERATION OF THE INITIAL STUDY AND PROJECT

Following the conclusion of the public review period, the City of Sunnyvale will consider the adoption of the Initial Study/Mitigated Negative Declaration (MND) for the project at a regularly scheduled meeting. The City shall consider the Initial Study/MND together with any comments received during the public review process. Upon adoption of the MND, the City may proceed with project approval actions.

1.4 NOTICE OF DETERMINATION

If the project is approved, the City of Sunnyvale will file a Notice of Determination (NOD), which will be available for public inspection and posted within 24 hours of receipt at the County Clerk's Office for 30 days. The filing of the NOD starts a 30-day statute of limitations on court challenges to the approval under CEQA (CEQA Guidelines Section 15075(g)).

SECTION 2.0 PROJECT INFORMATION

2.1 PROJECT TITLE

Lakewood Branch Library Facility and Learning Center

2.2 LEAD AGENCY CONTACT

Nathan Scribner
Assistant City Engineer
Department of Public Works
City of Sunnyvale
Phone: 408-730-7605
Email: nscribner@sunnyvale.ca.gov

2.3 PROJECT APPLICANT

Nathan Scribner
Assistant City Engineer
Department of Public Works
City of Sunnyvale
Phone: 408-730-7605
Email: nscribner@sunnyvale.ca.gov

2.4 PROJECT LOCATION

Lakewood Park
750 Lakechime Drive
Sunnyvale, CA

2.5 ASSESSOR'S PARCEL NUMBER

110-20-14 and 110-24-38

2.6 GENERAL PLAN DESIGNATION AND ZONING DISTRICT

General Plan:	Public Facilities
Zoning:	Public Facilities

SECTION 3.0 PROJECT DESCRIPTION

3.1 EXISTING CONDITIONS

The approximately 2.4-acre project site is located at 750 Lakechime Drive, within Lakewood Elementary School property, in the City of Sunnyvale. A portion of the project site includes Lakewood Park. Lakewood Elementary School and Lakewood Park are surrounded by residential land uses. The project site consists of two parcels of land, Assessor's Parcel Numbers (APNs) 110-20-14 and 110-24-38. The site is bounded by Lakechime Drive to the north and Lakewood Elementary School to the west, basketball courts to the east, and baseball diamond and turf fields to the south.

The project site is currently occupied with a paved parking lot, a former public swimming pool[1] and a baseball field. Vehicular access to the project site is provided by an existing parking lot and driveway located along Lakechime Drive.

Regional, vicinity, and aerial maps of the project site are shown on Figure 3.2-1, Figure 3.2-2, and Figure 3.2-3.

3.2 PROPOSED DEVELOPMENT

The project proposes to construct a new library facility and learning center within Lakewood Elementary School property, with some proposed site improvements occurring on the adjacent Lakewood Park property. The project would consist of a 22,771 square foot, single-story library and learning center building that would also include a small kitchen, community room, and storage. The library would be a maximum height of 34 feet, with shorter masses at 22 to 24 feet in height at the top of the parapet. The project would also expand the existing surface parking lot on the site through the removal of the former swimming pool.

The proposed facility will include joint use areas that will be shared by both the library and learning center staff and patrons. There is a joint use agreement between the City of Sunnyvale, Sunnyvale School District, and Fremont Union High School District.[2]

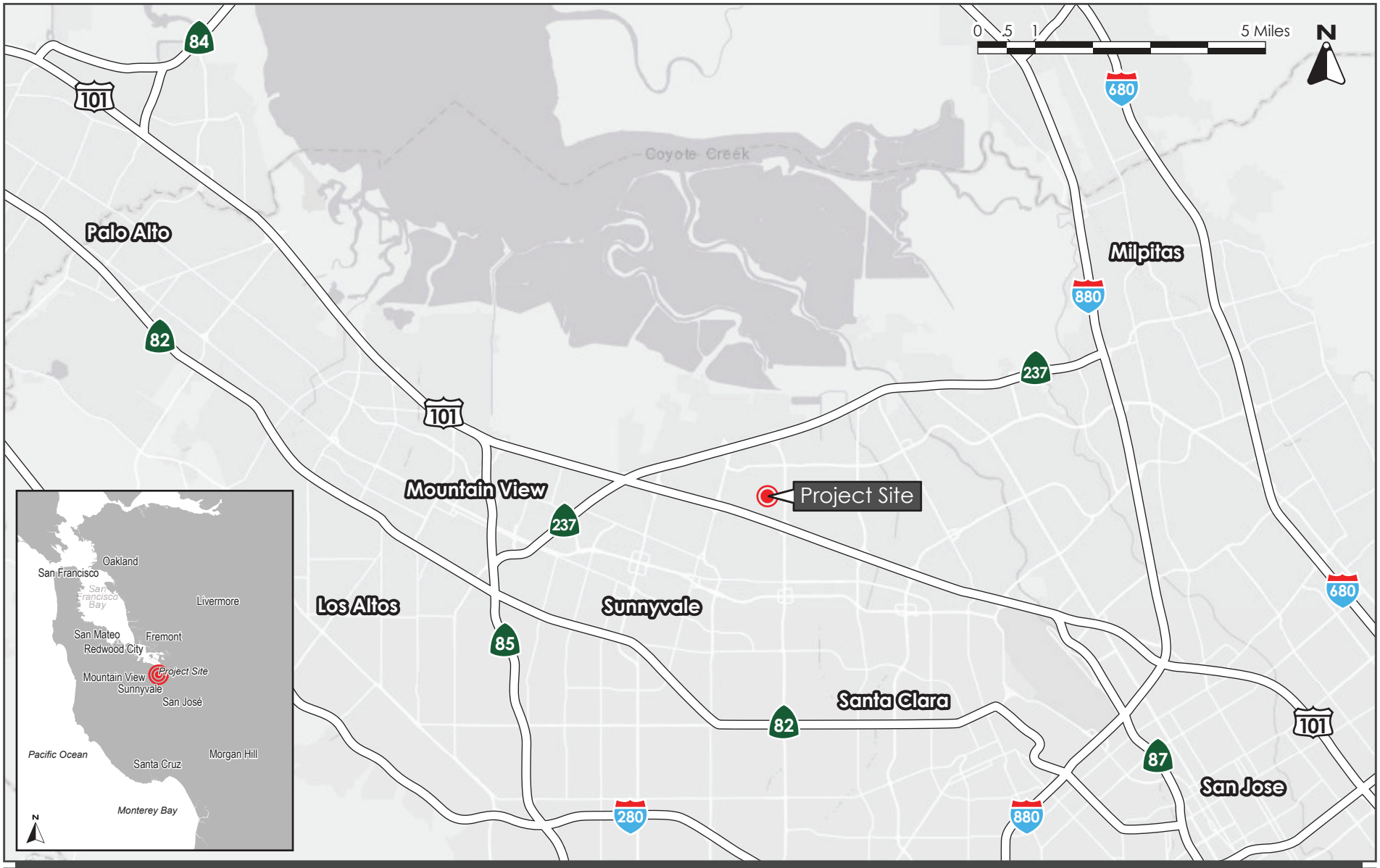
It is projected that the new library and learning center will serve a population of approximately 500 to 700 people per day.

3.2.1 Access, Circulation, and Parking

Vehicle access to the site would be via Lakechime Drive through three driveways (three inbound and two outbound). The project proposes a linear parking lot with a total of 100 spaces on the north side of the project site, fronting Lakechime Drive. Pedestrian access to the library would be provided from the new parking lot on Lakechime Drive and through two new gated entrances provided to allow access from the school.

[1] The swimming pool is no longer in operation, as it was closed due to structural safety conditions.

[2] The agreement states that Library and Community Services, Sunnyvale School District, and Fremont Union High School District will have operations out of the new building.

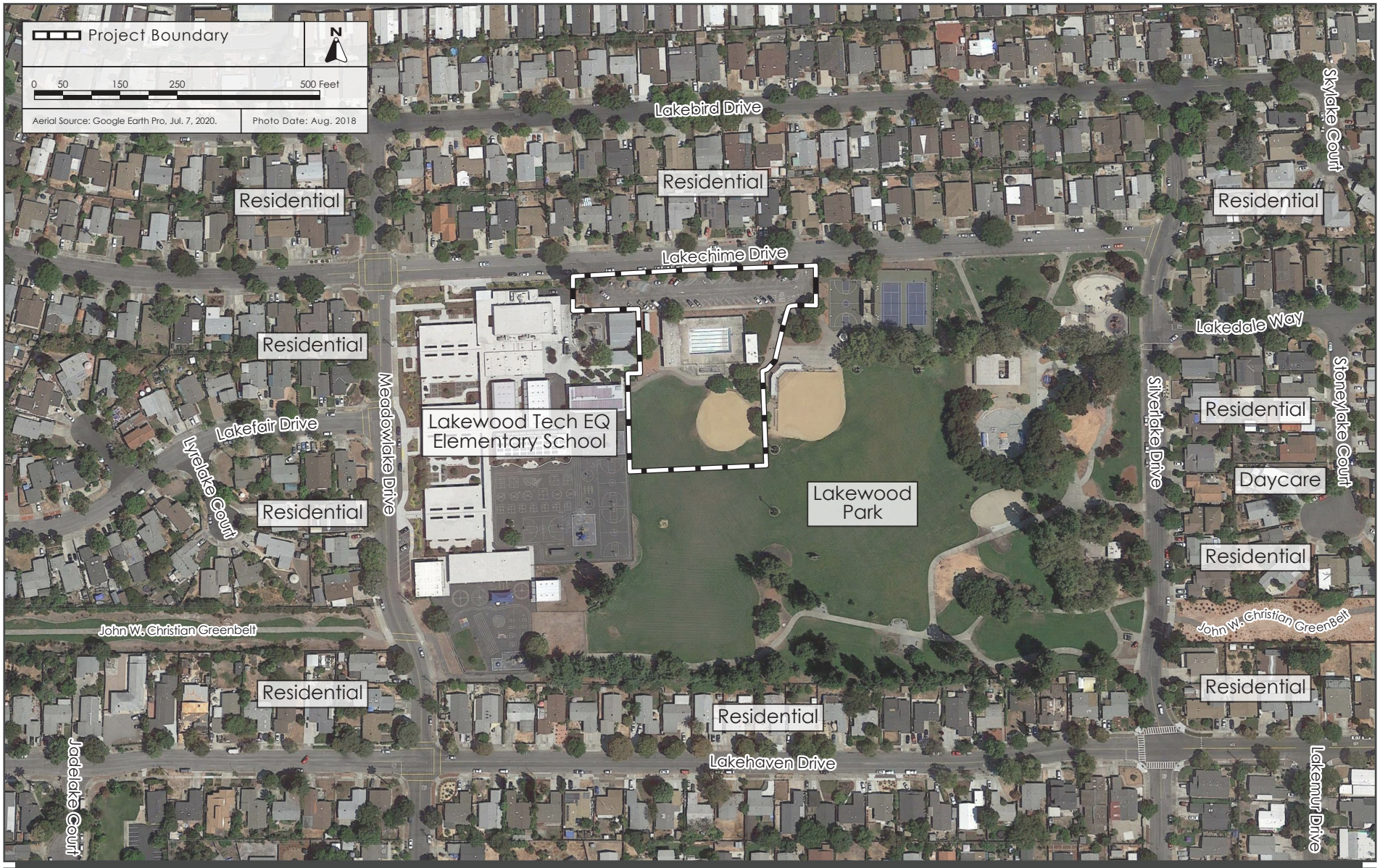


REGIONAL MAP

FIGURE 3.2-1

VICINITY MAP

FIGURE 3.2-2



AERIAL PHOTOGRAPH AND SURROUNDING LAND USES | FIGURE 3.2-3

3.2.2 Project Construction

Project construction would occur over the course of approximately 16 months. Hours of construction would take place within the limits set forth by the Sunnyvale Municipal Code: from 7:00 AM to 6:00 PM Monday through Friday, and 8:00 AM to 5:00 PM on Saturdays. Pile driving is not required to construct the project.

3.2.3 Hours of Operation

The standard hours of operation for the library and learning center would be from 10:00 AM to 9:00 PM Monday through Thursday, 10:00 AM to 6:00 PM on Friday and Saturday, and noon to 6:00 PM on Sundays. On occasion, the school may use the library and learning center rooms past standard closing hours. The project light poles would have LED fixtures with dynamic dimmer controllers. The fixtures would function as security lighting, and would turn on from dusk to 10:00 PM, dim down from 10:00 PM to an hour before dawn, and fully on for an hour until dawn.

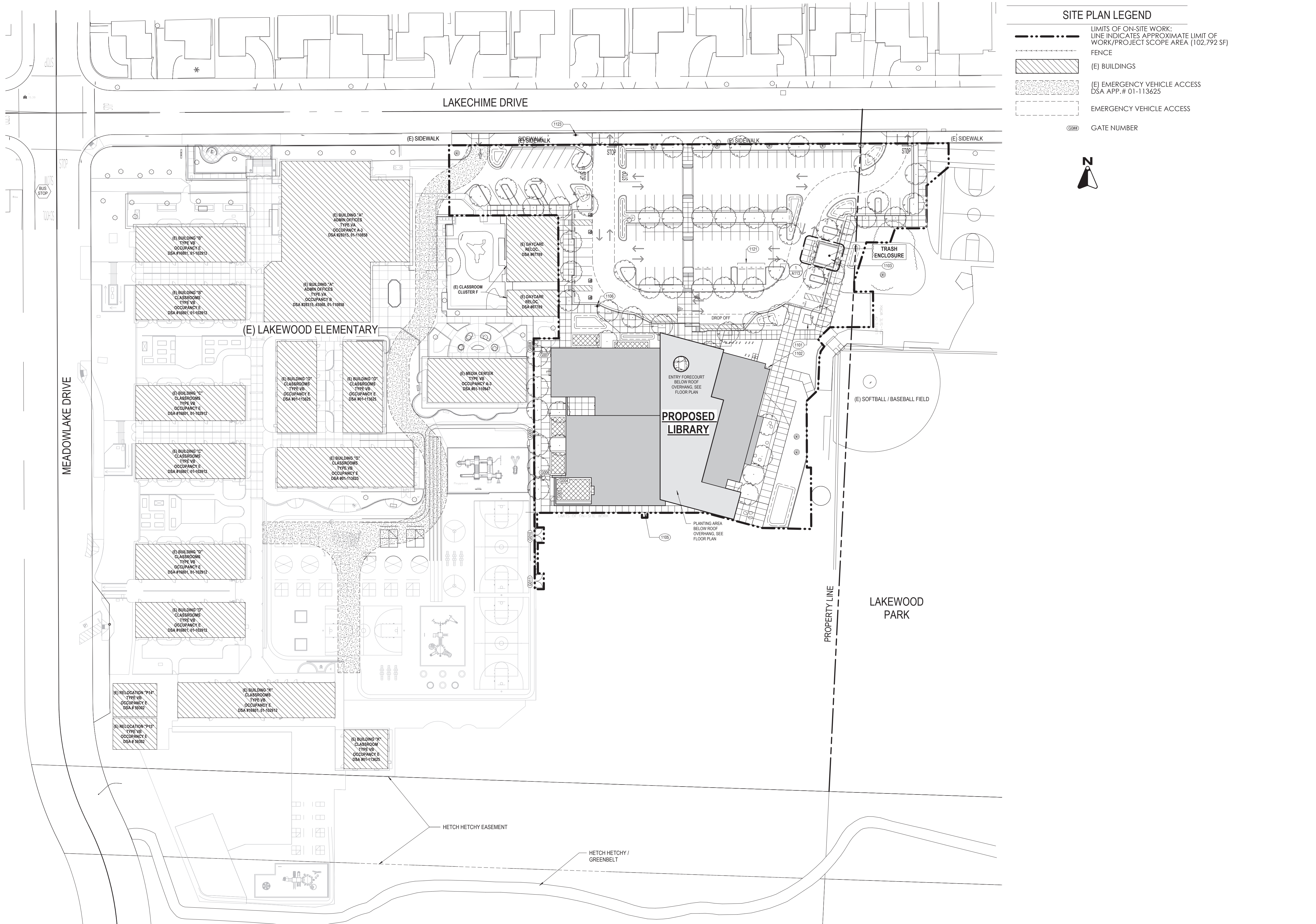
Lakewood Park would continue to operate from sunrise to sunset, seven days per week.

3.2.4 Landscaping and Trees

There are a total of 28 trees on-site, 13 of which are "protected" trees under City of Sunnyvale standards. The most common tree species on the project site include Chinese Pistache and Holly Oak. The project proposes to preserve 18 of the existing protected trees on site. The project would result in the removal of 10 trees, five of which are protected per City of Sunnyvale standards. Approximately 16 trees would be planted throughout the proposed parking lot.

3.2.5 Storm Drainage

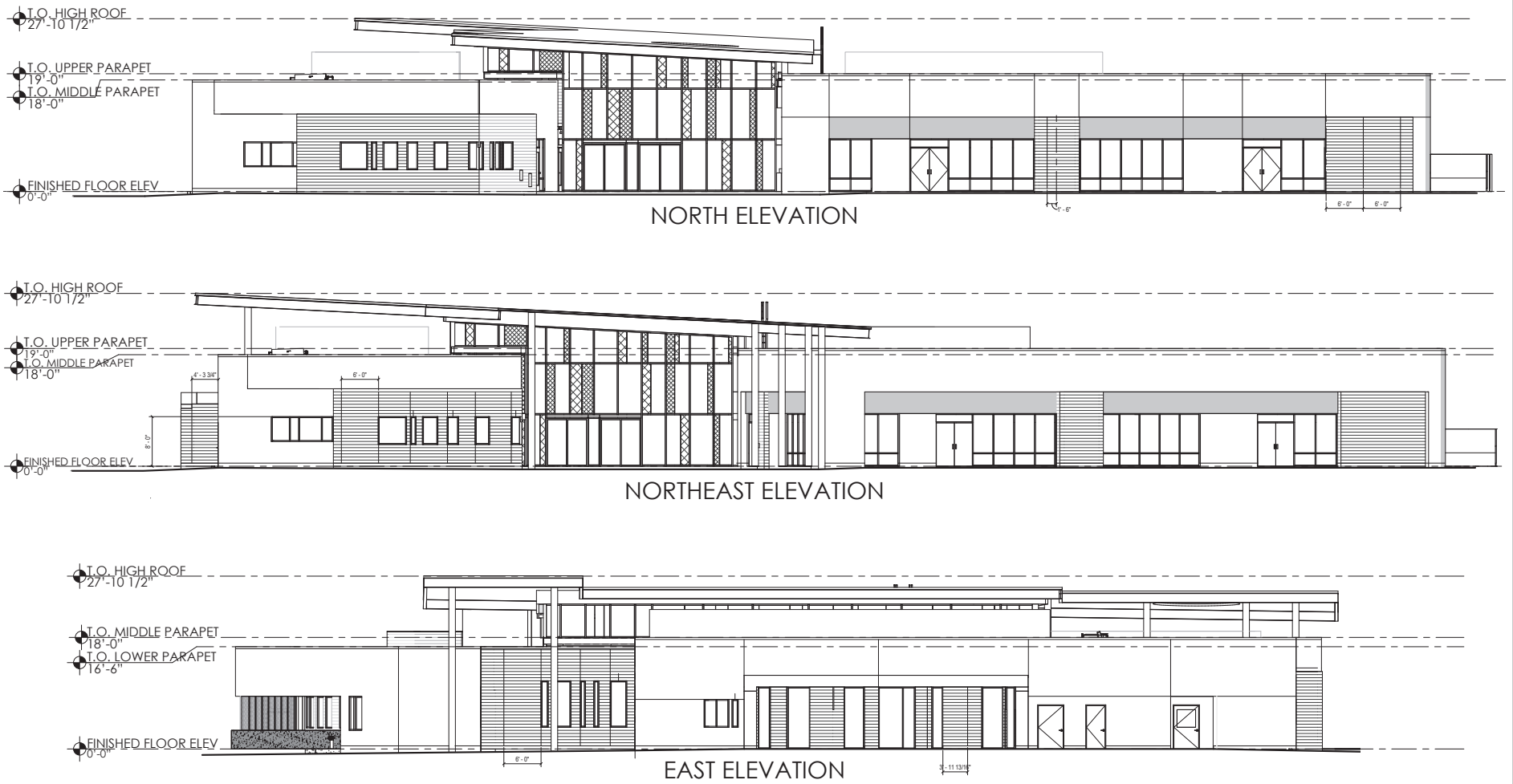
The project would contain 3,175 square feet of bioretention areas within the parking lot on the north side of the project site. Additionally, there would be a permeable hard- and soft-scape around the proposed library and learning center building. A proposed site plan is shown on Figure 3.2-4, and elevation plans are shown on Figure 3.2-5 and Figure 3.2-6.



Source: Anderson Brule Architects, March 31, 2023.

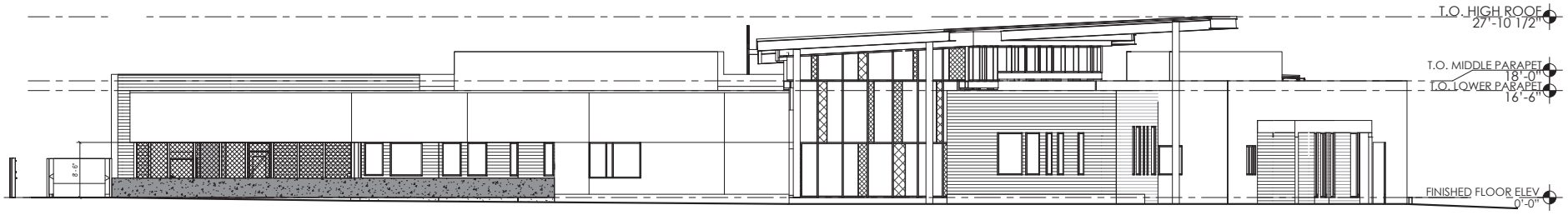
SITE PLAN

FIGURE 3.2-4

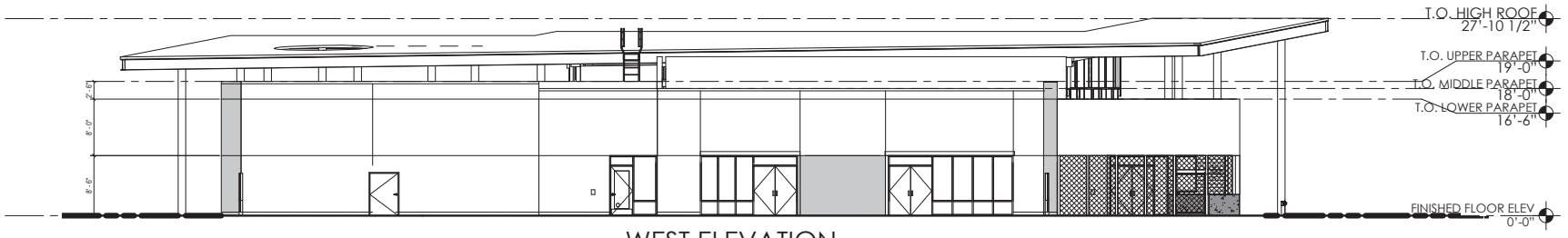


Source: Anderson Brule Architects, March 31, 2023.

BUILDING ELEVATIONS - NORTH AND EAST | FIGURE 3.2-5



SOUTH ELEVATION



WEST ELEVATION

Source: Anderson Brule Architects, March 31, 2023.

BUILDING ELEVATIONS - SOUTH AND WEST

FIGURE 3.2-6

SECTION 4.0 ENVIRONMENTAL SETTING, CHECKLIST, AND IMPACT DISCUSSION

This section presents the discussion of impacts related to the following environmental subjects in their respective subsections:

4.1	Aesthetics	4.12	Mineral Resources
4.2	Agriculture and Forestry Resources	4.13	Noise
4.3	Air Quality	4.14	Population and Housing
4.4	Biological Resources	4.15	Public Services
4.5	Cultural Resources	4.16	Recreation
4.6	Energy	4.17	Transportation
4.7	Geology and Soils	4.18	Tribal Cultural Resources
4.8	Greenhouse Gas Emissions	4.19	Utilities and Service Systems
4.9	Hazards and Hazardous Materials	4.20	Wildfire
4.10	Hydrology and Water Quality	4.21	Mandatory Findings of Significance
4.11	Land Use and Planning		

The discussion for each environmental subject includes the following subsections:

- **Environmental Setting** – This subsection 1) provides a brief overview of relevant plans, policies, and regulations that compose the regulatory framework for the project and 2) describes the existing, physical environmental conditions at the project site and in the surrounding area, as relevant.
- **Impact Discussion** – This subsection 1) includes the recommended checklist questions from Appendix G of the CEQA Guidelines to assess impacts and 2) discusses the project's impact on the environmental subject as related to the checklist questions. For significant impacts, feasible mitigation measures are identified. "Mitigation measures" are measures that will minimize, avoid, or eliminate a significant impact (CEQA Guidelines Section 15370). Each impact is numbered to correspond to the checklist question being answered. For example, Impact BIO-1 answers the first checklist question in the Biological Resources section. Mitigation measures are also numbered to correspond to the impact they address. For example, MM BIO-1.3 refers to the third mitigation measure for the first impact in the Biological Resources section.

4.1 AESTHETICS

4.1.1 Environmental Setting

4.1.1.1 *Regulatory Framework*

State

Streets and Highway Code Sections 260 through 263

The California Scenic Highway Program (Streets and Highway Code, Sections 260 through 263) is managed by the California Department of Transportation (Caltrans). The program is intended to protect and enhance the natural scenic beauty of California highways and adjacent corridors through special conservation treatment. There are no state-designated scenic highways in Sunnyvale. Interstate 280 from the San Mateo County line to State Route (SR) 17, which includes segments in Sunnyvale, is an eligible, but not officially designated, State Scenic Highway.[3]

In Santa Clara County, the one state-designated scenic highway is SR 9 from the Santa Cruz County line to the Los Gatos City Limit. Eligible State Scenic Highways (not officially designated) include: SR 17 from the Santa Cruz County line to SR 9, SR 35 from Santa Cruz County line to SR 9, Interstate 280 from the San Mateo County line to SR 17, and the entire length of SR 152 within the County.

Local

Sunnyvale General Plan

The General Plan includes policies for the purpose of avoiding or mitigating impacts from planned development in the City. The goal and policies below are specific to aesthetics and are applicable to the proposed project.

Goal LT-4: *An attractive community for residents and businesses: In combination with the city's community design sub-element, ensure that all areas of the city are attractive and that the city's image is enhanced by following policies and principles of good urban design while valued elements of the community's fabric are preserved.*

Policy LT-4.1: Preserve and enhance an attractive community, with a positive image, a sense of place, landscaping and a human scale.

Policy LT-4.2; Encourage nodes of interest and activity, public open spaces, well-planned development, mixed-use projects, signature commercial uses, and buildings and other desirable uses, locations, and physical attractions.

[3] California Department of Transportation. "Scenic Highways." Accessed May 28, 2020. https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways.

Policy LT-4.3: Enforce design review guidelines and zoning standards that ensure the mass and scale of new structures are compatible with adjacent structures, and also recognize the city's vision of the future for transition areas such as neighborhood village centers and El Camino Real nodes.

Sunnyvale Tree Preservation Ordinance (Sunnyvale Municipal Code 19.94)

According to the Sunnyvale Municipal Code (SMC) Section 19.94.050, tree removal permits are required for any removal of protected trees from City owned parks. The City of Sunnyvale Tree Preservation Ordinance defines a protected tree as any tree of significant size. A significant size single-trunk tree is any tree measuring 38 inches or more in circumference when measured at four and one-half feet above the ground surface, or any tree more than 12 inches in diameter. A significant size multi-trunk tree is any tree with at least one trunk measuring 38 inches or more in circumference or the cumulative measurement of all the trunks added together that equals 113 inches or greater.

4.1.1.2 *Existing Conditions*

Project Site

The 2.4-acre project site is currently developed with a swimming pool, baseball field, and parking lot, and is surrounded by one- to two-story developments. The project site is located in an urbanized area that is relatively flat in nature but contains 28 trees on-site. The most common tree species on the project site include Chinese Pistache and Holly Oak. A list of all of the tree species currently present on-site is shown in Table 4.4-1 in Section 4.4 Biological Resources.

The project site does not provide expansive views of the natural environment. The site is only visible from the immediately surrounding area.

Surrounding Land Uses

The project site's immediate surroundings are the Lakewood Elementary School buildings and Lakewood Park baseball fields. The project site is not located within a designated scenic view corridor, nor is it visible from a designated scenic highway.

Views of the project site and surrounding land uses are shown in Photos 1 through 6.

Photo 1: View of the project site from across Lakechime Drive.

Photo 2: View of the existing community swimming pool on the project site.

PHOTOS 1 & 2

Photo 3: View of the swimming pool and baseball field.

Photo 4: View of the adjacent Lakewood Elementary School from the project site.

PHOTOS 3 & 4

Photo 5: View of the surrounding neighborhood, across Lakechime Drive, facing northwest.

Photo 6: View of the surrounding neighborhood, across Lakechime Drive, facing northeast.

PHOTOS 5 & 6

4.1.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Except as provided in Public Resources Code Section 21099, would the project:				
1) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
2) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☒	☐
3) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? [4] If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☒	☐
4) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

Impact AES-1: The project would not have a substantial adverse effect on a scenic vista. (No Impact)

The project site is located in an urbanized area that is relatively flat in nature and does not provide expansive views of the natural environment. The project site is currently developed with a swimming pool, baseball field, and parking lot, and is surrounded by one-story residences. The project site does not provide scenic open space. As a result, views from the project site include views of the immediate, surrounding development. The project site is not located in a designated scenic vista. The development of the proposed project, therefore, would not impact a scenic vista. **(No Impact)**

Impact AES-2: The project would not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway. (Less than Significant Impact)

The project site does not include rock outcroppings or historic buildings. The project site is not located within a state scenic highway. The project, however, does include mature landscape trees on site. There are a total of 28 trees on-site, 13 of which are classified as protected trees under the City of Sunnyvale Tree Removal regulations. The project proposes to preserve 18 of the existing protected trees on site. The remaining ten, five of which are protected, would be removed. However, as discussed under Impact BIO-5, the project would comply with the City's Tree Replacement

[4] Public views are those that are experienced from publicly accessible vantage points.

Standards. For these reasons, the project would not substantially damage scenic resources. **(Less than Significant Impact)**

Impact AES-3:	**The project would not substantially degrade the existing visual character or quality of public views of the site and its surroundings. The project would not conflict with applicable zoning and other regulations governing scenic quality. (Less than Significant Impact)**

The project site is developed with a former public swimming pool, baseball field, and paved parking lot. Redevelopment of the project would include demolition of the existing pool and associated pool structures. The proposed building would reach a maximum height of 34 feet, which is below the three-story, 40-foot maximum height allowed per Sunnyvale Building Code. The proposed library building would be comparable in size and scale to the adjacent school, and would not obscure any scenic vistas, damage scenic resources, or degrade the visual quality of the area.

Ten trees are planned to be removed for the project, five of which meet the City definition of a Protected Tree (over 12 inches in diameter). The trees to be removed are common species for the area and unremarkable visually, typical of landscape trees in a public park. The new landscaping plan would include 12 new trees. As discussed in Section 4.4 Biological Resources, the planned replacement trees would meet City of Sunnyvale tree replacement guidelines. Therefore, the project would have less than significant impacts. **(Less Than Significant Impact)**

Impact AES-4:	**The project would not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area. (Less than Significant Impact)**

The project site is located in an urbanized area with existing sources of light, including exterior lighting sources from the current development on-site and surrounding developments. The proposed redevelopment with a library would incrementally increase the level of illumination in the area. The proposed building would include interior lighting and exterior security lighting, similar to the existing buildings' lighting. The new building would be constructed with non-reflective materials and would not result in glare to adjacent residences. The project, therefore, would not significantly impact adjacent land uses due to increased nighttime light levels or daytime glare from building materials. **(Less than Significant Impact)**

4.2 AGRICULTURE AND FORESTRY RESOURCES

4.2.1 Environmental Setting

4.2.1.1 *Regulatory Framework*

State

Farmland Mapping and Monitoring Program

The California Department of Conservation's Farmland Mapping and Monitoring Program (FMMP) assesses the location, quality, and quantity of agricultural land and conversion of these lands over time. Agricultural land is rated according to soil quality and irrigation status. The best quality land is called Prime Farmland. In CEQA analyses, the FMMP classifications and published county maps are used, in part, to identify whether agricultural resources that could be affected are present on-site or in the project area.[5]

California Land Conservation Act

The California Land Conservation Act (Williamson Act) enables local governments to enter into contracts with private landowners to restrict parcels of land to agricultural or related open space uses. In return, landowners receive lower property tax assessments. In CEQA analyses, identification of properties that are under a Williamson Act contract is used to also identify sites that may contain agricultural resources or are zoned for agricultural uses.[6]

Fire and Resource Assessment Program

The California Department of Forestry and Fire Protection (CAL FIRE) identifies forest land, timberland, and lands zoned for timberland production that can (or do) support forestry resources.[7] Programs such as CAL FIRE's Fire and Resource Assessment Program and are used to identify whether forest land, timberland, or timberland production areas that could be affected are located on or adjacent to a project site.[8]

[5] California Department of Conservation. "Farmland Mapping and Monitoring Program." Accessed August 3, 2020. http://www.conservation.ca.gov/dlrp/fmmp/Pages/Index.aspx.

[6] California Department of Conservation. "Williamson Act." http://www.conservation.ca.gov/dlrp/lca.

[7] Forest Land is land that can support 10 percent native tree cover and allows for management of forest resources (California Public Resources Code Section 12220(g)); Timberland is land not owned by the federal government or designated as experimental forest land that is available for, and capable of, growing trees to produce lumber and other products, including Christmas trees (California Public Resources Code Section 4526); and Timberland Production is land used for growing and harvesting timber and compatible uses (Government Code Section 51104(g)).

[8] California Department of Forestry and Fire Protection. "Fire and Resource Assessment Program." Accessed August 3, 2020. http://frap.fire.ca.gov/.

4.2.1.2 *Existing Conditions*

The project site is not designated as farmland and is not used for agricultural purposes. According to the *Santa Clara County Important Farmland 2016 Map,* the project site is designated as *Urban and Built-Up Land*.[9] The project site and surrounding properties are designated for and developed with urban uses. There is no forest land subject to a Williamson Act contract located on the project site.[10]

4.2.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) 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?	☐	☐	☐	☒
2) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
3) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	☐	☐	☐	☒
4) Result in a loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
5) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

Impact AG-1: The project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use. (No Impact)

The project site is not designated or used as farmland. According to the Santa Clara County Important Farmland map, the project site is designed as *Urban and Built-Up Land.* The project site is

[9] California Department of Conservation. *Santa Clara County Important Farmland.*
[10] County of Santa Clara Department of Planning and Development. "Williamson Act and Open Space Easement." Accessed June 10, 2020. Available at https://www.sccgov.org/sites/dpd/Programs/WA/Pages/WA.aspx.

designated and zoned for urban development (specifically Public Facilities) in the City's General Plan Land Use Map and Zoning Map. The project site is currently developed with a swimming pool, baseball field, and parking lot. Implementation of the project would not convert farmland to non-agricultural use. **(No Impact)**

Impact AG-2:	**The project would not conflict with existing zoning for agricultural use, or a Williamson Act contract. (No Impact)**

The project site is not zoned for agricultural use and is not the subject of a Williamson Act contract. For these reasons, the project would not conflict with existing zoning for agricultural use or a Williamson Act contract. **(No Impact)**

Impact AG-3:	**The project would not conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Production. (No Impact)**

The project site is not zoned for forest land or timberland. The project is zoned for public facilities. Implementation of the project would not result in the loss of forest land or conversion of forest land to non-forest use. **(No Impact)**

Impact AG-4:	**The project would not result in a loss of forest land or conversion of forest land to non-forest use. (No Impact)**

The project site and surrounding properties are developed and located in an urban setting. The implementation of the project would not result in the loss of forest land or conversion of forest land to non-forest use. **(No Impact)**

Impact AG-5:	**The project would not involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use. (No Impact)**

The project site and surrounding area are developed and there are no properties within proximity that are used for agricultural or forestry uses. The implementation of the project, therefore, would not result in conversion of farmland or forest land to non-agricultural or non-forest uses. **(No Impact)**

4.3 AIR QUALITY

The discussion below is based in part on an air quality report prepared by Illingworth & Rodkin on September 8, 2020. The report is attached as Appendix A.

4.3.1 Environmental Setting

4.3.1.1 *Background Information*

Criteria Pollutants

Air quality in the Bay Area is assessed related to six common air pollutants (referred to as criteria pollutants), including ground-level ozone (O_3), nitrogen oxides (NO_x), particulate matter (PM), carbon monoxide (CO), sulfur oxides (SO_x), and lead.[11] Criteria pollutants are regulated because they result in health effects. An overview of the sources of criteria pollutants and their associated health are summarized in Table 4.3-1. The most commonly regulated criteria pollutants in the Bay Area are discussed further below.

Table 4.3-1: Health Effects of Air Pollutants

Pollutants	Sources	Primary Effects
Ozone (O_3)	Atmospheric reaction of organic gases with nitrogen oxides in sunlight	• Aggravation of respiratory and cardiovascular diseases • Irritation of eyes • Cardiopulmonary function impairment
Nitrogen Dioxide (NO_2)	Motor vehicle exhaust, high temperature stationary combustion, atmospheric reactions	• Aggravation of respiratory illness • Reduced visibility
Fine Particulate Matter ($PM_{2.5}$) and Coarse Particulate Matter (PM_{10})	Stationary combustion of solid fuels, construction activities, industrial processes, atmospheric chemical reactions	• Reduced lung function, especially in children • Aggravation of respiratory and cardiorespiratory diseases • Increased cough and chest discomfort • Reduced visibility
Toxic Air Contaminants (TACs)	Cars and trucks, especially diesel-fueled; industrial sources, such as chrome platers; dry cleaners and service stations; building materials and products	• Cancer • Chronic eye, lung, or skin irritation • Neurological and reproductive disorders

High O_3 levels are caused by the cumulative emissions of reactive organic gases (ROG) and NO_x. These precursor pollutants react under certain meteorological conditions to form high O_3 levels. Controlling the emissions of these precursor pollutants is the focus of the Bay Area's attempts to

[11] The area has attained both state and federal ambient air quality standards for CO. The project does not include substantial new emissions of sulfur dioxide or lead. These criteria pollutants are not discussed further.

reduce O_3 levels. The highest O_3 levels in the Bay Area occur in the eastern and southern inland valleys that are downwind of air pollutant sources.

PM is a problematic air pollutant of the Bay Area. PM is assessed and measured in terms of respirable particulate matter or particles that have a diameter of 10 micrometers or less (PM_{10}) and fine particulate matter where particles have a diameter of 2.5 micrometers or less ($PM_{2.5}$). Elevated concentrations of PM_{10} and $PM_{2.5}$ are the result of both region-wide emissions and localized emissions.

Toxic Air Contaminants

TACs are a broad class of compounds known to have health effects. They include but are not limited to criteria pollutants. TACs are found in ambient air, especially in urban areas, and are caused by industry, agriculture, diesel fuel combustion, and commercial operations (e.g., dry cleaners). TACs are typically found in low concentrations, even near their source (e.g., diesel particulate matter [DPM] near a freeway).

Diesel exhaust is the predominant TAC in urban air and is estimated to represent about three-quarters of the cancer risk from TACs. Diesel exhaust is a complex mixture of gases, vapors, and fine particles. Medium- and heavy-duty diesel trucks represent the bulk of DPM emissions from California highways. The majority of DPM is small enough to be inhaled into the lungs. Most inhaled particles are subsequently exhaled, but some deposit on the lung surface or are deposited in the deepest regions of the lungs (most susceptible to injury).[12] Chemicals in diesel exhaust, such as benzene and formaldehyde, have been previously identified as TACs by the California Air Resources Board (CARB).

Sensitive Receptors

Some groups of people are more affected by air pollution than others. CARB has identified the following persons who are most likely to be affected by air pollution: children under 16, individuals over the age of 65, athletes, and people with cardiovascular and chronic respiratory diseases. These groups are classified as sensitive receptors. Locations that may contain a high concentration of these sensitive population groups include residential areas, hospitals, daycare facilities, elder care facilities, and elementary schools.

4.3.1.2 *Regulatory Framework*

Federal and State

Clean Air Act

At the federal level, the United States Environmental Protection Agency (EPA) is responsible for overseeing implementation of the Clean Air Act and its subsequent amendments. The federal Clean Air Act requires the EPA to set national ambient air quality standards for the six common criteria pollutants (discussed previously), including PM, O_3, CO, SO_x, NO_x, and lead.

[12] California Air Resources Board. "Overview: Diesel Exhaust and Health." Accessed August 3, 2020. https://www.arb.ca.gov/research/diesel/diesel-health.htm.

CARB is the state agency that regulates mobile sources throughout the state and oversees implementation of the state air quality laws and regulations, including the California Clean Air Act. The EPA and the CARB have adopted ambient air quality standards establishing permissible levels of these pollutants to protect public health and the climate. Violations of ambient air quality standards are based on air pollutant monitoring data and are determined for each air pollutant. Attainment status for a pollutant means that a given air district meets the standard set by the EPA and/or CARB.

Risk Reduction Plan

To address the issue of diesel emissions in the state, CARB developed the Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles. In addition to requiring more stringent emission standards for new on-road and off-road mobile sources and stationary diesel-fueled engines to reduce particulate matter emissions by 90 percent, the plan involves application of emission control strategies to existing diesel vehicles and equipment to reduce DPM (in additional to other pollutants). Implementation of this plan, in conjunction with stringent federal and CARB-adopted emission limits for diesel fueled vehicles and equipment (including off-road equipment), will significantly reduce emissions of DPM and NO_X.

Regional

2017 Clean Air Plan

The Bay Area Air Quality Management District (BAAQMD) is the agency primarily responsible for assuring that the federal and state ambient air quality standards are maintained in the San Francisco Bay Area. Regional air quality management districts, such as BAAQMD, must prepare air quality plans specifying how state and federal air quality standards will be met. BAAQMD's most recently adopted plan is the Bay Area 2017 Clean Air Plan (2017 CAP). The 2017 CAP focuses on two related BAAQMD goals: protecting public health and protecting the climate. To protect public health, the 2017 CAP describes how BAAQMD will continue its progress toward attaining state and federal air quality standards and eliminating health risk disparities from exposure to air pollution among Bay Area communities. To protect the climate, the 2017 CAP includes control measures designed to reduce emissions of methane and other super-greenhouse gases (GHGs) that are potent climate pollutants in the near-term, and to decrease emissions of carbon dioxide by reducing fossil fuel combustion.[13]

CEQA Air Quality Guidelines

The BAAQMD CEQA Air Quality Guidelines are intended to serve as a guide for those who prepare or evaluate air quality impact analyses for projects and plans in the San Francisco Bay Area. Jurisdictions in the San Francisco Bay Area Air Basin utilize the thresholds and methodology for assessing air quality impacts developed by BAAQMD within their CEQA Air Quality Guidelines. The guidelines include information on legal requirements, BAAQMD rules, methods of analyzing impacts, and recommended mitigation measures.

[13] BAAQMD. *Final 2017 Clean Air Plan.* April 19, 2017. http://www.baaqmd.gov/plans-and-climate/air-quality-plans/current-plans.

Local

Sunnyvale General Plan

The General Plan includes policies for the purpose of avoiding or mitigating impacts from planned development in the City. The goal and policies below are specific to air quality and are applicable to the proposed project.

Goal EM-11: *Improved air quality improve Sunnyvale's air quality and reduce the exposure of its citizens to air pollutants.*

Policy EM-11.2: Utilize land use strategies to reduce air quality impact, including opportunities for citizens to live and work in close proximity.

Policy EM-11.3: Require all new developments to utilize site planning to protect citizens from unnecessary exposure to air pollutants.

Policy EM-11.4: Apply the indirect source rule to new development with significant air quality impacts. Indirect source review would cover commercial and residential projects as well as other land uses that produce or attract motor vehicle traffic.

4.3.1.3 *Existing Conditions*

The Bay Area is considered a non-attainment area for ground-level O_3 and $PM_{2.5}$ under both the federal Clean Air Act and state Clean Air Act. The area is also considered nonattainment for PM_{10} under the state act, but not the federal act. The area has attained both state and federal ambient air quality standards for CO. As part of an effort to attain and maintain ambient air quality standards for O_3 and PM_{10}, BAAQMD has established thresholds of significance for these air pollutants and their precursors. These thresholds are for O_3 precursor pollutants (ROG and NO_X), PM_{10}, and $PM_{2.5}$, and apply to both construction period and operational period impacts.

Currently, the project site is developed with a baseball field, parking lot, a public swimming pool and associated pool buildings. The pool has been closed due to structural safety reasons. Since the pool is not operational and the property is currently unproductive, the project site's existing operational emissions were assumed to be zero.

4.3.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
2) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	☐	☒	☐
3) Expose sensitive receptors to substantial pollutant concentrations?	☐	☒	☐	☐
4) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☒	☐

Note: 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.

4.3.2.1 *Thresholds of Significance*

Impacts from the Project

As discussed in CEQA Guidelines Section 15064(b), the determination of whether a project may have a significant effect on the environment calls for judgment on the part of the lead agency and must be based to the extent possible on scientific and factual data. The City of Sunnyvale has considered the air quality thresholds updated by BAAQMD in May 2017 and regards these thresholds to be based on the best information available for the San Francisco Bay Area Air Basin and conservative in terms of the assessment of health effects associated with TACs and $PM_{2.5}$. The BAAQMD CEQA Air Quality thresholds used in this analysis are identified in Table 4.3-2 below.

Table 4.3-2: BAAQMD Air Quality Significance Thresholds			
Pollutant	**Construction Thresholds**	**Operation Thresholds**	
	Average Daily Emissions (pounds/day)	**Average Daily Emissions (pounds/day)**	**Annual Average Emissions (tons/year)**
Criteria Air Pollutants			
ROG, NO_x	54	54	10
PM_{10}	82 (exhaust)	82	15
$PM_{2.5}$	54 (exhaust)	54	10
CO	Not Applicable	9.0 ppm (eight-hour) or 20.0 ppm (one-hour)	
Fugitive Dust	Dust Control Measures/Best Management Practices	Not Applicable	
Health Risks and Hazards for New Sources (within a 1,000-foot Zone of Influence)			
Health Hazard	**Single Source**	**Combined Cumulative Sources**	
Excess Cancer Risk	10 per one million	100 per one million	
Hazard Index	1.0	10.0	
Incremental Annual $PM_{2.5}$	0.3 $\mu g/m^3$	0.8 $\mu g/m^3$ (average)	

Impact AIR-1: The project would not conflict with or obstruct implementation of the applicable air quality plan. (Less than Significant Impact)

The BAAQMD CEQA Air Quality Guidelines set forth criteria for determining consistency with the CAP. In general, a project is considered consistent if it a) supports the primary goals of the Clean Air Plan; b) includes relevant control measures; and c) does not interfere with implementation of CAP control measures. The proposed project would not conflict with the 2017 CAP because as discussed under Impact AIR-2, the proposed project's emissions would be below the BAAQMD operational thresholds. Therefore, the project is not required to incorporate project-specific control measures listed in the 2017 CAP. Implementation of the project would not inhibit BAAQMD or partner agencies from continuing progress toward attaining state and federal air quality standards and eliminating health-risk disparities from exposure to air pollution among Bay Area communities, as described within the 2017 CAP. **(Less than Significant Impact)**

Impact AIR-2:	The project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard. (Less than Significant Impact)

Construction-Related Criteria Pollutant Emissions

The proposed project is anticipated to be constructed over a period of 16 months. CalEEMod was used to estimate annual emissions for both on- and off-site construction activities. On-site activities are primarily made up of construction equipment emissions, while off-site activity includes worker, hauling, and vendor traffic. The project land use types and size, and anticipated construction schedule, were input to CalEEMod. Table 4.3-3 below shows the average daily construction emissions of ROG, NO_X, PM_{10} exhaust, and $PM_{2.5}$ exhaust during construction of the project.

Table 4.3-3: Construction Period Emissions

Scenario	ROG	NO_X	PM_{10} Exhaust	$PM_{2.5}$ Exhaust
Total construction emissions	0.6 tons	2.6 tons	0.13 tons	0.12 tons
Average daily emissions[1]	**3.2 lbs/day**	**14.4 lbs/day**	**0.7 lbs/day**	**0.6 lbs/day**
BAAQMD Thresholds	54 lbs/day	54 lbs/day	82 lbs/day	54 lbs/day
Exceed Threshold?	***No***	***No***	***No***	***No***

[1]Assumes 365 workdays.

Source: Illingworth & Rodkin, Inc. *Lakewood Branch Library and Learning Center Air Quality and Greenhouse Gas Emissions Assessment.* September 8, 2020.

Construction activities, particularly during site preparation and grading, would temporarily generate fugitive dust in the form of PM_{10} and $PM_{2.5}$. Sources of fugitive dust would include disturbed soils at the construction site and trucks carrying uncovered loads of soils. Unless properly controlled, vehicles leaving the site would deposit mud on local streets, which could be an additional source of airborne dust after it dries.

The calculated emissions presented above in Table 4.3-3 reflect the project description at the time the analysis was conducted, i.e., construction of a 20,090 square foot building with 112 parking spaces on 2.38 acres of land. As discussed in Section 3.0 Project Description, the proposed project has been refined and the updated project description would disturb a total of 2.86 acres, consisting of a 22,771 square foot building with 100 parking spaces and 21,000 square feet of ground disturbance for utilities improvements. Illingworth & Rodkin, Inc. considered the project changes to disturb an additional 0.5 acres of land and confirmed the change in emissions would be negligible.[14] As shown in Table 4.3-3 above, construction emissions based on the original project description were far below, e.g., from 1% to 26%, of the BAAQMD thresholds for ROG, NO_X, PM_{10} exhaust, and $PM_{2.5}$ exhaust, respectively. The disturbance of an additional 0.5 acres of land (21% increase) and construction of an additional 1,040 square feet of building area (5% increase) would not substantially

[14] Jay Witt, Senior Consultant, Illingworth & Rodkin, Inc. Personal Communication. April 19, 2023.

increase construction emissions, and emissions from the updated project description would remain well below the thresholds. In addition, the project would implement the BAAQMD best management practices listed below as Standard Condition AIR-1, which would further reduce emissions.

Standard Condition AIR-1: The following measures shall be implemented during all phases of construction to control dust and exhaust at the project site:

- All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
- All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
- All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- All vehicle speeds on unpaved roads shall be limited to 15 miles per hour (mph).
- All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
- Replant vegetation in disturbed areas as soon as possible after completion of construction.
- Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of the California Code of Regulations). Clear signage shall be provided for construction workers at all access points.
- All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.
- Post a publicly visible sign with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.

As discussed above, emissions from project construction would not exceed BAAQMD emissions thresholds, and compliance with Standard Condition AIR-1 would ensure impacts are less than significant. (**Less than Significant Impact)**

Operation-Related Criteria Pollutant Emissions

Operational air emissions from the proposed project would be generated primarily from vehicles driven by visitors to the project site. Evaporative emissions from architectural coatings and maintenance products are typical emissions from these types of uses. CalEEMod was used to estimate emissions from operation of the proposed project. For the purposes of calculating operational emissions, the pool was conservatively assumed to not be operational. Table 4.3-4 below shows average daily construction emissions of ROG, NO_X, total PM_{10} and total $PM_{2.5}$ during operation of the project.

Table 4.3-4: Operational Period Emissions				
Scenario	**ROG**	**NO_X**	**PM_{10}**	**$PM_{2.5}$**
2024 Project Operational Emissions (tons/year)	0.54 tons	0.60 tons	0.83 tons	0.23 tons
BAAQMD Thresholds (tons/year)	10 tons	10 tons	15 tons	10 tons
Exceed Threshold?	**No**	**No**	**No**	**No**
2024 Project Operational Emissions (lbs/day)	3.0 lbs	3.3 lbs	4.5 lbs	1.2 lbs
BAAQMD Thresholds (pounds/day)	54 lbs	54 lbs	82 lbs	54 lbs
Exceed Threshold?	**No**	**No**	**No**	**No**

[1]Assumes 365-day operation.

Source: Illingworth & Rodkin, Inc. *Lakewood Branch Library and Learning Center Air Quality and Greenhouse Gas Emissions Assessment.* September 8, 2020.

As shown in Table 4.3-4 above, operational period emissions would not exceed BAAQMD significance thresholds emissions for the project. As noted previously, modeling was completed based on the project description at the time, and the current project description provides a slightly larger building area, 20,090 versus 22,177 square feet, an increase of 5%. This minor increase in the building area would not substantially increase operational emissions, and emissions from the updated project description would remain well below the thresholds. Therefore, the project would have a less than significant impact. **(Less than Significant Impact)**

Impact AIR-3: The project would not expose sensitive receptors to substantial pollutant concentrations. (Less than Significant Impact with Mitigation Incorporated)

Community Health Risks from Project Construction

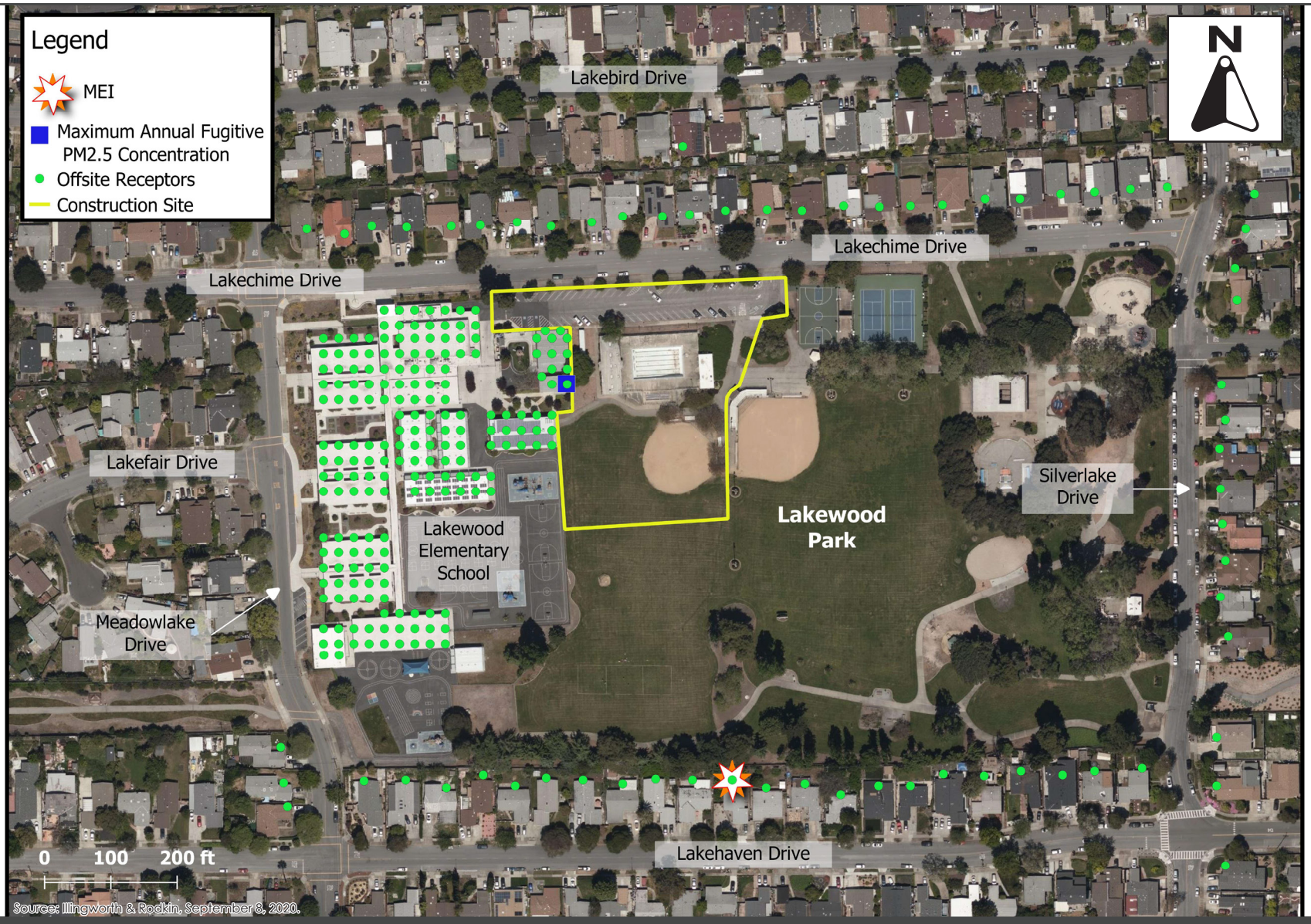
Construction of the proposed project would generate dust and equipment exhaust that could affect nearby sensitive receptors. Although it was concluded in Impact AIR-2 that construction exhaust air pollutant emissions would not be considered to contribute substantially to existing or projected air quality violations within the air basin as a whole, construction exhaust emissions may still pose localized health risks for nearby sensitive receptors such as surrounding residents. The primary community health risk impact issues associated with construction emissions are cancer risk and exposure to $PM_{2.5}$. Diesel exhaust poses both a potential health and nuisance impact to nearby receptors. A health risk assessment of the project construction activities was conducted that evaluated potential health effects to nearby sensitive receptors from construction emissions of DPM and $PM_{2.5}$.[15] This assessment included dispersion modeling to predict the off-site concentrations resulting from project construction, so that lifetime cancer risks and non-cancer health effects could be evaluated.

[15] DPM is identified by California as a toxic air contaminant due to the potential to cause cancer.

The maximum modeled DPM and $PM_{2.5}$ concentrations were identified at nearby receptors to find the maximally exposed individuals (MEI), which correlates to individuals with the greatest cancer risk from project emissions. The maximum increased cancer risks were determined using meteorological data, as well as the guidelines recommended by the California Office of Environmental Health Hazard Assessment (OEHHA) and BAAQMD. OEHHA recommends that cancer risk be calculated by age groups to account for different breathing rates and sensitivity to TACs. Specifically, they recommend evaluating risks for the third trimester of pregnancy to age zero, ages zero to less than two (infant exposure), ages two to less than 16 (child exposure), and ages 16 to 70 (adult exposure). For children at schools, BAAQMD recommends using the 95th percentile 8-hour breathing rates. For residential exposures, BAAQMD recommends using the 95th percentile breathing rates for the third trimester and infant exposures, which places a factor of 10 on the DPM concentration.

Results of the assessment, as shown on Figure 4.3-1 below, indicated that the construction MEI was located at a single-family residence south of the project site and south of Lakewood Park. Although the closest residences to the project site are located to the north across Lakechime Drive, meteorological data showed that prevailing winds blow to the south. Thus, the residence to the south would result in the greatest cancer risk due to prevailing winds. It is important to note that a property identified as the MEI (orange star showed on Figure 4.3-1) does not mean the individuals at that location have an imminent probability or chance of contracting cancer or experiencing acute/chronic health risks. The properties identified as the MEI(s) represent the areas with the highest exposures to TACs generated from construction and subsequent operation of the proposed project. Thus, their exposures are used to assess whether a significant impact would result or not, and if so, to identify the level of mitigation necessary to reduce the impact below the threshold of significance. The health risks computed are not reflective of cancer or hazard risks to be experienced by a singular individual, but indicate the rate of cancer or other health risk, if applied to the general population, with particular attention paid to infant and children exposures.

The health risks identified at the MEI(s) are below the BAAQMD cancer risk, particulate matter, and hazard index thresholds, with implementation of Standard Condition AIR-1 and mitigation measure MM AIR-3.1 (discussed below). If unmitigated, the cancer risks from construction during 2022-2023 would exceed the BAAQMD single-source thresholds of greater than 10.0, as shown in Table 4.3-5 below. The highest annual $PM_{2.5}$ concentration was located at the Lakewood Elementary/YMCA day care adjacent to the project site. The unmitigated maximum annual $PM_{2.5}$ from construction during 2022-2023 exceed the BAAQMD single-source thresholds of greater than 0.3 micrograms per cubic meter. However, with the implementation of MM AIR-3.1 and Standard Condition AIR-1, the increased project cancer risk and $PM_{2.5}$ concentration would not exceed thresholds. Table 4.3-5 below summarizes the maximum cancer risks, $PM_{2.5}$ concentrations, and health hazard indexes for project-related construction activities affecting the off-site residential MEI and the Lakewood Elementary/YMCA daycare.



PROJECT SITE AND LOCATIONS OF OFF-SITE SENSITIVE RECEPTORS AND TAC IMPACTS | FIGURE 4.3-1

Table 4.3-5: Construction Risk Impacts at the Offsite MEI			
Source	**Cancer Risk (per million)**	**Annual PM2.5 ($\mu g/m^3$)**	**Hazard Index**
Project Construction - MEI			
Unmitigated	32.3 (infant)	0.20	0.03
Mitigated	6.2 (infant)	0.05	<0.01
BAAQMD Single-Source Threshold	***>10.0***	***>0.3***	***>1.0***
Exceed Threshold?			
Unmitigated	Yes	No	No
Mitigated	No	No	No
Project Construction – Lakewood Elementary			
Unmitigated	11.6 (child)	0.38	0.04
Mitigated	2.2 (infant)	0.11	<0.01
BAAQMD Single-Source Threshold	***>10.0***	***>0.3***	***>1.0***
Exceed Threshold?			
Unmitigated	Yes	Yes	No
Mitigated	No	No	No
Source: Illingworth & Rodkin, Inc. *Lakewood Branch Library and Learning Center Air Quality and Greenhouse Gas Emissions Assessment.* September 8, 2020.			

In order to meet BAAQMD single-source health risks thresholds for DPM and fugitive $PM_{2.5}$, the following mitigation measure would be required to reduce health risks impacts resulting from construction.

Impact AIR-3: Project construction emissions could impact nearby sensitive receptors. **(Potentially Significant Impact)**

Mitigation Measures: The project proposes to implement the following mitigation measures to reduce construction impacts to a less than significant level.

MM AIR-3.1: The following mitigation measure shall be implemented during all phases of construction to minimize emissions:

- The project shall develop a plan demonstrating that the off-road equipment used onsite to construct the project would achieve a fleet-wide average 69-percent reduction in diesel particulate matter (DPM) exhaust emissions or greater. One feasible plan to achieve this reduction would include the following:
    - All diesel-powered off-road equipment, larger than 25 horsepower, operating on the site for more than two days continuously shall meet, at a minimum, meet U.S. EPA

particulate matter emissions standards for Tier 3 engines with CARB-certified Level 3 Diesel Particulate Filters or equivalent. Equipment that is electrically powered or uses non-diesel fuels would also meet this requirement.

With implementation of the MM AIR-3.1, project impacts would be reduced to less-than-significant levels. **(Less than Significant with Mitigation Incorporated)**

Community Risks from Project Operation

Operation of the project is not expected to be a source of TAC or localized air pollutant emissions since the project would not generate substantial truck traffic or include stationary sources of diesel emissions. Emissions from vehicle traffic generated by the project would not be localized, would primarily consist of standard passenger vehicles and not diesel-powered trucks, and would be spread out over a broad geographical area. **(Less than Significant Impact)**

Impact AIR-4:	**The project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people. (Less than Significant Impact)**

The project would generate localized emissions of diesel exhaust during construction equipment operation and truck activity. These emissions may be noticeable from time to time by adjacent receptors; however, the odors would be localized and temporary and would not affect people off-site. For these reasons, implementation of the proposed project would not result in significant long-term or short-term odor impacts, affecting a substantial number of people. **(Less Than Significant Impact)**

4.4 BIOLOGICAL RESOURCES

The discussion below is based in part on an arborist report prepared by HMH on July 28, 2020 and a bird-safe design review prepared by WRA, Inc. on April 7, 2023. The reports are attached as Appendices B and C.

4.4.1 Environmental Setting

4.4.1.1 *Regulatory Framework*

Federal and State

Endangered Species Act

Individual plant and animal species listed as rare, threatened, or endangered under state and federal Endangered Species Acts are considered special-status species. Federal and state endangered species legislation has provided the United States Fish and Wildlife Service (USFWS) and the California Department of Fish and Wildlife (CDFW) with a mechanism for conserving and protecting plant and animal species of limited distribution and/or low or declining populations. Permits may be required from both the USFWS and CDFW if activities associated with a proposed project would result in the take of a species listed as threatened or endangered. To "take" a listed species, as defined by the State of California, is "to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill" these species. Take is more broadly defined by the federal Endangered Species Act to include harm of a listed species.

In addition to species listed under state and federal Endangered Species Acts, Sections 15380(b) and (c) of the CEQA Guidelines provide that all potential rare or sensitive species, or habitats capable of supporting rare species, must be considered as part of the environmental review process. These may include plant species listed by the California Native Plant Society and CDFW-listed Species of Special Concern.

Migratory Bird Treaty Act

The federal Migratory Bird Treaty Act (MBTA) prohibits killing, capture, possession, or trade of migratory birds except in accordance with regulations prescribed by the Secretary of the Interior. Hunting and poaching are also prohibited. The taking and killing of birds resulting from an activity is not prohibited by the MBTA when the underlying purpose of that activity is not to take birds.[16] Nesting birds are considered special-status species and are protected by the USFWS. The CDFW also protects migratory and nesting birds under California Fish and Game Code Sections 3503, 3503.5, and 3800. The CDFW defines taking as causing abandonment and/or loss of reproductive efforts through disturbance.

Sensitive Habitat Regulations

Wetland and riparian habitats are considered sensitive habitats under CEQA. They are also afforded protection under applicable federal, state, and local regulations, and are generally subject to

[16] United States Department of the Interior. "Memorandum M-37050. The Migratory Bird Treaty Act Does Not Prohibit Incidental Take." Accessed July 28, 2020. https://www.doi.gov/sites/doi.gov/files/uploads/m-37050.pdf.

regulation by the United States Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), CDFW, and/or the USFWS under provisions of the federal Clean Water Act (e.g., Sections 303, 304, 404) and State of California Porter-Cologne Water Quality Control Act.

Fish and Game Code Section 1602

Streambeds and banks, as well as associated riparian habitat, are regulated by the CDFW per Section 1602 of the Fish and Game Code. Work within the bed or banks of a stream or the adjacent riparian habitat requires a Streambed Alteration Agreement from the CDFW.

Regional and Local

Santa Clara Valley Habitat Plan/Natural Community Conservation Plan

The Santa Clara Valley Habitat Plan/Natural Community Conservation Plan (Habitat Plan) covers approximately 520,000 acres, or approximately 62 percent of Santa Clara County. It was developed and adopted through a partnership between Santa Clara County, the Cities of San José, Morgan Hill, and Gilroy, Santa Clara Valley Water District (Valley Water), Santa Clara Valley Transportation Authority (VTA), USFWS, and CDFW. The Habitat Plan is intended to promote the recovery of endangered species and enhance ecological diversity and function, while accommodating planned growth in southern Santa Clara County. The Santa Clara Valley Habitat Agency is responsible for implementing the plan. Sunnyvale is not a partner to the Habitat Plan.

Sunnyvale General Plan

The General Plan includes policies for the purpose of avoiding or mitigating impacts from planned development in the City. The goal and policies below are specific to biological resources and are applicable to the proposed project.

Policy LT-1.10: Participate in federal, state, and regional programs and processes in order to protect the natural and human environment in Sunnyvale and the region.

Policy LT-1.10e: Continue to evaluate and ensure mitigation of potential biological impacts of future development and redevelopment projects in a manner consistent with applicable local, state, and federal laws and regulations.

Goal LT-2: *Environmentally sustainable land use and transportation planning and development.*

Policy LT-2.4: Maintain and regularly review and update regulations and practices for the planting, protection, removal, replacement, and long-term management of large trees on private property and city-owned golf courses and parks.

Policy LT-2.5: Recognize the value of protected trees and heritage landmark trees (as defined in city ordinances) to the legacy, character, and livability of the community by expanding the designation and protection of large signature and native trees on private property and in city parks.

Goal CC-5: *Protection of Sunnyvale's Heritage – To enhance, preserve, and protect Sunnyvale's heritage including natural features, the built environment and significant artifacts.*

Policy CC-5.1: Preserve existing landmarks and cultural resources and their environmental settings.

Sunnyvale Tree Preservation Ordinance (Sunnyvale Municipal Code 19.94)

According to the Sunnyvale Municipal Code (SMC) Section 19.94.050, tree removal permits are required for any removal of protected trees from City owned parks. The City of Sunnyvale Tree Preservation Ordinance defines a protected tree as any tree of significant size. A significant size single-trunk tree is any tree measuring 38 inches or more in circumference when measured at four and one-half feet above the ground surface, or any tree more than 12 inches in diameter. A significant size multi-trunk tree is any tree with at least one trunk measuring 38 inches or more in circumference or the cumulative measurement of all the trunks added together that equals 113 inches or greater.

Sunnyvale Bird Safe Design Guidelines

The City's Bird Safe Design Guidelines stipulate that efforts should be taken to reduce bird strikes in all locations of the City. The guidelines require the following items:

- Avoiding large, uninterrupted expanses of glass near open areas;
- Avoiding the funneling of open space towards a building face;
- Prohibiting glass skyways and freestanding glass walls;
- Avoiding transparent glass walls coming together at building corners;
- Reducing glass at the top of the building;
- Prohibiting up-lighting or spotlights;
- Shielding outdoor lights to cast down onto the area to be illuminated;
- Incorporating window blinds; and
- Creating smaller zones for internal lighting.

4.4.1.2 *Existing Conditions*

The project site is located in an urban setting. The project site does not contain any riparian corridors or wetlands. The project site is not located in an area containing any of the sensitive natural communities or special status species.

As shown in Table 4.4-1 below, there are 28 trees located on the project site, 13 of which are protected trees. A protected tree is any single trunk tree 38 inches or greater in circumference or 12 inches or greater in diameter, or any multi-trunk tree that has at least one trunk 38 inches or greater in circumference.

Table 4.4-1: Tree Quantity Summary			
Botanical Name	**Common Name**	**Number of Trees**	**Number of Protected Trees**
Pistacia chinensis	Chinese Pistache	9	4
Quercus ilex	Holly Oak	6	3
Quercus agrifolia	Coast Live Oak	4	0
Pinus canariensis	Canary Island Pine	2	2
Prunus cerasifera 'Atropurpurea'	Purple Leaf Plum	2	0
Acer rubrum	Red Maple	1	0
Liriodendron tulipifera	Tulip Tree	1	1
Magnolia grandiflora	Southern Magnolia	1	1
Pyrus calleryana	Flowering Pear	1	1
Ulmus parvifolia	Chinese Elm	1	1
	Total Trees	**28**	**13**

4.4.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife (CDFW) or United States Fish and Wildlife Service (USFWS)?	☐	☒	☐	☐
2) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFW or USFWS?	☐	☐	☐	☒
3) 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?	☐	☐	☐	☒

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
4) 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?	☐	☐	☐	☒
5) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☒	☐
6) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

Impact BIO-1: **The project would not have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS. (Less than Significant Impact with Mitigation Incorporated)**

The project site is developed and located in a developed, urban area. The project site does not contain sensitive habitat. Due to the lack of sensitive habitat, special-status species on-site are unlikely. There are existing trees and landscaping on and adjacent to the site, however, that could be used by nesting birds. Nesting birds are protected under the provisions of the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code Sections 3503, 3503.5, and 2800.

Construction disturbance during the breeding season could result in the incidental loss of fertile eggs or nestlings, or otherwise lead to nest abandonment. Disturbance that causes abandonment and/or loss of reproductive effort is considered a taking by the California Department of Fish and Wildlife (CDFW). Any loss of fertile eggs, nesting raptors, or any activities resulting in nest abandonment would constitute a significant impact. Construction activities such as tree removal and site grading that disturb a nesting bird or raptor on-site or immediately adjacent to the construction zone would constitute a significant impact.

Impact BIO-1: Project construction could impact nesting birds on or adjacent to the site, if present. **(Potentially Significant Impact)**

Mitigation Measure: In compliance with federal and state regulations and protocol, the project proposes to implement the following mitigation measure, to reduce impacts to a less than significant level.

MM BIO-1.1: Construction shall be scheduled to avoid the nesting season to the extent feasible. The nesting season for most birds, including most raptors, in the San Francisco Bay area extends from February 1 through August 31.

If it is not possible to schedule construction and tree removal between September and January, then pre-construction surveys for nesting birds shall be completed by a qualified ornithologist to ensure that no nests shall be disturbed during project implementation. This survey shall be completed no more than 14 days prior to the initiation of grading, tree removal, or other demolition or construction activities during the early part of the breeding season (February through April) and no more than 30 days prior to the initiation of these activities during the late part of the breeding season (May through August).

During this survey, the ornithologist shall inspect all trees and other possible nesting habitats within and immediately adjacent to the construction area for nests. If an active nest is found sufficiently close to work areas to be disturbed by construction, the ornithologist, in consultation with CDFW, shall determine the extent of a construction-free buffer zone to be established around the nest to ensure that nests of bird species protected by the MBTA or Fish and Game code shall not be disturbed during project construction.

A final report of nesting birds, including any protection measures, shall be submitted to the Director of Community Development prior to the start of grading or tree removal.

The project, with implementation of the above mitigation measure, would reduce impacts to nesting birds (if present) by avoiding construction during nesting bird season or completing pre-construction nesting bird surveys to minimize and/or avoid impacts to nesting birds. **(Less Than Significant Impact with Mitigation Incorporated)**

Impact BIO-2:	**The project would not have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFW or USFWS. (No Impact)**

The project site is located in an urban, developed area and is not located near an existing waterway. No riparian habitat or other sensitive natural community is identified on or adjacent to the site. For these reasons, the development of the project would not have a substantial adverse effect on any riparian habitat or other sensitive natural community. **(No Impact)**

Impact BIO-3:	**The project would not have a substantial adverse effect on state or federally protected wetlands through direct removal, filling, hydrological interruption, or other means. (No Impact)**

There are no wetlands on-site; therefore, the proposed project would not have a substantial adverse effect on wetlands. **(No Impact)**

Impact BIO-4:	**The project would not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites. (No Impact)**

The project site is fully developed and located in an urban area. No waterways or other sensitive habitats are located on-site. The project site is not used as a wildlife corridor or wildlife nursery site. For these reasons, the project would not substantially impact the movement of fish or wildlife, wildlife corridors, or wildlife nursery sites. **(No Impact)**

Impact BIO-5:	**The project would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. (Less than Significant Impact)**

Tree Preservation Ordinance

There are a total of 28 trees on-site, 13 of which are "protected" trees. The most common tree species on the project site include Chinese Pistache and Holly Oak. The project proposes to preserve 18 of the existing protected trees on site. The project would result in the removal of 12 trees, five of which are protected per City of Sunnyvale standards. Of these five protected trees, one is 24 inches in diameter and four are between 12 and 14 inches in diameter. The other seven trees are between 8 and 10 inches in diameter.

The project shall comply with the City's Tree Preservation Ordinance (SMC Chapter 19.94). According to the guidelines shown in Table 4.4-2 below, the removal of 12 trees would require the planting of 16 24-inch box trees. The project proposes to plant a total of 27 new trees.

Table 4.4-2: City of Sunnyvale Tree Replacement Guidelines

Trees to be Removed	Replacement Tree(s)
12- to 18- inch diameter (36- to 56- inch circumference)	One 24-inch box tree or three 15-gallon trees
18- to 24- inch diameter (56- to 76-inch circumference)	One 36-inch box tree or two 24-inch box trees
Over 24 inches in diameter (greater than 75 inches in circumference)	One 48-inch box tree, two 36-inch box trees, or four 24-inch box trees

The Director of Community Development would determine the final replacement trees mitigation ratio based on their review of the project plans and the number, species, size, and location of the existing trees on the site.

Bird Safety

The project site is located in a developed area and is not located near a body of water, resulting in potentially low-quality habitat for birds. Thus, it is not expected that implementation of the proposed project would result in a high number of bird strikes. However, as discussed under 4.4.1.1 Regulatory Framework, the City of Sunnyvale requires all projects in the City to implement the measures outlined in the City's Bird-Safe Building Design Guidelines. To ensure the proposed project's compliance with the City's Bird-Safe Building Design Guidelines, WRA prepared a bird-safe design review (refer to Appendix C).

As discussed in greater detail in Appendix C, the project design incorporates the following elements that reduce the likelihood of bird collisions:

- Non-reflective glazing;
- Low amount of glazing proposed;
- East and south elevations facing open space avoid storefront-style windows;
- Exterior use of various colors, textures, and patterns;
- Overhanging roof eaves;
- Ornamental fencing adjacent to landscaping;
- Exterior lights direct light downward;
- Occupancy sensors installed on outdoor pole-mounted lights;
- Trees are oriented parallel to glazed areas on the building; and
- Ceramic fritting on curtain wall glazing.

The project, in conformance with the Tree Preservation Ordinance and applicable Bird Safe Design Guidelines, would not conflict with local policies or ordinances protecting biological resources. **(Less than Significant Impact)**

Impact BIO-6:	**The project would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. (No Impact)**

The project site is not located within an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved habitat conservation plan. The project, therefore, would not conflict with any of these plans. **(No Impact)**

4.5 CULTURAL RESOURCES

The discussion below is based in part on a Cultural Report prepared by Holman & Associates, Inc. on August 25, 2020. The report is on file with the City.

4.5.1 Environmental Setting

4.5.1.1 *Regulatory Framework*

Federal and State

National Historic Preservation Act

Federal protection is legislated by the National Historic Preservation Act of 1966 (NHPA) and the Archaeological Resource Protection Act of 1979. These laws maintain processes for determination of the effects on historical properties eligible for listing in the National Register of Historic Places (NRHP). Section 106 of the NHPA and related regulations (36 Code of Federal Regulations [CFR] Part 800) constitute the primary federal regulatory framework guiding cultural resources investigations and require consideration of effects on properties that are listed or eligible for listing in the NRHP. Impacts to properties listed in the NRHP must be evaluated under CEQA.

California Register of Historical Resources

The California Register of Historical Resources (CRHR) is administered by the State Office of Historic Preservation and encourages protection of resources of architectural, historical, archeological, and cultural significance. The CRHR identifies historic resources for state and local planning purposes and affords protections under CEQA. Under California Public Resources Code Section 5024.1(c), a resource may be eligible for listing in the CRHR if it meets any of the NRHP criteria.[17]

Historical resources eligible for listing in the CRHR must meet the significance criteria described previously and retain enough of their historic character or appearance to be recognizable as historical resources and to convey the reasons for their significance. A resource that has lost its historic character or appearance may still have sufficient integrity for the CRHR if it maintains the potential to yield significant scientific or historical information or specific data.

The concept of integrity is essential to identifying the important physical characteristics of historical resources and, therefore, in evaluating adverse changes to them. Integrity is defined as "the authenticity of a historical resource's physical identity evidenced by the survival of characteristics that existed during the resource's period of significance." The processes of determining integrity are similar for both the CRHR and NRHP and use the same seven variables or aspects to define integrity that are used to evaluate a resource's eligibility for listing. These seven characteristics include 1) location, 2) design, 3) setting, 4) materials, 5) workmanship, 6) feeling, and 7) association.

[17] California Office of Historic Preservation. "CEQA Guidelines Section 15064.5(a)(3) and California Office of Historic Preservation Technical Assistance Series #6." Accessed May 28, 2020. http://www.ohp.parks.ca.gov/pages/1069/files/technical%20assistance%20bulletin%206%202011%20update.pdf.

California Native American Historical, Cultural, and Sacred Sites Act

The California Native American Historical, Cultural, and Sacred Sites Act applies to both state and private lands. The act requires that upon discovery of human remains, construction or excavation activity must cease and the county coroner be notified.

Public Resources Code Sections 5097 and 5097.98

Section 15064.5 of the CEQA Guidelines specifies procedures to be used in the event of an unexpected discovery of Native American human remains on non-federal land. These procedures are outlined in Public Resources Code Sections 5097 and 5097.98. These codes protect such remains from disturbance, vandalism, and inadvertent destruction, establish procedures to be implemented if Native American skeletal remains are discovered during construction of a project, and establish the Native American Heritage Commission (NAHC) as the authority to resolve disputes regarding disposition of such remains.

Pursuant to Public Resources Code Section 5097.98, in the event of human remains discovery, no further disturbance is allowed until the county coroner has made the necessary findings regarding the origin and disposition of the remains. If the remains are of a Native American, the county coroner must notify the NAHC. The NAHC then notifies those persons most likely to be related to the Native American remains. The code section also stipulates the procedures that the descendants may follow for treating or disposing of the remains and associated grave goods.

Local

Sunnyvale General Plan

The General Plan includes policies for the purpose of avoiding or mitigating impacts from planned development in the City. The goal and policies below are specific to cultural resources and are applicable to the proposed project.

Policy LT-1.10: Participate in federal, state, and regional programs and processes in order to protect the natural and human environment in Sunnyvale and the region.

Policy LT-1.10f: Continue to condition projects to halt all ground-disturbing activities when unusual amounts of shell or bone, isolated artifacts, or other similar features are discovered. Retain an archaeologist to determine the significance of the discovery. Mitigation of discovered significant cultural resources shall be consistent with Public Resources Code Section 21083.2 to ensure protection of the resource.

4.5.1.2 *Existing Conditions*

The 2.4-acre project site is urban and is developed with a swimming pool, baseball field, and parking lot. The site is surrounded by one- to two-story developments.

The Geotechnical Investigation and Geologic Hazards Evaluation (Appendix D) performed for the project found that the project site was developed with the first school buildings and playfields by

1960. Additional buildings were constructed on the western site by 1968. By 1980 the pool was established, and by 1991 the school property and park were developed to the extent they are today. The surrounding area was developed with residential housing tracks by 1956 and 1960.

According to the age of the buildings on the project site, they are not historically significant according to the National Register, California Register, and the City of Sunnyvale criteria for historical significance. Additionally, no archaeological sites have been identified on or near the project site. The Cultural Report determined that there is a low potential for either historic-era or Native American archaeological resources.

4.5.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines Section 15064.5?	☐	☐	☒	☐
2) Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5?	☐	☒	☐	☐
3) Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☐	☒	☐

Impact CUL-1: The project would not cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines Section 15064.5. (Less than Significant Impact)

There are no known cultural resources recorded within the project site. The project site is currently developed with a swimming pool, baseball field, and parking lot, and is surrounded by one- to two-story developments. The project site and adjacent properties are not listed on federal, state, or local listings of historical resources. For these reasons, the project would not cause adverse changes to historic resources. **(Less than Significant Impact)**

Impact CUL-2: The project would not cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5. (Less than Significant Impact with Mitigation Incorporated)

According to the Cultural Resources Report, no archaeological site has been recorded near the project area, and additional research showed low potential for Native American or historic-era archaeological resources to be uncovered. Nevertheless, the project shall implement the following mitigation measures in the event that archaeological resources are discovered during project construction activities.

Impact CUL-1: Redevelopment of the project site could impact unknown buried archaeological resources, if present on-site. **(Potentially Significant Impact)**

Mitigation Measures: The project proposes to implement the following mitigation measures to reduce construction related archaeological impacts to a less than significant level:

MM CUL-1.1: In the event that buried, or previously unrecognized archaeological deposits or materials of any kind are inadvertently exposed during any construction activity, work within 50 feet of the find shall cease until a qualified archaeologist can assess the find and provide recommendations for further treatment, if warranted. Construction and potential impacts to the area(s) within a radius determined by the archaeologist shall not recommence until the assessment is complete.

MM CUL-1.2: In the event of the discovery of human remains during construction, there shall be no further excavation or disturbance of the site within a 50-foot radius of the remains or any nearby area reasonably suspected to overlie adjacent remains. The Santa Clara County Coroner shall be notified and shall make a determination as to whether the remains are Native American. If the Coroner determines that the remains are not subject to his authority, the Coroner shall notify the Native American Heritage Commission who shall attempt to identify descendants of the deceased Native American. If no satisfactory agreement can be reached as to the disposition of the remains pursuant to State law, then the land owner shall re-inter the human remains and items associated with Native American burials on the property in a location not subject to further subsurface disturbance.

The project, with implementation of the above mitigation measures, would reduce construction-related impacts to archaeological resources to a less than significant level by determining the presence/absence of resources on-site, ceasing work within 50 feet if a resource is encountered during construction, and following recommendations of a qualified archaeologist regarding the find. **(Less Than Significant Impact with Mitigation Incorporated)**

Impact CUL-3: The project would not disturb any human remains, including those interred outside of dedicated cemeteries. (Less than Significant Impact)

The project site is not located in an archaeologically sensitive area. In the unlikely event that human remains are discovered during construction activities, implementation of MM CUL-1.2 would reduce the project's impact on human remains to a less than significant level. **(Less than Significant Impact)**

4.6 ENERGY

4.6.1 Environmental Setting

4.6.1.1 *Regulatory Framework*

Federal and State

Energy Star and Fuel Efficiency

At the federal level, energy standards set by the EPA apply to numerous consumer products and appliances (e.g., the EnergyStar™ program). The EPA also sets fuel efficiency standards for automobiles and other modes of transportation.

Renewables Portfolio Standard Program

In 2002, California established its Renewables Portfolio Standard Program, with the goal of increasing the percentage of renewable energy in the state's electricity mix to 20 percent of retail sales by 2010. In 2008, Executive Order S-14-08 was signed into law, requiring retail sellers of electricity serve 33 percent of their load with renewable energy by 2020. In October 2015, Governor Brown signed Senate Bill (SB) 350 to codify California's climate and clean energy goals. A key provision of SB 350 requires retail sellers and publicly owned utilities to procure 50 percent of their electricity from renewable sources by 2030. SB 100, passed in 2018, requires 100 percent of electricity in California to be provided by 100 percent renewable and carbon-free sources by 2045.

California Building Standards Code

The Energy Efficiency Standards for Residential and Nonresidential Buildings, as specified in Title 24, Part 6 of the California Code of Regulations (Title 24), was established in 1978 in response to a legislative mandate to reduce California's energy consumption. Title 24 is updated approximately every three years.[18] Compliance with Title 24 is mandatory at the time new building permits are issued by city and county governments.[19]

California Green Building Standards Code

The California Green Building Standards Code (CALGreen) establishes mandatory green building standards for buildings in California. CALGreen was developed to reduce GHG emissions from buildings, promote environmentally responsible and healthier places to live and work, reduce energy and water consumption, and respond to state environmental directives. CALGreen covers five categories: planning and design, energy efficiency, water efficiency and conservation, material and resource efficiency, and indoor environmental quality.

[18] California Building Standards Commission. "California Building Standards Code." Accessed August 11, 2020. https://www.dgs.ca.gov/BSC/Codes#@ViewBag.JumpTo.

[19] California Energy Commission (CEC). "2019 Building Energy Efficiency Standards." Accessed August 11, 2020. https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2019-building-energy-efficiency.

Advanced Clean Cars Program

CARB adopted the Advanced Clean Cars Program in 2012 in coordination with the EPA and National Highway Traffic Safety Administration. The program combines the control of smog-causing pollutants and GHG emissions into a single coordinated set of requirements for vehicle model years 2015 through 2025. The program promotes development of environmentally superior passenger cars and other vehicles, as well as saving the consumer money through fuel savings.[20]

Local

Sunnyvale Green Building Program

The Sunnyvale Green Building Program identifies minimum standards and measures for new construction, additions, and remodels of residential and non-residential buildings. The minimum standard for new non-residential projects of less than 5,000 square feet is CALGreen Mandatory measures. The minimum standard for non-residential projects between 5,000 square feet and 30,000 square feet is CALGreen Mandatory measures and LEED Gold Level.

4.6.1.2 *Existing Conditions*

Total energy usage in California was approximately 7,881 trillion British thermal units (Btu) in the year 2017, the most recent year for which this data was available.[21] Out of the 50 states, California is ranked second in total energy consumption and 48th in energy consumption per capita. The breakdown by sector was approximately 18 percent (1,416 trillion Btu) for residential uses, 19 percent (1,473 trillion Btu) for commercial uses, 23 percent (1,818 trillion Btu) for industrial uses, and 40 percent (3,175 trillion Btu) for transportation.[22] This energy is primarily supplied in the form of natural gas, petroleum, nuclear electric power, and hydroelectric power.

Electricity

Electricity in Santa Clara County in 2018 was consumed primarily by the commercial sector (77 percent), followed by the residential sector consuming 23 percent. In 2018, a total of approximately 16,668 gigawatt hours (GWh) of electricity was consumed in Santa Clara County.[23]

The community-owned Silicon Valley Clean Energy (SVCE) is the electricity provider for the City of Sunnyvale.[24] SVCE sources the electricity and the Pacific Gas and Electric Company (PG&E) delivers it to customers over their existing utility lines. Customers are automatically enrolled in the

[20] California Air Resources Board. "The Advanced Clean Cars Program." Accessed August 11, 2020. https://www.arb.ca.gov/msprog/acc/acc.htm.
[21] United States Energy Information Administration. "State Profile and Energy Estimates, 2017." Accessed August 11, 2020. https://www.eia.gov/state/?sid=CA#tabs-2.
[22] United States Energy Information Administration. "State Profile and Energy Estimates, 2017." Accessed August 11, 2020. https://www.eia.gov/state/?sid=CA#tabs-2.
[23] California Energy Commission. Energy Consumption Data Management System. "Electricity Consumption by County." Accessed August 10, 2020. http://ecdms.energy.ca.gov/elecbycounty.aspx.
[24] Silicon Valley Clean Energy. "Frequently Asked Questions." Accessed August 10, 2020. https://www.svcleanenergy.org/faqs.

GreenStart plan and can upgrade to the GreenPrime plan. Both options are considered 100 percent GHG-emission free.

Natural Gas

PG&E provides natural gas services within the City of Sunnyvale. In 2018, approximately one percent of California's natural gas supply came from in-state production, while the remaining supply was imported from other western states and Canada.[25] In 2018, residential and commercial customers in California used 34 percent of the state's natural gas, power plants used 35 percent, the industrial sector used 21 percent, and other uses used 10 percent. Transportation accounted for one percent of natural gas use in California. In 2018, Santa Clara County used approximately 3.5 percent of the state's total consumption of natural gas.[26]

Fuel for Motor Vehicles

In 2018, 15.5 billion gallons of gasoline were sold in California.[27] The average fuel economy for light-duty vehicles (autos, pickups, vans, and sport utility vehicles) in the United States has steadily increased from about 13.1 miles per gallon (mpg) in the mid-1970s to 24.9 mpg in 2018.[28] Federal fuel economy standards have changed substantially since the Energy Independence and Security Act was passed in 2007. That standard, which originally mandated a national fuel economy standard of 35 miles per gallon by the year 2020, was subsequently revised to apply to cars and light trucks model years 2011 through 2020. [29,30]

4.6.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☒	☐
2) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☒	☐

[25] California Gas and Electric Utilities. 2019 *California Gas Report.* Accessed August 10, 2020. https://www.socalgas.com/regulatory/documents/cgr/2019_CGR_Supplement_7-1-19.pdf.
[26] California Energy Commission. "Natural Gas Consumption by County." Accessed August 10, 2020. http://ecdms.energy.ca.gov/gasbycounty.aspx.
[27] California Department of Tax and Fee Administration. "Net Taxable Gasoline Gallons." Accessed August 10, 2020. https://www.cdtfa.ca.gov/dataportal/dataset.htm?url=VehicleTaxableFuelDist.
[28] United States Environmental Protection Agency. "The 2018 EPA Automotive Trends Report: Greenhouse Gas Emissions, Fuel Economy, and Technology since 1975." March 2019.
[29] United States Department of Energy. *Energy Independence & Security Act of 2007.* Accessed August 10, 2020. http://www.afdc.energy.gov/laws/eisa.
[30] Public Law 110–140—December 19, 2007. *Energy Independence & Security Act of 2007.* Accessed August 10, 2020. http://www.gpo.gov/fdsys/pkg/PLAW-110publ140/pdf/PLAW-110publ140.pdf.

Impact EN-1:	The project would not result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation. (Less than Significant Impact)

Construction

Construction of the project would require energy for site preparation and grading, and construction of the proposed improvements. Construction processes are generally designed to be efficient in order to avoid excess monetary costs. Equipment and fuel are not typically used wastefully on the site because of the added expense associated with renting the equipment, as well as maintenance and fuel. In addition, as discussed in Section 4.3 Air Quality in response to question 3, the project will implement Standard Project Conditions to minimize the idling of construction equipment thus reducing the potential for energy waste. For these reasons, the construction of the project would not use energy in a wasteful manner. **(Less than Significant Impact)**

Operational

As the proposed project is a library, operation of the project would consume energy for multiple purposes including outdoor lighting, and heating, cooling, and lighting for the new building. Energy would also be consumed during each vehicle trip generated by visitors. As discussed in Section 4.17 Transportation, the project would generate an additional daily 1,450 vehicle trips. The library would use LED lighting and solar panels, which would minimize electricity use. The project proposes a library on a site that is adequately served by pedestrian and bicycle facilities because of the adjacent park. For these reasons, operation of the project would not use energy in a wasteful manner. **(Less than Significant Impact)**

Impact EN-2:	The project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. (Less than Significant Impact)

The project would be consistent with General Plan policies and would comply with the Sunnyvale Green Building Standards Code, as well as the California Building Energy Efficiency Standards Code. Therefore, the project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. **(Less than Significant Impact)**

4.7 GEOLOGY AND SOILS

The following discussion is based in part on a Geotechnical Investigation and Geologic Hazards Evaluation completed by Cornerstone Earth Group, Inc. This technical report is attached as Appendix D.

4.7.1 Environmental Setting

4.7.1.1 *Regulatory Framework*

State

Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act was passed following the 1971 San Fernando earthquake. The act regulates development in California near known active faults due to hazards associated with surface fault ruptures. Alquist-Priolo maps are distributed to affected cities, counties, and state agencies for their use in planning and controlling new construction. Areas within an Alquist-Priolo Earthquake Fault Zone require special studies to evaluate the potential for surface rupture to ensure that no structures intended for human occupancy are constructed across an active fault.

Seismic Hazards Mapping Act

The Seismic Hazards Mapping Act (SHMA) was passed in 1990 following the 1989 Loma Prieta earthquake. The SHMA directs the California Geological Survey (CGS) to identify and map areas prone to liquefaction, earthquake-induced landslides, and amplified ground shaking. CGS has completed seismic hazard mapping for the portions of California most susceptible to liquefaction, landslides, and ground shaking, including the central San Francisco Bay Area. The SHMA requires that agencies only approve projects in seismic hazard zones following site-specific geotechnical investigations to determine if the seismic hazard is present and identify measures to reduce earthquake-related hazards.

California Building Standards Code

The CBC prescribes standards for constructing safe buildings. The CBC contains provisions for earthquake safety based on factors including occupancy type, soil and rock profile, ground strength, and distance to seismic sources. The CBC requires that a site-specific geotechnical investigation report be prepared for most development projects to evaluate seismic and geologic conditions such as surface fault ruptures, ground shaking, liquefaction, differential settlement, lateral spreading, expansive soils, and slope stability. The CBC is updated every three years.

California Division of Occupational Safety and Health Regulations

Excavation, shoring, and trenching activities during construction are subject to occupational safety standards for stabilization by the California Department of Industrial Relations, Division of Occupational Safety and Health (Cal/OSHA) under Title 8 of the California Code of Regulations and Excavation Rules. These regulations minimize the potential for instability and collapse that could injure construction workers on the site.

Public Resources Code Section 5097.5

Paleontological resources are the fossilized remains of organisms from prehistoric environments found in geologic strata. They range from mammoth and dinosaur bones to impressions of ancient animals and plants, trace remains, and microfossils. These are valued for the information they yield about the history of the earth and its past ecological settings. California Public Resources Code Section 5097.5 specifies that unauthorized removal of a paleontological resource is a misdemeanor. Under the CEQA Guidelines, a project would have a significant impact on paleontological resources if it would disturb or destroy a unique paleontological resource or site or unique geologic feature.

Local

Sunnyvale General Plan

The General Plan includes policies for the purpose of avoiding or mitigating impacts from planned development in the City. The goal and policies below are specific to geology and are applicable to the proposed project.

Goal SN-1: *Acceptable level of risk for natural and human-caused hazards – ensure that natural and human-caused hazards are recognized and considered in decisions affecting the community, and that land uses reflect acceptable levels of risk based on identified hazards and occupancy.*

Policy SN-1.4: Monitor and plan for hydraulic changes due to global warming, earthquakes, and/or subsidence.

Policy EM-8.5: Prevent accelerated soil erosion. Continue implementation of a construction site inspection and control program to prevent discharges of sediment from erosion and discharges of other pollutants from new and redevelopment projects.

4.7.1.2 *Existing Conditions*

Regional Geology

The project site is located in the Santa Clara Valley, an alluvial basin, bounded by the Santa Cruz Mountains to the west, the Hamilton/Diablo Range to the east, and the San Francisco Bay to the north. The Santa Clara Valley was formed when sediments derived from the Santa Cruz Mountains and the Hamilton/Diablo Range were exposed by the continued tectonic uplift and regression of the inland sea that had previously inundated the area. Sediments of the Santa Clara Valley are composed of water-bearing Plio-Pleistocene and Upper Quaternary sediments, which are underlain by older non-water bearing rocks. The Upper Quaternary sediments consist of up to 1,000 feet of poorly sorted gravel, sand and clay, which were deposited in alluvial fan (triangular-shaped deposits of water-transported material) and deltaic (delta) depositional environments.

Site Geology

Soils

The project site is relatively flat with slopes of zero to two percent. The project site is underlain by soils of the Hangerone complex, composed primarily of clay and clay loam.[31] Hangerone soils are poorly drained and have a high shrink-swell potential (i.e., expansive behavior).

Seismicity and Seismic-Related Hazards

The project site is located within the seismically active San Francisco Bay Area region. There is a 72 percent probability that one or more major earthquakes (6.7 in magnitude or greater) will occur in the region by 2044.[32] Although the site is within a seismically active region, it is not located within a designated Alquist-Priolo Earthquake Fault Zone[33] and no known active or potentially active faults exist on the site. Since no known active faults cross the site, fault rupture is not a significant geologic hazard on the site.

Significant active faults (which have a capability generating an earthquake with a magnitude of 6.7 or greater)[34] within the region include the Hayward Fault, Calaveras Fault, and San Andreas Fault. Due to the proximity of the project site to these active or potentially active faults, ground shaking, ground failure, and/or liquefaction as a result of an earthquake could cause damage to structures on the site. The distance between the project site and nearby faults is shown in Table 4.7-1 below.

Table 4.7-1: Nearby Faults

Fault	Distance from Site
Sargent-Berrocal	6.3 miles
Monte Vista – Shannon	8 miles
Hayward	7.2 miles
San Andreas	9.9 miles
Calaveras	10.8 miles

Liquefaction

Liquefaction is a result of seismic activity and is characterized as the transformation of loose, water-saturated soils from a solid state to a liquid state after ground shaking. There are many variables that contribute to liquefaction, including the age of the soil, soil type, soil cohesion, soil density, and groundwater level. Soil susceptible to liquefaction includes loose to medium dense sand and gravel,

[31] USDA. *Custom Soil Resource Report for Santa Clara Area, California, Western Part*. <https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>. Accessed August 14, 2020.
[32] US Geological Survey. *UCERF3: A New Earthquake Forecast for California's Complex Fault System*. Fact Sheet 2015–3009. March 2015. Available at: <http://pubs.usgs.gov/fs/2015/3009/pdf/fs2015-3009.pdf>. Accessed August 13, 2020.
[33] California Geological Survey. Regional Geologic Hazards and Mapping Program. *Alquist-Priolo*. Available at: <https://www.conservation.ca.gov/cgs/alquist-priolo>. Accessed August 13, 2020.
[34] Ibid.

low-plasticity silt, and some low-plasticity clay deposits. Liquefaction can result in ground surface deformations and settlement.

The project site is located within a State of California Hazard Zone for moderate liquefaction[35] and also within a County of Santa Clara Liquefaction Hazard Zone[36].

Lateral Spreading

Lateral spreading is a type of ground failure related to liquefaction. It consists of the horizontal displacement of flat-lying alluvial material toward an open area, such as the steep bank of a stream channel. The project site is relatively flat and is not adjacent to a creek or any other unsupported face. For these reasons, the potential for lateral spreading is low.

Paleontological Resources

Paleontological resources are fossils; the remains or traces of prehistoric life preserved in the geological record. They range from well-known and well publicized fossils (such as mammoth and dinosaur bones) to scientifically important fossils (such as paleobotanical remains, trace fossils, and microfossils). Potentially sensitive areas with fossil bearing sediments near the ground surface in areas of Santa Clara County are generally in or adjacent to foothill areas rather than the younger Holocene age deposits on the valley floor. Geologic units of the Holocene age are generally not considered sensitive for paleontological resources, because biological remains younger than 10,000 years are not usually considered fossils.

4.7.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
– Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault (refer to Division of Mines and Geology Special Publication 42)?	☐	☐	☒	☐
– Strong seismic ground shaking?	☐	☐	☒	☐
– Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
– Landslides?	☐	☐	☒	☐

[35] Association of Bay Area Governments. Resilience Program. *Liquefaction: Official California Seismic Hazards Zone Map*. Available at: <http://resilience.abag.ca.gov/earthquakes/>. Accessed August 14, 2020.
[36] County of Santa Clara. *County Geologic Hazard Zones*. Map 11. February 2002.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
2) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
3) 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?	☐	☐	☒	☐
4) Be located on expansive soil, as defined in the current California Building Code, creating substantial direct or indirect risks to life or property?	☐	☐	☒	☐
5) 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?	☐	☐	☐	☒
6) Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?	☐	☐	☒	☐

Impact GEO-1: The project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault; strong seismic ground shaking; seismic-related ground failure, including liquefaction; or landslides. (Less than Significant Impact)

The project site is not located in an Alquist-Priolo Earthquake Fault Zone and no active faults are known to cross the site. The project site, however, is located within the seismically active Bay Area and strong ground shaking would be expected during the lifetime of the proposed project. Strong ground shaking during an earthquake can result in ground failure such as that associated with soil liquefaction, damage to the proposed library building, and expose people to injury. As required by the California Building Code (CBC), a design-level geotechnical investigation will be completed for the project site.

The project shall comply with all CBC requirements and shall implement the recommendations identified in the design-level geotechnical investigation, which include design and construction recommendations to avoid and reduce seismic and seismic-related hazards (including liquefaction). The project site is located in a generally flat area and, therefore, the project site is not subject to landslides. The existing seismic conditions would not be exacerbated by the project. For all these reasons, the project would have a less than significant impact. **(Less than Significant Impact)**

Impact GEO-2: The project would not result in substantial soil erosion or the loss of topsoil. (Less than Significant Impact)

Project construction activities would temporarily disturb soils and could result in soil erosion and loss of topsoil during high wind and rainfall events. As discussed further in Section 4.10 Hydrology and Water Quality, the project is required to comply with the National Pollutant Discharge Elimination System (NPDES) permit, which requires the implementation of a Stormwater Pollution Prevention Plan (SWPPP) to control the discharge of storm water pollutants including sediments associated with construction activities. The SWPPP would include control measures including soil stabilization practices, sediment control practices, sediment tracking control practices, and wind erosion control practices.

Standard Permit Conditions:

In compliance with the City of Sunnyvale's Municipal Code, the following Best Management Practices (BMPs) would be implemented as standard permit conditions:

- Appropriate BMPs will be implemented to prevent pollutant sources from entering the City's storm drain collection system that are associated with outdoor process and manufacturing areas, outdoor material storage areas, outdoor waste storage and disposal areas, outdoor vehicle and equipment storage and maintenance areas, outdoor parking and access roads, outdoor wash areas, outdoor drainage from indoor areas, rooftop equipment, contaminated and erodible surfaces, or other sources determined by the director to have a reasonable potential to contribute to pollution of stormwater runoff.
- Inspection, Maintenance, Repair and Upgrading of Best Management Practices. Best management practices at staffed and unstaffed facilities must be inspected and maintained by the discharger according to manufacturer specifications and/or the CASQA Stormwater BMP Handbooks. These best management practices must be maintained so that they continue to function as designed. Best management practices which fail must be repaired as soon as it is safe to do so. If the failure of a best management practice indicates that the best management practices in use are inappropriate or inadequate to the circumstances, the practices must be modified or upgraded to prevent any further failure in the same or similar circumstances.
- Construction Site Stormwater Pollution Controls. All construction sites will implement effective erosion control, run-on and runoff control, sediment control, active treatment systems (as appropriate), good site management, and non-stormwater management through all phases of construction (including, but not limited to, site grading, building and finishing of lots) until the site is fully stabilized by landscaping or the installation of permanent erosion control measures.
- All applicable sites are encouraged to include adequate source control measures to limit pollutant generation, discharge, and runoff.

In addition, the project shall comply with the Municipal Regional Stormwater Permit (MRP) NPDES permit to adequately treat post-construction runoff. The project, therefore, would not result in substantial soil erosion or loss of topsoil. **(Less Than Significant Impact)**

Impact GEO-3:	**The project would not be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse. (Less than Significant Impact)**

The project site is located in an area of high expansion potential and very strong ground shaking during an earthquake. As discussed in response to Impact GEO-1, the proposed project would be constructed in compliance with the CBC requirements to address soil instability. Therefore, development of the project site would not change or exacerbate the geologic conditions of the project area and would not result in a significant geologic hazards impact. **(Less than Significant Impact)**

Impact GEO-4:	**The project would not be located on expansive soil, as defined in the current California Building Code, creating substantial direct or indirect risks to life or property. (Less than Significant Impact)**

The project site consists of highly expansive surficial soils, located beneath fills and pavement. The proposed pool demolition and library construction project would be constructed based on applicable standard practices in the CBC, as adopted by the City of Sunnyvale. Compliance with these standards would reduce expansive soil impacts to a less than significant level. **(Less than Significant Impact)**

Impact GEO-5:	**The project would not 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. (No Impact)**

The project site is located within an urbanized area of Sunnyvale where sewers are available to dispose of wastewater from the project site. Therefore, the site would not need to support septic tanks or alternative wastewater disposal systems. **(No Impact)**

Impact GEO-6:	**The project would not directly or indirectly destroy a unique paleontological resource or site or unique geological feature. (Less than Significant Impact)**

The proposed project would excavate to a maximum depth of approximately three feet, six inches below ground surface. Given that the proposed project would not require excavation below four feet below ground surface and would not contact bedrock, paleontological resources would not be discovered during construction. The project, therefore, would not result in a significant impact to paleontological resources. **(Less than Significant Impact)**

4.8 GREENHOUSE GAS EMISSIONS

The discussion below is based in part on an Air Quality and Greenhouse Gas Emissions report prepared by Illingworth & Rodkin on September 8, 2020. The report is attached as Appendix A.

4.8.1 Environmental Setting

4.8.1.1 *Background Information*

Gases that trap heat in the atmosphere, GHGs, regulate the earth's temperature. This phenomenon, known as the greenhouse effect, is responsible for maintaining a habitable climate. In GHG emission inventories, the weight of each gas is multiplied by its global warming potential (GWP) and is measured in units of CO_2 equivalents (CO_2e). The most common GHGs are carbon dioxide (CO_2) and water vapor but there are also several others, most importantly methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6). These are released into the earth's atmosphere through a variety of natural processes and human activities. Sources of GHGs are generally as follows:

- CO_2 and N_2O are byproducts of fossil fuel combustion.
- N_2O is associated with agricultural operations such as fertilization of crops.
- CH_4 is commonly created by off-gassing from agricultural practices (e.g., keeping livestock) and landfill operations.
- Chlorofluorocarbons (CFCs) were widely used as refrigerants, propellants, and cleaning solvents, but their production has been stopped by international treaty.
- HFCs are now used as a substitute for CFCs in refrigeration and cooling.
- PFCs and SF_6 emissions are commonly created by industries such as aluminum production and semiconductor manufacturing.

An expanding body of scientific research supports the theory that global climate change is currently causing changes in weather patterns, average sea level, ocean acidification, chemical reaction rates, and precipitation rates, and that it will increasingly do so in the future. The climate and several naturally occurring resources within California are adversely affected by the global warming trend. Increased precipitation and sea level rise will increase coastal flooding, saltwater intrusion, and degradation of wetlands. Mass migration and/or loss of plant and animal species could also occur. Potential effects of global climate change that could adversely affect human health include more extreme heat waves and heat-related stress; an increase in climate-sensitive diseases; more frequent and intense natural disasters such as flooding, hurricanes, and drought; and increased levels of air pollution.

4.8.1.2 *Regulatory Framework*

State

Assembly Bill 32

Under the California Global Warming Solutions Act, also known as Assembly Bill (AB) 32, CARB established a statewide GHG emissions cap for 2020, adopted mandatory reporting rules for significant sources of GHGs, and adopted a comprehensive plan, known as the Climate Change Scoping Plan, identifying how emission reductions would be achieved from significant GHG sources.

In 2016, SB 32 was signed into law, amending the California Global Warming Solution Act. SB 32, and accompanying Executive Order B-30-15, require CARB to ensure that statewide GHG emissions are reduced to 40 percent below the 1990 level by 2030. CARB updated its Climate Change Scoping Plan in December of 2017 to express the 2030 statewide target in terms of million metric tons of CO_2E ($MMTCO_2e$). Based on the emissions reductions directed by SB 32, the annual 2030 statewide target emissions level for California is 260 $MMTCO_2e$.

Senate Bill 375

SB 375, known as the Sustainable Communities Strategy and Climate Protection Act, was signed into law in September 2008. SB 375 builds upon AB 32 by requiring CARB to develop regional GHG reduction targets for automobile and light truck sectors for 2020 and 2035. The per-capita GHG emissions reduction targets for passenger vehicles in the San Francisco Bay Area include a seven percent reduction by 2020 and a 15 percent reduction by 2035.

Consistent with the requirements of SB 375, the Metropolitan Transportation Commission (MTC) partnered with the Association of Bay Area Governments (ABAG), BAAQMD, and the Bay Conservation and Development Commission to prepare the region's Sustainable Communities Strategy (SCS) as part of the Regional Transportation Plan process. The SCS is referred to as Plan Bay Area 2040. Plan Bay Area 2040 establishes a course for reducing per capita GHG emissions through the promotion of compact, high density, mixed-use neighborhoods near transit, particularly within identified Priority Development Areas (PDAs).

Regional and Local

2017 Clean Air Plan

To protect the climate, the 2017 CAP (prepared by BAAQMD) includes control measures designed to reduce emissions of methane and other super-GHGs that are potent climate pollutants in the near-term, and to decrease emissions of carbon dioxide by reducing fossil fuel combustion.

CEQA Air Quality Guidelines

The BAAQMD CEQA Air Quality Guidelines are intended to serve as a guide for those who prepare or evaluate air quality impact analyses for projects and plans in the San Francisco Bay Area. The jurisdictions in the San Francisco Bay Area Air Basin utilize the thresholds and methodology for assessing GHG impacts developed by BAAQMD within the CEQA Air Quality Guidelines. The

guidelines include information on legal requirements, BAAQMD rules, methods of analyzing impacts, and recommended mitigation measures.

Sunnyvale General Plan

The General Plan includes policies for the purpose of avoiding or mitigating impacts from planned development in the City. The goal and policies below are specific to GHGs and are applicable to the proposed project.

Goal LT-2: *Environmentally sustainable land use and transportation planning and development.*

Policy LT-2.1: Enhance the public's health and welfare by promoting the city's environmental and economic health through sustainable practices for the design, construction, maintenance, operation, and deconstruction of buildings, including measures in the Climate Action Plan.

Policy LT-2.2: Reduce greenhouse gas emissions that affect climate and the environment through land use and transportation planning and development.

Sunnyvale Climate Action Playbook

Adopted in 2014, the City of Sunnyvale's first Climate Action Plan (CAP 1.0) streamlined the environmental review of development projects in Sunnyvale by following the guidelines set forth by CEQA and BAAQMD. CAP 1.0 identified how the City would achieve the state-recommended GHG emission reduction target of 15% below 2008 levels by the year 2020. The City exceeded the state's 2020 GHG emissions reduction target.

To drive progress towards the emissions reduction targets by 2030 and 2050, the City adopted the Climate Action Playbook in 2019. The Climate Action Playbook sets an overarching goal for the City of Sunnyvale to achieve a reduction of 56% below 1990 level emissions by 2030, surpassing the State's goal of 40% reduction by 2030.

The Climate Action Playbook established the following six strategies, targeted towards reducing fossil fuel consumption and GHGs, with goals for 2030 and 2050:

- Strategy 1: Promoting Clean Electricity
- Strategy 2: Decarbonizing Buildings
- Strategy 3: Decarbonizing Transportation and Sustainable Land Use
- Strategy 4: Managing Resources Sustainably
- Strategy 5: Empowering the Community
- Strategy 6: Adapting to a Changing Climate

Furthermore, The Climate Action Playbook identified specific actions to be executed by 2022. These actions are not intended to achieve the 2030 targets; however, they would help catapult progress towards those targets. The following 2022 actions are applicable to the proposed project:

Action 1.B Collaborate with SVCE to target direct access customers to shift to 100% clean electricity.

Action 1.C Research a mandatory solar roof ordinance for new commercial developments. A local ordinance requiring solar installations on new commercial buildings leverages and complements the anticipated 2019 California Building Standards Code requirement of mandatory solar installations for all new residential buildings starting in 2020. Local solar installations would also help to comply with the anticipated requirement for all new non-residential buildings to be Zero Net Energy by 2030.

Action 2.C Develop a program to accelerate the adoption of heat pump water heaters and space heaters.

Action 2.G Continue to incentivize energy efficient and high performance buildings through the Green Building Program updates.

Action 3.C Enhance City Transportation Demand Management (TDM) program implementation and monitoring to facilitate further reductions in single-occupant automobile trips, citywide.

Action 4.B Consider solid waste collection and processing improvements to increase waste diversion away from landfills as a part of service provider and facility transition planning. In addition to Sunnyvale residents and businesses reducing their waste, there may be opportunities to increase waste diversion away from landfills by modifying waste collection and processing practices. Additionally, as processing facilities are slated for renovation or replacement, more efficient technology or practices may be employed to improve waste diversion.

Action 4.F Implement the City's Urban Forest Management Plan (UFMP) and continue to protect and greatly expand tree canopy.

The Playbook is not a qualified GHG reduction strategy pursuant to the BAAQMD CEQA Guidelines and CEQA Guidelines Section 15183.5(b). The City is in the process of developing the next five-year work plan for implementing the Playbook. No updates to the Plays are anticipated.

Sunnyvale Reach Code

The California Energy Commission approved the City's Reach Code Ordinance, which went in effect on January 26, 2021. The Reach Code is a local energy code for buildings design and construction that go beyond the minimum state requirements. The purpose of the Reach Code is to help reduce GHG emissions by promoting electric versus natural gas energy use and encouraging electric vehicle charging infrastructure. The Reach Code Ordinance applies to new residential and nonresidential construction, and includes the following requirements:

- Gas appliances including cooking range, water heater, space heater, fireplace, etc. are not permitted (with the exception of certain non-residential uses such factories, hazardous

materials manufacturing, and laboratory facilities, as well as emergency operation centers, and commercial dryers in large hotels);
- Solar panels are required for all new buildings; and
- Electric vehicle charging stations (or conduit and preliminary wiring for them) are required for all new building parking lots.

The Reach Codes were re-adopted as part of the 2023 Building Codes update on November 1, 2022.

Sunnyvale Construction and Demolition Waste Diversion

The City requires remodel or demolition projects where 50 percent or more of the exterior wall will be removed to recycle or reuse at least 65 percent of the project's nonhazardous waste.[37] Recycling of nonhazardous waste reduces the energy use to produce new materials from raw, non-renewable resources.

4.8.1.3 *Existing Conditions*

Unlike emissions of criteria and toxic air pollutants, which have regional and local impacts, emissions of GHGs have a broader, global impact. Global warming is a process whereby GHGs accumulating in the upper atmosphere contribute to an increase in the temperature of the earth and changes in weather patterns.

4.8.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Generate greenhouse gas (GHG) emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
2) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs?	☐	☐	☒	☐

Impact GHG-1: The project would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment. **(Less than Significant Impact)**

GHG emissions associated with development of the project would occur over the short-term from construction activities, consisting primarily of emissions from equipment exhaust and worker and vendor trips. There would also be long-term operational emissions associated with vehicular traffic to and from the project site, energy and water usage, and solid waste disposal. However, as previously

[37] City of Sunnyvale. "Construction Waste." Accessed December 9, 2022. https://www.sunnyvale.ca.gov/business-and-development/planning-and-building/construction-waste.

discussed in Section 4.3 Air Quality, emissions for the project are discussed below and were analyzed using the methodology recommended in the BAAQMD CEQA Air Quality Guidelines.

Construction Emissions

GHG emissions would occur during grading of the site and construction of the project. Construction of the project would involve emissions associated with equipment, vehicles, and manufacturing materials used to construct the project. Waste generated from demolition and construction would be salvaged and recycled to the extent practical to reduce waste going to the landfill. The project site is an infill site located in an urbanized location within close distance to construction supplies and equipment. These project features would help to minimize GHG emissions generated by transport of construction materials and waste associated with the project.

Neither the City of Sunnyvale nor BAAQMD have quantified thresholds for construction activities. Given that the project is in an urban setting close to construction supplies and equipment, discarded materials would be salvaged or recycled, and the project would implement the best management practices outlined in Section 4.3 Air Quality, construction of the project would not contribute substantially to local or regional GHG emissions. **(Less than Significant Impact)**

Operational Emissions

The project is the development of a library and learning center. The project site is accessible via sidewalks throughout the project area and from internal pathways in Lakewood Park. The CalEEMod model, along with the project vehicle trip generation rates, was used to estimate daily emissions associated with operation of the fully developed site under the proposed project.

In the event the library would not be implemented, the air quality/GHG analysis that the City would fix and rebuild the pool to make it operational in the future (refer to Appendix A for a description of methods and assumptions).[38] The rebuilding of the pool would be exempt from CEQA analysis, under Article 19 Categorical Exemptions, Section 15301: Existing Facilities and/or Section 15302: Replacement or Reconstruction. Therefore, baseline existing uses were calculated based on the assumption that if the City does not implement the library project, the City would choose to fix and operate the pool in 2024. Table 4.8-1 below shows the project's estimated annual GHG emissions.

[38] This is a conservative assumption. The pool is non-operational and has been decommissioned.

Table 4.8-1: Annual Project GHG Emissions (CO_2e) in Metric Tons		
Source Category	**Existing Use (MT CO_2e/yr)**	**Proposed Project in 2030 (MT CO_2e/yr)**
Area	0	0
Energy Consumption	0	31
Mobile	200	669
Solid Waste Generation	38	9
Water Usage	1	1
Metric Ton Total	**239**	**710**
Net Emissions Increase (MT CO_2e/yr)	**471**	
Bright-Line Significance Threshold	*660 MT of CO_2e*	

To be considered a significant impact, a project must exceed both the GHG brightline significance threshold and the service population significance threshold. As shown in Table 4.8-1 above, the proposed library project would not exceed the 660 MT CO2e/year bright-line threshold in 2030. Therefore, the project's generated GHG emissions would be considered less than significant. **(Less Than Significant Impact)**

Impact GHG-2: The project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs. (Less than Significant Impact)

The proposed project would not conflict or otherwise interfere with the statewide GHG reduction measures identified in CARB's Scoping Plan. The project would be constructed in conformance with CALGreen and the Title 24 Building Code, which requires high-efficiency water fixtures and water-efficient irrigation systems. Furthermore, the project would comply with the City's General Plan policies and Climate Action Playbook actions that are targeted towards reducing GHG emissions. In addition, the project would comply with the City's Reach Code by including solar panels and electric vehicle charging stations. Therefore, impacts would be less than significant. **(Less than Significant Impact)**

4.9 HAZARDS AND HAZARDOUS MATERIALS

The following discussion is based in part on a Geotechnical Investigation and Geologic Hazards Evaluation completed by Cornerstone Earth Group, Inc. This technical report is attached as Appendix D.

4.9.1 Environmental Setting

4.9.1.1 *Regulatory Framework*

Overview

The storage, use, generation, transport, and disposal of hazardous materials and waste are highly regulated under federal and state laws. In California, the EPA has granted most enforcement authority over federal hazardous materials regulations to the California Environmental Protection Agency (CalEPA). In turn, local agencies have been granted responsibility for implementation and enforcement of many hazardous materials regulations under the Certified Unified Program Agency (CUPA) program.

Worker health and safety and public safety are key issues when dealing with hazardous materials. Proper handling and disposal of hazardous material is vital if it is disturbed during project construction. Cal/OSHA enforces state worker health and safety regulations related to construction activities. Regulations include exposure limits, requirements for protective clothing, and training requirements to prevent exposure to hazardous materials. Cal/OSHA also enforces occupational health and safety regulations specific to lead and asbestos investigations and abatement.

Federal and State

Federal Aviation Regulations Part 77

Federal Aviation Regulations, Part 77 Objects Affecting Navigable Airspace (FAR Part 77) sets forth standards and review requirements for protecting the airspace for safe aircraft operation, particularly by restricting the height of potential structures and minimizing other potential hazards (such as reflective surfaces, flashing lights, and electronic interference) to aircraft in flight. These regulations require that the Federal Aviation Administration (FAA) be notified of certain proposed construction projects located within an extended zone defined by an imaginary slope radiating outward for several miles from an airport's runways, or which would otherwise stand at least 200 feet in height above the ground.

Comprehensive Environmental Response, Compensation, and Liability Act

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), commonly known as Superfund, was enacted by Congress on December 11, 1980. This law created a tax on the chemical and petroleum industries and provided broad federal authority to respond directly to releases or threatened releases of hazardous substances that may endanger public health or the environment. Over five years, $1.6 billion was collected and the tax went to a trust fund for cleaning up abandoned or uncontrolled hazardous waste sites. CERCLA accomplished the following objectives:

- Established prohibitions and requirements concerning closed and abandoned hazardous waste sites;
- Provided for liability of persons responsible for releases of hazardous waste at these sites; and
- Established a trust fund to provide for cleanup when no responsible party could be identified.

The law authorizes two kinds of response actions:

- Short-term removals, where actions may be taken to address releases or threatened releases requiring prompt response;
- Long-term remedial response actions that permanently and significantly reduce the dangers associated with releases or threats of releases of hazardous substances that are serious, but not immediately life-threatening. These actions can be completed only at sites listed on EPA's National Priorities List.

CERCLA also enabled the revision of the National Contingency Plan (NCP). The NCP provided the guidelines and procedures needed to respond to releases and threatened releases of hazardous substances, pollutants, or contaminants. The NCP also established the National Priorities List. CERCLA was amended by the Superfund Amendments and Reauthorization Act on October 17, 1986.[39]

Resource Conservation and Recovery Act

The Resource Conservation and Recovery Act (RCRA), enacted in 1976, is the principal federal law in the United States governing the disposal of solid waste and hazardous waste. RCRA gives EPA the authority to control hazardous waste from the "cradle to the grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also sets forth a framework for the management of non-hazardous solid wastes.

The Federal Hazardous and Solid Waste Amendments (HSWA) are the 1984 amendments to RCRA that focused on waste minimization, phasing out land disposal of hazardous waste, and corrective action for releases. Some of the other mandates of this law include increased enforcement authority for the EPA, more stringent hazardous waste management standards, and a comprehensive underground storage tank program.[40]

Government Code Section 65962.5

Section 65962.5 of the Government Code requires CalEPA to develop and update a list of hazardous waste and substances sites, known as the Cortese List. The Cortese List is used by state and local agencies and developers to comply with CEQA requirements. The Cortese List includes hazardous

[39] United States Environmental Protection Agency. "Superfund: CERCLA Overview." Accessed May 11, 2020. https://www.epa.gov/superfund/superfund-cercla-overview.
[40] United States Environmental Protection Agency. "Summary of the Resource Conservation and Recovery Act." Accessed May 11, 2020. https://www.epa.gov/laws-regulations/summary-resource-conservation-and-recovery-act.

substance release sites identified by the Department of Toxic Substances Control (DTSC) and State Water Resources Control Board (SWRCB).[41]

Toxic Substances Control Act

The Toxic Substances Control Act (TSCA) of 1976 provides EPA with authority to require reporting, record-keeping and testing requirements, and restrictions relating to chemical substances and/or mixtures. Certain substances are generally excluded from TSCA, including, among others, food, drugs, cosmetics and pesticides. The TSCA addresses the production, importation, use, and disposal of specific chemicals including polychlorinated biphenyls (PCBs), asbestos, radon and lead-based paint.

Asbestos-Containing Materials

Friable asbestos is any asbestos-containing material (ACM) that, when dry, can easily be crumbled or pulverized to a powder by hand, allowing the asbestos particles to become airborne. Common examples of products that have been found to contain friable asbestos include acoustical ceilings, plaster, wallboard, and thermal insulation for water heaters and pipes. Common examples of non-friable ACMs are asphalt roofing shingles, vinyl floor tiles, and transite siding made with cement. The EPA phased out use of friable asbestos products between 1973 and 1978. National Emission Standards for Hazardous Air Pollutants (NESHAP) guidelines require that potentially friable ACMs be removed prior to building demolition or remodeling that may disturb the ACMs.

California Code of Regulations Title 8, Section 1532.1

The United States Consumer Product Safety Commission banned the use of lead-based paint in 1978. Removal of older structures with lead-based paint is subject to requirements outlined by Cal/OSHA Lead in Construction Standard, California Code of Regulations Title 8, Section 1532.1 during demolition activities. Requirements include employee training, employee air monitoring, and dust control. If lead-based paint is peeling, flaking, or blistered, it is required to be removed prior to demolition.

Regional and Local

Sunnyvale General Plan

The General Plan includes policies for the purpose of avoiding or mitigating impacts from planned development in the City. The goal and policies below are specific to hazards and hazardous materials and are applicable to the proposed project.

Goal SN-1: *Acceptable level of risk for natural and human-caused hazards – ensure that natural and human-caused hazards are recognized and considered in decisions affecting the community, and that land uses reflect acceptable levels of risk based on identified hazards and occupancy.*

[41] California Environmental Protection Agency. "Cortese List Data Resources." Accessed August 7, 2020. https://calepa.ca.gov/sitecleanup/corteselist/.

Policy SN-1.5: Promote a living and working environment safe from exposure to hazardous materials.

4.9.1.2 *Existing Conditions*

The 2.4-acre project site is urban and is developed with a swimming pool, baseball field, and parking lot. The site is surrounded by one- to two-story developments.

The Geotechnical Investigation and Geologic Hazards Evaluation found that the project site was developed with the first school buildings and playfields by 1960. Additional buildings were constructed on the western site by 1968. By 1980 the pool was established, and by 1991 the school property and park were developed to the extent they are today. Between 1956 and 1960, the surrounding area was developed with residential housing tracks.

Database Search

A review of federal, state, and local regulatory agency databases was completed to evaluate the likelihood of contamination incidents at and near the project site. The project site is not identified on any of the regulatory databases and is not on the Cortese list.[42]

4.9.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
2) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
3) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☒	☐
4) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒

[42] California Environmental Protection Agency. *Cortese List Data Resources.* Accessed August 7, 2020. https://calepa.ca.gov/sitecleanup/corteselist/

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
5) 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, result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☐	☒
6) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
7) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	☐	☐	☐	☒

Impact HAZ-1: The project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. (Less than Significant Impact)

The project does not propose any on-site use of hazardous materials other than small quantities of cleaning products, and herbicides and pesticides for landscaping maintenance. The use, storage, transportation, and disposal of maintenance chemicals would be managed in accordance with existing laws and regulations that ensure herbicide and pesticide storage, transportation, and disposal would result in a less than significant impact. No other routine use, storage, transportation, or disposal of hazardous materials is anticipated as part of the project. **(Less than Significant Impact)**

Impact HAZ-2: The project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. (Less than Significant Impact)

The most common type of naturally-occurring asbestos is chrysotile, which is commonly found in serpentinite rock formations. When disturbed by construction, grading, quarrying, or surface mining operations, asbestos-containing dust can be generated. The subject site is not underlain by ultramafic rocks nor is it located immediately adjacent to any known deposits of ultramafic rocks.

The pool and its associated buildings were constructed in 1980, two years after the National Emission Standards for Hazardous Air Pollutants (NESHAP) banned the use of asbestos and lead. Given the age of the buildings, the presence of asbestos-containing materials (ACMs) and lead-based paint are unlikely. Therefore, the project would not create a significant hazard to the public or to the environment, and impacts would be less than significant. **(Less than Significant)**

Impact HAZ-3:	**The project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. (Less than Significant Impact)**

Lakewood Elementary School is adjacent to the project site. However, the project does not propose the use of substantial hazardous materials on-site as discussed under Impact HAZ-1, and the project site does not have any known contamination on-site as discussed under Impact HAZ-3. For these reasons, the project would not emit hazardous emissions or handle hazardous materials that would impact the nearby school. **(Less than Significant Impact)**

Impact HAZ-4:	**The project would not 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, create a significant hazard to the public or the environment. (No Impact)**

The project site is not listed on a hazardous materials database or on the Cortese List. Therefore, the project would not create a significant hazard to the public or to the environment. **(No Impact)**

Impact HAZ-5:	**The project would not be 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. The project would not result in a safety hazard or excessive noise for people residing or working in the project area. (No Impact)**

The project site is not located near any public airport or private air strip. The nearest airport is the Moffett Federal Airfield, approximately four miles northeast of the project site. Therefore, implementation of the proposed project would not result in safety hazard impacts due to airport activities. **(No Impact)**

Impact HAZ-6:	**The project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. (No Impact)**

The project proposes improvements that would not alter the existing emergency access to the project site and/or the existing roadway system surrounding the site. Therefore, the project would not interfere with an emergency response plan or emergency evacuation plan. **(No Impact)**

Impact HAZ-7:	**The project would not expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires. (No Impact)**

The project site is not located within a Fire Hazard Severity Zone as designated by the State of California Department of Forestry and Fire Protection. **(No Impact)**

4.10 HYDROLOGY AND WATER QUALITY

4.10.1 Environmental Setting

4.10.1.1 *Regulatory Framework*

Overview

The federal Clean Water Act and California's Porter-Cologne Water Quality Control Act are the primary laws related to water quality in California. Regulations set forth by the EPA and the SWRCB have been developed to fulfill the requirements of this legislation. EPA regulations include the National Pollutant Discharge Elimination System (NPDES) permit program, which controls sources that discharge pollutants into the waters of the United States (e.g., streams, lakes, bays, etc.). These regulations are implemented at the regional level by the Regional Water Quality Control Boards (RWQCBs). The project site is within the jurisdiction of the San Francisco Bay RWQCB.

Federal and State

National Flood Insurance Program

The Federal Emergency Management Agency (FEMA) established the National Flood Insurance Program (NFIP) to reduce impacts of flooding on private and public properties. The program provides subsidized flood insurance to communities that comply with FEMA regulations protecting development in floodplains. As part of the program, FEMA publishes Flood Insurance Rate Maps (FIRMs) that identify Special Flood Hazard Areas (SFHAs). An SFHA is an area that would be inundated by the one-percent annual chance flood, which is also referred to as the base flood or 100-year flood.

Statewide Construction General Permit

The SWRCB has implemented an NPDES General Construction Permit for the State of California (Construction General Permit). For projects disturbing one acre or more of soil, a Notice of Intent (NOI) and Storm Water Pollution Prevention Plan (SWPPP) must be prepared by a qualified professional prior to commencement of construction. The Construction General Permit includes requirements for training, inspections, record keeping, and, for projects of certain risk levels, monitoring. The general purpose of the requirements is to minimize the discharge of pollutants and to protect beneficial uses and receiving waters from the adverse effects of construction-related storm water discharges.

Regional and Local

San Francisco Bay Basin Plan

The San Francisco Bay RWQCB regulates water quality in accordance with the Water Quality Control Plan for the San Francisco Bay Basin (Basin Plan). The Basin Plan lists the beneficial uses that the San Francisco Bay RWQCB has identified for local aquifers, streams, marshes, rivers, and the San Francisco Bay, as well as the water quality objectives and criteria that must be met to protect these uses. The San Francisco Bay RWQCB implements the Basin Plan by issuing and enforcing waste discharge requirements, including permits for nonpoint sources such as the urban runoff

discharged by the City's stormwater drainage system. The Basin Plan also describes watershed management programs and water quality attainment strategies.

Municipal Regional Permit Provision C.3.

The San Francisco Bay RWQCB re-issued the Municipal Regional Stormwater NPDES Permit (MRP) in 2015 to regulate stormwater discharges from municipalities and local agencies (co-permittees) in Alameda, Contra Costa, San Mateo, and Santa Clara Counties, and the cities of Fairfield, Suisun City, and Vallejo.[43] Under Provision C.3 of the MRP, new and redevelopment projects that create or replace 10,000 square feet or more of impervious surface area are required to implement site design, source control, and Low Impact Development (LID)-based stormwater treatment controls to treat post-construction stormwater runoff. LID-based treatment controls are intended to maintain or restore the site's natural hydrologic functions, maximizing opportunities for infiltration and evapotranspiration, and using stormwater as a resource (e.g., rainwater harvesting for non-potable uses). The MRP also requires that stormwater treatment measures are properly installed, operated, and maintained.

In addition to water quality controls, the MRP requires new development and redevelopment projects that create or replace one acre or more of impervious surface to manage development-related increases in peak runoff flow, volume, and duration, where such hydromodification is likely to cause increased erosion, silt pollutant generation, or other impacts to local rivers, streams, and creeks. Projects may be deemed exempt from these requirements if they do not meet the minimized size threshold, drain into tidally influenced areas or directly into the Bay, or drain into hardened channels, or if they are infill projects in subwatersheds or catchment areas that are greater than or equal to 65 percent impervious.

Water Resources Protection Ordinance and District Well Ordinance

The Santa Clara Valley Water District (Valley Water) operates as the flood control agency for Santa Clara County. Their stewardship also includes creek restoration, pollution prevention efforts, and groundwater recharge. Permits for well construction and destruction work, most exploratory boring for groundwater exploration, and projects within Valley Water property or easements are required under Valley Water's Water Resources Protection Ordinance and District Well Ordinance.

Sunnyvale General Plan

The General Plan includes policies for the purpose of avoiding or mitigating impacts from planned development in the City. The goals and policies below are specific to hydrology and are applicable to the proposed project.

Goal EM-8: *Protection of Creeks and Bay: Assure the reasonable protection of beneficial uses of creeks and San Francisco Bay, established in the Regional Board's Basin Plan, and protect environmentally sensitive areas.*

[43] MRP Number CAS612008

Policy EM-8.1: Comply with regulatory requirements and participate in processes which may result in modifications to regulatory requirements.

Policy EM-8.3: Ensure that stormwater control measures and best management practices (BMPs) are implemented to reduce the discharge of pollutants in storm water to the maximum extent practicable.

Policy EM-8.5: Prevent accelerated soil erosion. Continue implementation of a construction site inspection and control program to prevent discharges of sediment from erosion and discharges of other pollutants from new redevelopment projects.

Policy EM-8.6: Minimize the impacts from stormwater and urban runoff on the biological integrity of natural drainage systems and water bodies.

Goal EM-10: *Reduced runoff and pollutant discharge: Minimize the quantity of runoff and discharge of pollutants to the maximum extent practicable by integrating surface runoff controls into new development and redevelopment land use decisions.*

Policy EM-10.1: Consider the impacts of surface runoff as part of land use and development decisions and implement BMPs to minimize the total volume and rate of runoff of waste quality and quantity (hydro modification) of surface runoff as part of land use and development decisions.

Sunnyvale Municipal Code

Chapter 16.62 Prevention of Flood Damage of the Sunnyvale Municipal Code sets forth floodplain management regulations required for development projects located within special flood hazard areas. Section 16.62.020 requires that plans show the proposed floor elevation in relation to mean sea level of the lowest floor of all structures, proposed finished floor elevations in relation to mean sea level, and a description of the extent to which any watercourse will be altered or relocated as a result of the development.

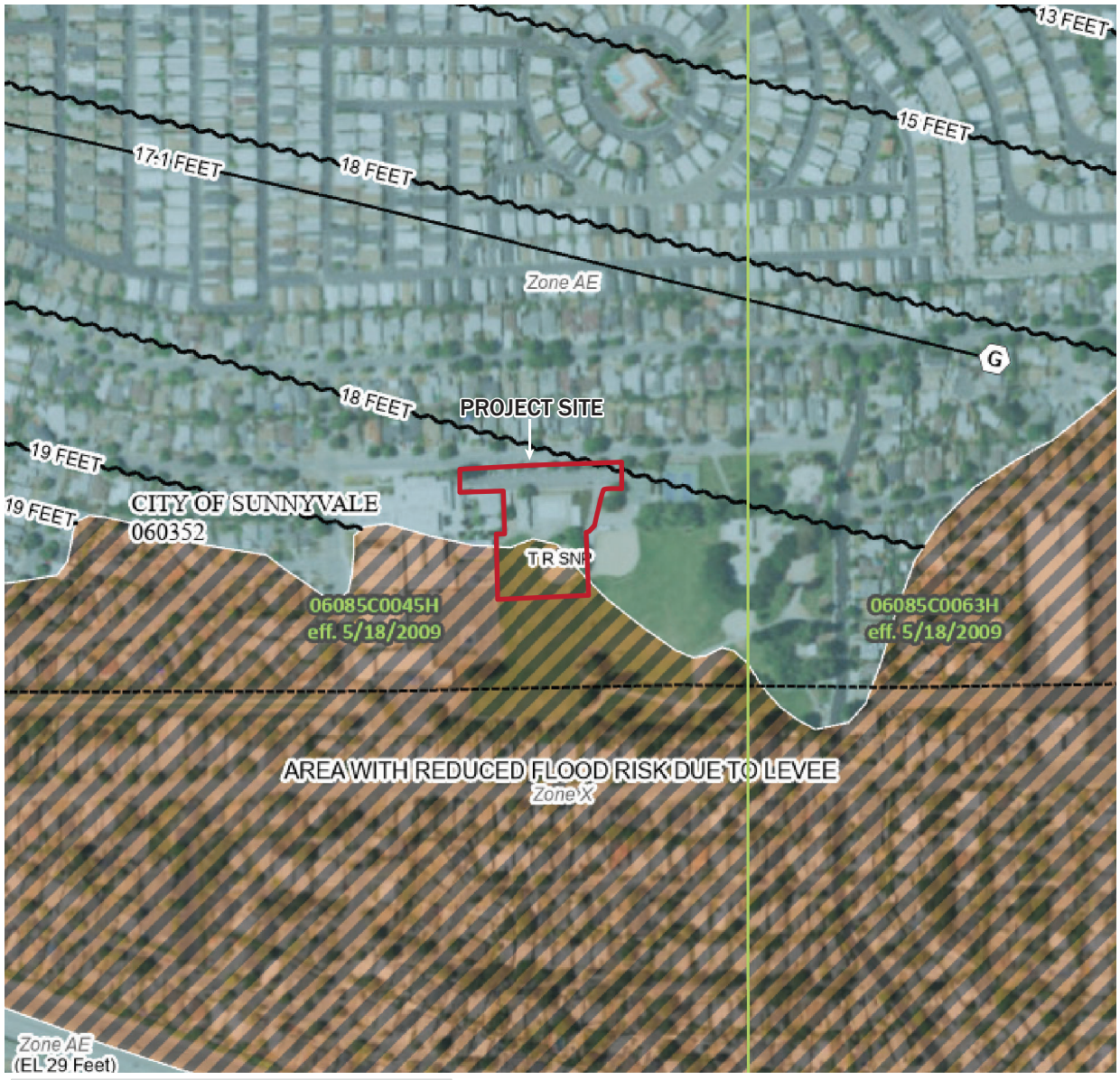
4.10.1.2 *Existing Conditions*

Flooding and Other Hazards

According to the Federal Emergency Management Agency (FEMA), the project site is partially located in Zone X, which is an area with reduced flood risk due to levee, and in Zone AE, which is a flood hazard area with a one percent annual chance of flood.[44]

Figure 4.10-1 shows the project site overlaid on the FEMA flood zone map.

[44] FEMA Flood Map Service Center. Available at https://msc.fema.gov/portal/home. Map 06085C0045H. Accessed August 14, 2020.



Source: FEMA NFHL.

PROJECT SITE FLOOD ZONES | FIGURE 4.10-1

There are no landlocked bodies of water near the project site that would affect the site in the event of a seiche or tsunami.[45] The project site is flat and would not be subject to potential mudslides.

Based on the Santa Clara Valley Water District dam failure inundation hazard maps, the project site is not located within the Andersen Dam or Lexington Dam failure inundation hazard zone.[46]

Groundwater

The City of Sunnyvale is located within the Santa Clara Valley Groundwater Basin, one of two groundwater basins in Santa Clara County.[47] Hydrologically, the groundwater basin is separated into recharge and confined zones. Geological conditions in the recharge areas allow precipitation, stream flow, and water diverted into percolation areas to recharge the deeper aquifers. The confined zones include areas of the valley where low permeability clays and silts overlie the major groundwater aquifers which impedes the vertical flow of groundwater into the deeper aquifers. The City of Sunnyvale lies entirely within the confined zone. [48]

Stormwater Runoff

Calabazas Creek is located approximately 0.8 mile east of the project site. The water quality of Calabazas Creek is directly affected by pollutants contained in stormwater runoff from a variety of urban uses. Stormwater from urban uses contains metals, pesticides, herbicides, and other contaminants, including oil, grease, asbestos, lead, and animal wastes. The Federal Clean Water Act, Section 303, establishes water quality standards and Total Maximum Daily Load (TMDL) programs. The 303(d) list is a list of impaired water bodies. The TMDL program calculates the maximum amount of a pollutant that a water body can receive and still meet water quality standards. The TMDL high priority schedule denotes the most severely impaired water bodies on the 303(d) list. Currently, Calabazas Creek is not listed on the California 303(d) list or on the TMDL high priority schedule.[49] Calabazas Creek drains to the San Francisco Bay. The southern portion of the Bay is listed on the California 303(d) list for diazinon.

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[45] Association of Bay Area Governments. *Tsunami Inundation Emergency Planning Map for the San Francisco Bay Region*. <http://quake.abag.ca.gov/tsunamis>. Accessed August 14, 2020.

[46] Santa Clara Valley Water District. *Andersen Dam Flood Inundation Maps. 2016*. Accessed on August 14, 2020. Available at https://www.valleywater.org/sites/default/files/Anderson%20Dam%20Inundation%20Maps%202016.pdf.

[47] California Department of Water Resources, Bulletin 118, 2003.
The California Department of Water Resources defined two groundwater basins in Santa Clara County: The Santa Clara Valley Basin and The Gilroy-Hollister Valley Basin.

[48] Santa Clara Valley Water District. 2016 Groundwater Management Plan. <https://s3.us-west-2.amazonaws.com/assets.valleywater.org/2016%20Groundwater%20Management%20Plan.pdf>. Accessed on August 14, 2020.

[49] California State Water Resources Control Board. *2010 CWA Section 303(d) List of Water Quality Limited Segments Requiring TMDLs.* Accessed August 14, 2020. Available at http://www.waterboards.ca.gov/water_issues/programs/tmdl/2010state_ir_reports/category4a_report.shtml

4.10.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☐	☒	☐
2) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☒	☐
3) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:	☐	☐	☒	☐
– result in substantial erosion or siltation on- or off-site;	☐	☐	☒	☐
– substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;	☐	☐	☒	☐
– 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	☐	☐	☒	☐
– impede or redirect flood flows?	☐	☐	☒	☐
4) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☒	☐
5) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☒	☐

Impact HYD-1: The project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality. (Less than Significant Impact)

Construction-Related Water Quality Impacts

Implementation of the proposed project would require the removal of existing improvements and grading of the site. Demolition and construction activities would temporarily increase the amount of debris on-site and grading activities could increase erosion and the amount of sediment that could be carried by runoff into natural waterways via the existing storm drain system in the City. The project

would disturb approximately 100,000 square feet of land. Since the project would disturb more than one acre of land, the project would be subject to the provisions of the Construction General Permit, which requires the submittal of an NOI to the RWQCB and development of a SWPPP to control discharge associated with construction activities.

Additionally, the project shall comply with the following project conditions (based on RWQCB recommendations) to reduce potential construction-related water quality impacts:

Standard Permit Conditions:

- Burlap bags filled with drain rock will be installed around storm drains to route sediment and other debris away from the drains.
- Earthmoving or other dust-producing activities would be suspended during periods of high winds.
- All exposed or disturbed soil surfaces would be watered at least twice daily to control dust as necessary.
- Stockpiles of soil or other materials that can be blown by the wind would be watered or covered.
- All trucks hauling soil, sand, and other loose materials would be covered and all trucks would be required to maintain at least two feet of freeboard.
- All paved access roads, parking areas, staging areas and residential streets adjacent to the construction sites would be swept daily (with water sweepers).
- Vegetation in disturbed areas would be replanted as quickly as possible.
- A Storm Water Permit shall be administered by the SWRCB. Prior to construction grading for the proposed land uses, the project proponents will file an NOI to comply with the General Permit and prepare a SWPPP which addresses measures that would be included in the project to minimize and control construction and post-construction runoff. Measures will include, but are not limited to, the aforementioned RWQCB Best Management Practices.
- The SWPPP shall be posted at the project site and shall be updated to reflect current site conditions.
- When construction is complete, a Notice of Termination for the General Permit for Construction shall be filed with the SWRCB. The Notice of Termination shall document that all elements of the SWPPP have been executed, construction materials and waste have been properly disposed of, and a post-construction stormwater management plan is in place as described in the SWPPP for the site.

With implementation of the identified construction measures, construction of the proposed project would have a less than significant impact on water quality. **(Less Than Significant Impact)**

Post-Construction Water Quality Impacts

The project would increase on-site impervious surfaces by approximately 20,000 square feet. The project would include treatment planters and would divert runoff from impervious surfaces to

landscaped areas. Runoff from the parking lot and driveway would flow into treatment planters that would be located in the parking lot on the northern end of the site.

The project's overall design, along with implementation of the Standard Project Conditions listed above, would result in a less than significant impact to water quality. **(Less than Significant Impact)**

Impact HYD-2:	**The project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin. (Less than Significant Impact)**

The proposed library and learning center project would not include the installation of new groundwater wells and, thus, would not deplete groundwater supplies. The project site is located within the Santa Clara Plain Recharge area of the Santa Clara Valley Basin. The proposed project would be required to treat post-construction runoff using LID treatment controls (e.g., bioretention facilities) in compliance with the MRP. Although the project would result in an increase in impervious surfaces on the site, the project's compliance with the MRP would allow for groundwater infiltration and reduce impacts to a less-than-significant level. **(Less than Significant Impact)**

Impact HYD-3:	**The project would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- or off-site; substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site; 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 impede or redirect flood flows. (Less than Significant Impact)**

As discussed in Section 4.10.1.2 Existing Conditions, the project site is located within Flood Zones X and AE. The parking lot would be constructed within Flood Zone AE. The library building would be constructed partially within Flood Zone X and partially within Flood Zone AE. The building would be elevated 1.25 feet above the flood zone elevation of 19 feet above mean sea level for a finished floor elevation of 20.25 feet. Construction of the proposed project would alter the existing drainage pattern on the project site or surrounding area because it would introduce approximately 20,000 square feet of impervious surfaces.

Post-construction stormwater runoff from the project's impervious surfaces during routine rainfall events would be directed towards landscaped areas and bioretention areas throughout the project site for treatment, consistent with the MRP. The proposed bioretention areas would remove pollutants and minimize the rate and volume of runoff from the project site, reducing the potential for runoff, erosion, or siltation on and off-site during routine rainfall events. Additionally, the project's stormwater treatment system would allow percolation of stormwater into the ground through bioretention facilities and reduce the rate of stormwater runoff entering the City's storm drainage system during routine rainfall events.

The proposed project design would comply with the requirements of Sunnyvale Municipal Code Chapter 16.62 Prevention of Flood Damage during the large, infrequent rainfall events that can cause flooding. As discussed above, the portion of the building located within Flood Zone AE would be elevated to 20.25 feet above mean sea level. Given the nearest watercourse (Calabazas Creek) is 0.8 miles west of the site, the project would not alter or relocate any watercourse. As mentioned above, construction of the proposed project would alter the existing drainage pattern through the addition of impervious surfaces, which could increase the rate or amount of surface water and potentially result in flooding on- or off-site. Given the extent and size of Flood Zone AE, it is unlikely that implementation of the project would create a significant impact.

Further, the Sunnyvale East and West Channel Flood Protection Project, undertaken by Valley Water, will upgrade approximately 6.4 miles of the existing Sunnyvale East Channel to provide one percent flood protection (for 100-year events) to 1,618 parcels and approximately three miles of the existing West Channel to provide one percent flood protection for 47 acres of industrial lands. The project will raise and improve levees and floodwalls to reduce flood risk throughout the City. Construction of this project is anticipated to begin in 2024 and end in 2026. Once implemented, the flood protection project would take the entire Lakewood Park Library project site and surrounding area outside of Flood Zone AE. The flood protection project is a long-term solution that would eliminate any impacts related to drainage pattern alteration and subsequent displacement of flooding. In the time between construction of the Lakewood Park Library and construction of the flood protection project, there would be a period of approximately two years during which the drainage pattern is altered.

For the reasons described above, the project would not substantially alter the existing drainage pattern of the site such that erosion or siltation would occur, nor would the project result in a substantial increase in the rate or amount of surface runoff. **(Less than Significant Impact)**

Impact HYD-4:	**The project would not risk release of pollutants due to project inundation in flood hazard, tsunami, or seiche zones. (Less than Significant Impact)**

Due to the project site's inland location and distance from large bodies of water, it is not subject to seiche or tsunami hazards. Therefore, there would be no risk of release of pollutants at the project site due to tsunamis or seiches.

The project site is located within Zone AE, a part of the 100-year flood plain, zone of Zone AE where there is a one percent annual chance of flooding, with remaining portions of the site within Flood Zone X where there is a 0.2 percent annual chance of flooding. The project would raise the building pad 1.25 feet above the base flood zone elevation. The project's increased floor elevation would prevent the inundation of the proposed building in a flood event. No pollutants would be stored outside of the building that would be subject to inundation during a flood. Therefore, there would be no risk of release of pollutants at the project site due to inundation. **(Less than Significant Impact)**

Impact HYD-5:	The project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. (Less than Significant Impact)

As discussed in responses to questions a) and b), the proposed project will implement identified Standard Project Conditions, would be required to comply with the NPDES MRP, and would not impact groundwater recharge consistent with the Basin Plan. For these reasons, the project would not conflict with implementation of a water quality or groundwater management plan. **(Less than Significant Impact)**

4.11 LAND USE AND PLANNING

4.11.1 Environmental Setting

4.11.1.1 *Regulatory Framework*

Local

Sunnyvale General Plan

The General Plan includes policies for the purpose of avoiding or mitigating impacts from planned development in the City. The policies below are specific to hydrology and are applicable to the proposed project.

Policy CC-4.1: Ensure that Sunnyvale's public facilities are easily identified, accessible, attractive and representative of the community's values and aspirations.

Policy CC-4.2: Maintain beautiful and comfortable outdoor public places which provide a shared sense of ownership and belonging for Sunnyvale residents, business owners and visitors.

4.11.1.2 *Existing Conditions*

The project site is currently developed with a swimming pool, baseball field, and parking lot. The site has a General Plan land use designation of Public Facilities. The project site is also zoned as Public Facilities (P-F). The P-F designation (Section 19.24.020 of the Sunnyvale Municipal Code) is reserved for the construction, use, and occupancy of governmental, public utility and educational buildings and facilities, and other uses compatible with the public character of the district. Surrounding land uses are designated and zoned as Low Density Residential.

4.11.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Physically divide an established community?	☐	☐	☐	☒
2) 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?	☐	☐	☐	☒

Impact LU-1: The project would not physically divide an established community. (No Impact)

The project site contains a former public swimming pool, baseball field, and paved parking lot, and is surrounded by a mix of residential buildings, including single-family houses. The proposed project would redevelop the existing use of the site with a library building. Therefore, the project would not

conflict with the site's General Plan designation or zoning. Since the library would remain publicly accessible and would not construct physically dividing features (such as a wall, roadway, or railroad tracks), the project would not physically divide an established community. Therefore, the project would have no impact. **(No Impact)**

Impact LU-2:	**The project would not 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. (No Impact)**

The project site is not located within a Habitat Conservation Plan or Natural Community Conservation Plan. As discussed in Section 4.9, the project site is not located within the Airport AIA and is not subject to the policies in the CLUP. Therefore, the project would not cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation. **(No Impact)**

4.12 MINERAL RESOURCES

4.12.1 Environmental Setting

4.12.1.1 *Regulatory Framework*

State

Surface Mining and Reclamation Act

The Surface Mining and Reclamation Act (SMARA) was enacted by the California legislature in 1975 to address the need for a continuing supply of mineral resources, and to prevent or minimize the negative impacts of surface mining to public health, property, and the environment. As mandated under SMARA, the State Geologist has designated mineral land classifications in order to help identify and protect mineral resources in areas within the state subject to urban expansion or other irreversible land uses which would preclude mineral extraction. SMARA also allowed the State Mining and Geology Board (SMGB), after receiving classification information from the State Geologist, to designate lands containing mineral deposits of regional or statewide significance.

4.12.1.2 *Existing Conditions*

The project site is located in Mineral Resource Zone One, which is defined as areas where adequate information indicates no significant mineral deposits are present or where it is judged that little likelihood exists for their presence.[50] There are no known mineral resources located on or adjacent to the project site.

4.12.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
2) 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?	☐	☐	☐	☒

[50] California Department of Conservation. *Generalized Mineral Land Classification Map of the South San Francisco Bay Production-Consumption Region.* 1996.

Impact MIN-1:	**The project would not result in the loss of availability of a known mineral resource that would be of value to the region and residents of the state. (No Impact)**

The proposed project site is within a developed urban area and does not contain any known or designated mineral resources; therefore, the project would have no impact. **(No Impact)**

Impact MIN-2:	**The project would not result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan. (No Impact)**

The project site is not located in or near an area containing known mineral resources. Therefore, the project would not result in the loss of availability of locally important mineral resources recovery site delineated on a local general plan, specific plan, or other land use plan. **(No Impact)**

4.13 NOISE

The following discussion is based in part on a Noise and Vibration Assessment prepared by Illingworth & Rodkin, Inc. on September 4, 2020. The report is attached as Appendix E.

4.13.1 Environmental Setting

4.13.1.1 *Background Information*

Noise

Factors that influence sound as it is perceived by the human ear, include the actual level of sound, period of exposure, frequencies involved, and fluctuation in the noise level during exposure. Noise is measured on a decibel scale, which serves as an index of loudness. The zero on the decibel scale is based on the lowest sound level that the healthy, unimpaired human ear can detect. Each 10 decibel increase in sound level is perceived as approximately a doubling of loudness. Because the human ear cannot hear all pitches or frequencies, sound levels are frequently adjusted or weighted to correspond to human hearing. This adjusted unit is known as the A-weighted decibel, or dBA.

Since excessive noise levels can adversely affect human activities and human health, federal, state, and local governmental agencies have set forth criteria or planning goals to minimize or avoid these effects. Noise guidelines are generally expressed using one of several noise averaging methods, including L_{eq}, DNL, or CNEL.[51] These descriptors are used to measure a location's overall noise exposure, given that there are times when noise levels are higher (e.g., when a jet is taking off from an airport or when a leaf blower is operating) and times when noise levels are lower (e.g., during lulls in traffic flows on freeways or in the middle of the night). L_{max} is the maximum A-weighted noise level during a measurement period.

Vibration

Ground vibration consists of rapidly fluctuating motions or waves with an average motion of zero. Vibration amplitude can be quantified using Peak Particle Velocity (PPV), which is defined as the maximum instantaneous positive or negative peak of the vibration wave. PPV has been routinely used to measure and assess ground-borne construction vibration. Studies have shown that the threshold of perception for average persons is in the range of 0.008 to 0.012 inches/second (in/sec) PPV.

[51] L_{eq} is a measurement of average energy level intensity of noise over a given period of time. Day-Night Level (DNL) is a 24-hour average of noise levels, with a 10 dB penalty applied to noise occurring between 10:00 PM and 7:00 AM. Community Noise Equivalent Level (CNEL) includes an additional five dB applied to noise occurring between 7:00 PM and 10:00 PM. Where traffic noise predominates, the CNEL and DNL are typically within two dBA of the peak-hour L_{eq}.

4.13.1.2 *Regulatory Framework*

Federal

Federal Transit Administration Vibration Limits

The Federal Transit Administration (FTA) has developed vibration impact assessment criteria for evaluating vibration impacts associated with transit projects. The FTA has proposed vibration impact criteria based on maximum overall levels for a single event. The impact criteria for groundborne vibration are shown in Table 4.13-1 below. These criteria can be applied to development projects in jurisdictions that lack vibration impact standards.

Table 4.13-1: Groundborne Vibration Impact Criteria

Land Use Category	Groundborne Vibration Impact Levels (VdB inch/sec)		
	Frequent Event	Occasional Events	Infrequent Events
Category 1: Buildings where vibration would interfere with interior operations	65	65	65
Category 2: Residences and buildings where people normally sleep	72	75	80
Category 3: Institutional land uses with primarily daytime use	75	78	83

Source: Federal Transit Administration. *Transit Noise and Vibration Assessment Manual.* September 2018.

State and Local

California Green Building Standards Code

For commercial uses, CALGreen (Section 5.507.4.1 and 5.507.4.2) requires that wall and roof-ceiling assemblies exposed to the adjacent roadways have a composite Sound Transmission Class (STC) rating of at least 50 or a composite OITC rating of no less than 40, with exterior windows of a minimum STC of 40 or OITC of 30 when the commercial property falls within the 65 dBA L_{dn} or greater noise contour for a freeway or expressway, railroad, or industrial or stationary noise source. The state requires interior noise levels to be maintained at 50 dBA $L_{eq(1\text{-}hr)}$ or less during hours of operation at a proposed commercial use.

Sunnyvale General Plan

The General Plan includes policies for the purpose of avoiding or mitigating impacts from planned development in the City. The goal and policies below are specific to noise and are applicable to the proposed project.

Goal SN-8: *Compatible noise environment: Maintain or achieve a compatible noise environment for all land uses in the community.*

Policy SN-8.3: Attempt to achieve a maximum instantaneous noise level of 50 dBA in bedrooms and 55 dBA in other areas of residential units exposed to train or aircraft noise, where the exterior Ldn exceeds 55 dBA.

Policy SN-8.4: Prevent significant noise impacts from new development by applying state noise guidelines and Sunnyvale Municipal Code noise regulations in the evaluation of land use issues and proposals.

Sunnyvale Municipal Code

The Sunnyvale Municipal Code (Section 16.08.030) contains the following construction activity policies related to noise:

- Construction activity shall be permitted between the hours of seven a.m. and six p.m. daily Monday through Friday. Saturday hours of operation shall be between eight a.m. and five p.m. There shall be no construction activity on Sunday or federal holidays when city offices are closed.
- No loud environmentally disruptive noises, such as air compressors without mufflers, continuously running motors or generators, loud playing musical instruments, radios, etc., will be allowed where such noises may be a nuisance to adjacent residential neighborhoods.

4.13.1.3 *Existing Conditions*

The project site is bounded by single-family residential uses to the north, Lakewood Elementary School to the west, and Lakewood Park, which consists of a basketball court, tennis courts, baseball field, grass areas, and skatepark. At the time of preparation of the noise report, traffic volumes in the project vicinity were substantially lower and not representative of typical conditions due to the County's Shelter-in-Place restrictions responding to the COVID-19 pandemic. Therefore, instead of completing a noise monitoring survey, the project's environmental baseline was determined using noise data from the City of Sunnyvale's General Plan. This approach is consistent with CEQA case law, which provides discretion for a lead agency to establish an alternate baseline when existing conditions are not representative of typical environmental conditions on and around a site. The General Plan noise contour information shows that the noise levels in the project vicinity are less than 60 dBA L_{dn}.

4.13.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project result in:				
1) 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?	☐	☒	☐	☐
2) Generation of excessive groundborne vibration or groundborne noise levels?	☐	☒	☐	☐
3) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☒	☐

Impact NOI-1: The project would not result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. (Less than Significant Impact with Mitigation Incorporated)

Construction Noise

Noise impacts resulting from construction depend on upon the noise generated by various pieces of construction equipment, the timing and duration of noise-generating activities, and the distance between construction noise sources and noise-sensitive areas. Construction noise impacts primarily result when construction activities occur during noise-sensitive times of the day (e.g., early morning, evening, or nighttime hours), the construction occurs in areas immediately adjoining noise-sensitive land uses, or when construction lasts over extended periods of time. Project construction is anticipated to occur over an approximate period of 16 months. Noise would be generated only during a portion of this period, as interior construction activities would not be anticipated to generate substantial noise.

The construction of the proposed project would involve grading, excavating, trenching, building erection, and paving. Pile driving is not required to construct the project. Hauling imported and exported soil and materials would generate truck trips on local roadways. During each stage of construction, there would be a different mix of equipment operating, and noise levels would vary. Average construction noise levels are shown in Table 4.13-2, and maximum noise level ranges for different equipment is shown in Table 4.13-3.

Table 4.13-2: Typical Ranges of Construction Noise Levels at 50 Feet, L_{eq} (dBA)								
	Domestic Housing		**Office Building, Hotel, Hospital, School, Public Works**		**Industrial Parking Garage, Religious Amusement & Recreations, Store, Service Station**		**Public Works Roads & Highways, Sewers, and Trenches**	
	I	**II**	**I**	**II**	**I**	**II**	**I**	**II**
Ground Clearing	83	83	84	84	84	83	84	84
Excavation	88	75	89	79	89	71	88	78
Foundations	81	81	78	78	77	77	88	88
Erection	81	65	87	75	84	72	79	78
Finishing	88	72	89	75	89	74	84	84

I - All pertinent equipment present at site.
II - Minimum required equipment present at site.
Source: U.S.E.P.A., Legal Compilation on Noise, Vol. 1, p. 2-104, 1973.

Table 4.13-3: Construction Equipment 50-foot Noise Emission Limits		
Equipment Category	**L_{max} Level (dBA)1,2**	**Impact/Continuous**
Arc Welder	73	Continuous
Auger Drill Rig	85	Continuous
Backhoe	80	Continuous
Bar Bender	80	Continuous
Boring Jack Power Unit	80	Continuous
Chain Saw	85	Continuous
Compressor[3]	70	Continuous
Compressor (other)	80	Continuous
Concrete Mixer	85	Continuous
Concrete Pump	82	Continuous
Concrete Saw	90	Continuous
Concrete Vibrator	80	Continuous
Crane	85	Continuous
Dozer	85	Continuous
Excavator	85	Continuous
Front End Loader	80	Continuous
Generator	82	Continuous
Generator (25 KVA or less)	70	Continuous
Gradall	85	Continuous
Grader	85	Continuous
Grinder Saw	85	Continuous
Horizontal Boring Hydro Jack	80	Continuous
Hydra Break Ram	90	Impact
Impact Pile Driver	105	Impact
Insitu Soil Sampling Rig	84	Continuous
Jackhammer	85	Impact
Mounted Impact Hammer (hoe ram)	90	Impact
Paver	85	Continuous
Pneumatic Tools	85	Continuous
Pumps	77	Continuous
Rock Drill	85	Continuous
Scraper	85	Continuous
Slurry Trenching Machine	82	Continuous
Soil Mix Drill Rig	80	Continuous
Street Sweeper	80	Continuous
Tractor	84	Continuous
Truck (dump, delivery)	84	Continuous
Vacuum Excavator Truck (vac-truck)	85	Continuous
Vibratory Compactor	80	Continuous
Vibratory Pile Driver	95	Continuous
All other equipment with engines larger than 5 HP	85	Continuous

Notes:

1. Measured at 50 feet from the construction equipment, with a "slow" (1 sec.) time constant.
2. Noise limits apply to total noise emitted from equipment and associated components operating at full power while engaged in its intended operation.
3. Portable Air Compressor rated at 75 cfm or greater and that operates at greater than 50 psi.

Source: Mitigation of Nighttime Construction Noise, Vibrations and Other Nuisances, National Cooperative Highway Research Program, 1999.

The proposed project would produce construction noise levels ranging between 77 to 89 dBA L_{eq} at a distance of 50 feet from the source with all equipment present at the site. With the minimum required equipment present at the site, construction noise levels produced by the project would typically range from 71 to 83 dBA L_{eq} at a distance of 50 feet from the source. Such noise levels would be expected at portions of the Lakewood Elementary School and Lakewood Park immediately adjacent to the project site. Construction-generated noise levels drop off at a rate of about six dBA per doubling of the distance between the source and receptor. Shielding by buildings or terrain can provide an additional five to 10 dBA noise reduction at distance receptors.

The nearest noise-sensitive residential land uses are located 250 feet north of the acoustic center of the project's construction site. At a distance of 250 feet, noise levels would range from 63 to 75 dBA L_{eq} with all pertinent equipment present at the site, and from 57 to 69 dBA L_{eq} with the minimum required equipment present at the site, which would exceed ambient daytime noise levels in the area by more than five dBA L_{eq}. The project could create disturbance at existing noise-sensitive receptors in the project vicinity. In accordance with the City of Sunnyvale Land Use Transportation Element, the following mitigation measure would be implemented.

Impact NOI-1: Project construction could impact noise levels at nearby sensitive receptors. **(Potentially Significant Impact)**

Mitigation Measure: The project proposes to implement the following mitigation measures to reduce construction-related noise impacts to a less than significant level.

MM NOI-1.1: The project shall prepare a noise control plan in consultation with a qualified noise consultant implementing the following measures to reduce the generation of construction noise:

- Equipment and trucks used for construction shall use the best available noise control techniques (e.g., improved mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures, and acoustically attenuating shields or shrouds);
- Impact tools (e.g., jackhammers, pavement breakers, and rock drills) used for construction shall be hydraulically or electrically powered wherever possible to avoid noise associated with compressed air exhaust from pneumatically powered tools; and
- Stationary noise sources shall be located as far from adjacent receptors as possible, and they shall be muffled and enclosed within temporary sheds, incorporate insulation barriers, or include other measures.

Furthermore, the following best management practices, implemented as Standard Conditions, shall be incorporated to further reduce construction noise and vibration levels:

Standard Condition NOI-1: The following measures shall be implemented to control construction noise levels:

- Construct temporary noise barriers, where feasible, to screen receptors from stationary noise-generating equipment. Temporary noise barrier fences would provide a 5 dBA noise reduction if the noise barrier interrupts the line-of-sight between the noise source and receptor and if the barrier is constructed in a manner that eliminates any cracks of gaps.
- Unnecessary idling of internal combustion engines should be strictly prohibited.
- Construction staging areas shall be established at locations that will create the greatest distance between the construction-related noise sources and noise-sensitive receptors nearest the project site during all project construction. Locate material stockpiles, as well as maintenance/equipment staging and parking areas, as far as feasible from residential receptors.
- Control noise from construction workers' radios to a point where they are not audible at existing residences bordering the project site.
- Where feasible, temporary power service from local utility companies should be used instead of portable generators.
- During final grading, substitute graders for bulldozers, where feasible. Wheeled heavy equipment are quieter than track equipment and should be used where feasible.
- Substitute nail guns for manual hammering, where feasible.
- Avoid the use of circular saws, miter/chop saws, and radial arm saws near the adjoining noise-sensitive receptors (Lakewood Elementary School). Where feasible, shield saws with a solid screen with material having a minimum surface density of 2 lbs/ft^2 (e.g., such as ¾" plywood).
- Maintain smooth vehicle pathways for trucks and equipment accessing the site.
- During interior construction, the exterior windows facing noise-sensitive receptors shall be closed.
- During interior construction, locate noise-generating equipment within the building to break the line-of-sight to the adjoining receptors.
- The contractor shall prepare a detailed construction schedule for major noise-generating construction activities (see MM NOI-1.1 above). The construction plan shall identify a procedure for coordination with adjacent residential land uses so that construction activities can be scheduled to minimize noise disturbance.
- Designate a "disturbance coordinator" who would be responsible for responding to any complaints about construction noise. The disturbance coordinator will determine the cause of the noise complaint (e.g., bad muffler, etc.) and will require that reasonable measures be implemented to correct the problem. Conspicuously post a telephone number for the disturbance coordinator at the construction site and include in it the notice sent to neighbors regarding the construction schedule.

Pursuant to the City of Sunnyvale Municipal Code, project construction activities would take place between the hours of 7:00 AM and 6:00 PM on weekdays and between 8:00 AM and 5:00 PM on Saturdays. With implementation of MM NOI-1.1 and Standard Condition NOI-1 discussed above,

construction noise impacts would be reduced to less than significant levels. **(Less than Significant Impact with Mitigation Incorporated)**

Operational Noise

According to the City of Sunnyvale's General Plan, existing noise levels at the noise-sensitive land uses in the project vicinity fall within the "normally acceptable" range. The General Plan defines a significant impact as an increase of more than 3 dBA when the total L_{dn} exceeds the normally acceptable category, or an increase of more than 5 dBA. A review of the existing and existing plus project traffic volumes indicated that project generated traffic would increase existing traffic noise levels by less than 1 dBA L_{dn} along the Lawrence Expressway/Tasman Drive and Lawrence Expressway/Lakehaven Drive roadways.

The traffic study's trip generation estimates were used to calculate project-generated traffic noise levels expected along Lakechime Drive during peak hour traffic hours. During the AM Peak Hour, the proposed project is anticipated to generate 20 trips, resulting in an hourly average noise level of 44 dBA at a distance of 50 feet from the centerline of the roadway. During the PM Peak Hour, the proposed project is anticipated to generate 164 trips, resulting in an hourly average noise level of 51 dBA L_{eq} at a distance of 50 feet. The worst-case L_{dn} estimated from these data is 46 dBA. The project would result in relatively low noise levels during peak traffic hours.

Furthermore, as discussed in Section 4.17 Transportation, the project would generate an additional 1,450 daily vehicle trips. The existing average daily trips (ADT) along Lawrence Expressway and Tasman Drive is 48,315 and the ADT along Lawrence Expressway and Lakehaven Drive/Sandia Avenue is 41,090.[52] The project represents a small fraction (3.5 percent) of the existing ADT along these roadways.

Given the low number of additional trips and the less than 1 dBA L_{dn} increase in traffic noise, expected due to the operation of the project, the project would not double existing traffic volumes along Lakechime Drive or result in a permanent noise increase of 3 dBA L_{dn} or more. Therefore, the project's operational impacts would be less than significant. **(Less than Significant Impact)**

Impact NOI-2:	**The project would not result in generation of excessive groundborne vibration or groundborne noise levels. (Less than Significant Impact with Mitigation Incorporated)**

Construction Vibration

Project construction could generate perceptible vibrations when heavy equipment or impact tools (e.g., jackhammers, hoe rams) are used. Construction activities would include site demolition, preparation work, foundation work, new building framing and finishing, and paving. Pile driving is not required to build the project.

[52] Jocelyn Lee, Traffic Engineer, Hexagon Transportation Consultants, Inc. Personal Communication. August 11, 2020.

For structural damage, the California Department of Transportation recommends a vibration limit of 0.5 in/sec PPV for buildings structurally sound and designed to modern engineering standards, 0.3 in/sec PPV for buildings that are found to be structurally sound but where structural damage is a major concern, and a conservative limit of 0.08 in/sec PPV for historic buildings or buildings that are documented to be structurally weakened. The City of Sunnyvale General Plan includes a vibration limit of 0.25 in/sec PPV to minimize the potential for cosmetic damage at buildings of normal conventional construction.

Table 4.13-4 below shows the typical vibration levels to be expected from construction equipment at a distance of 25 feet.

Table 4.13-4: Summary of Short-Term Noise Measurements (dBA)

Equipment		PPV at 25 ft. (in/sec)	Vibration Levels at Nearest Buildings (in/sec PPV)	
			West School (10 ft)	North Residential (75 ft)
Clam shovel drop		0.202	0.553	0.060
Hydromill (slurry wall)	in soil	0.008	0.022	0.002
	in rock	0.017	0.047	0.005
Vibratory Roller		0.210	0.575	0.063
Hoe Ram		0.089	0.244	0.027
Large bulldozer		0.089	0.244	0.027
Caisson drilling		0.089	0.244	0.027
Loaded trucks		0.076	0.208	0.023
Jackhammer		0.035	0.096	0.010
Small bulldozer		0.003	0.008	0.001

Source: Transit Noise and Vibration Impact Assessment Manual, Federal Transit Administration, Office of Planning and Environment, U.S. Department of Transportation, FTA Report No. 0123, September 2018, as modified by Illingworth & Rodkin, Inc., September 2020.

The nearest buildings (Lakewood Elementary School) located to the west are as close as 10 feet from the shared property line. Based on the noise assessment, at this distance, vibration levels would be as high as 0.55 to 0.58 in/sec PPV when heavy equipment is dropped or vibratory rollers are used within 25 feet. Vibration levels at all other structures in the project vicinity would be less than 0.25 in/sec PPV.

Impact NOI-2: Since vibration levels would exceed 0.25 in/sec PPV at Lakewood Elementary School, the project would result in construction-related

groundborne vibration impacts (including cosmetic damage such as hairline cracks in plaster) at the nearest buildings. **(Potentially Significant Impact)**

Mitigation Measure: The project proposes to implement the following mitigation measures to reduce construction-related groundborne vibration impacts to a less than significant level.

MM NOI-2.1: The following measures shall be implemented where vibration levels due to construction activities would exceed 0.25 in/sec PPV at nearby buildings:

- Prohibit the use of heavy vibration-generating construction equipment within 25 feet of adjacent buildings.
- Use a smaller vibratory roller, such as the Caterpillar model CP433E vibratory compactor, when compacting materials within 25 feet of adjacent buildings. Only use the static compaction mode when compacting materials within 15 feet of educational buildings.
- Avoid dropping heavy equipment and use alternative methods for breaking up existing pavement, such as a pavement grinder, instead of dropping heavy objects, within 25 feet of adjacent educational buildings.
- Designate a person responsible for registering and investigating claims of excessive vibration. The contact information of such person shall be clearly posted on the construction site.

With implementation of the construction vibration controls described under Mitigation Measure NOI-2.1, project impacts would be reduced to less than significant. **(Less than Significant Impact with Mitigation Incorporated)**

Impact NOI-3:	**The project would not be located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport. The project would not expose people residing or working in the project area to excessive noise levels. (Less than Significant Impact)**

The project site is located approximately four miles southeast of Moffett Federal Airfield but would not expose people residing or working in the project area to excessive aircraft noise. According to the 2022 Aircraft Noise Contours figure provided in the Comprehensive Land Use Plan for Moffett Federal Airfield, the project falls outside of the 65 dBA CNEL noise contour lines. The proposed project would be compatible with the aircraft noise generated from the nearest airports; therefore, impacts would be less than significant. **(Less than Significant Impact)**

4.14 POPULATION AND HOUSING

4.14.1 Environmental Setting

4.14.1.1 *Regulatory Framework*

State

Housing-Element Law

State requirements mandating that housing be included as an element of each jurisdiction's general plan is known as housing element law. The Regional Housing Need Allocation (RHNA) is the state-mandated process to identify the total number of housing units (by affordability level) that each jurisdiction must accommodate in its housing element. California housing element law requires cities to: 1) zone adequate lands to accommodate its RHNA; 2) produce an inventory of sites that can accommodate its share of the RHNA; 3) identify governmental and non-governmental constraints to residential development; 4) develop strategies and a work plan to mitigate or eliminate those constraints; and 5) adopt a housing element and update it on a regular basis.[53] The City of Sunnyvale Housing Element and related land use policies were adopted in December 2014.

Regional and Local

Plan Bay Area 2040

Plan Bay Area 2040 is a long-range transportation, land use, and housing plan intended support a growing economy, provide more housing and transportation choices, and reduce transportation-related pollution and GHG emissions in the Bay Area. Plan Bay Area 2040 promotes compact, mixed-use residential and commercial neighborhoods near transit, particularly within identified Priority Development Areas (PDAs).[54]

ABAG allocates regional housing needs to each city and county within the nine-county San Francisco Bay Area, based on statewide goals. ABAG also develops forecasts for population, households, and economic activity in the Bay Area. ABAG, MTC, and local jurisdiction planning staff created the Regional Forecast of Jobs, Population, and Housing, which is an integrated land use and transportation plan through the year 2040 (upon which Plan Bay Area 2040 is based).

4.14.1.2 *Existing Conditions*

The population of Sunnyvale was estimated to be approximately 156,503 in January 2020 with an average of 2.69 persons per household.[55] The City currently has approximately 60,273 housing units. According to the City of Sunnyvale General Plan, by 2040, the City's population is projected to reach 194,300 and 72,800 households.

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[53] California Department of Housing and Community Development. "Regional Housing Needs Allocation and Housing Elements" Accessed August 14, 2020. http://hcd.ca.gov/community-development/housing-element/index.shtml.

[54] Association of Bay Area Governments and Metropolitan Transportation Commission. "Project Mapper." http://projectmapper.planbayarea.org/.

[55] State of California, Department of Finance. "E-5 Population and Housing Estimates for Cities, Counties, and the State, 2011-2018." Accessed August 14, 2020. http://www.dof.ca.gov/Forecasting/Demographics/Estimates/E-5/.

There are no housing units on the project site, and it is in a developed area with infrastructure and roads.

4.14.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) 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)?	☐	☐	☐	☒
2) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

Impact POP-1: The project would not 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). (No Impact)

The project would not add new land uses or new population in the City. The proposed library project would not expand the park outside its site boundary and would serve the City's existing and planned population growth. As a result, the project would not induce substantial unplanned population growth in the project area, either directly or indirectly. Therefore, the project would have no impact. **(No Impact)**

Impact POP-2: The project would not displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere. (No Impact)

The project site does not include residents or housing units and, therefore, the project would have no impact since it would not displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere. **(No Impact)**

4.15 PUBLIC SERVICES

4.15.1 Environmental Setting

4.15.1.1 *Regulatory Framework*

State

Government Code Section 66477

The Quimby Act (included within Government Code Section 66477) requires local governments to set aside parkland and open space for recreational purposes. It provides provisions for the dedication of parkland and/or payment of fees in lieu of parkland dedication to help mitigate the impacts from new residential developments. The Quimby Act authorizes local governments to establish ordinances requiring developers of new residential subdivisions to dedicate parks, pay a fee in lieu of parkland dedication, or perform a combination of the two.

Government Code Section 65995 through 65998

California Government Code Section 65996 specifies that an acceptable method of offsetting a project's effect on the adequacy of school facilities is the payment of a school impact fee prior to the issuance of a building permit. Government Code Sections 65995 through 65998 set forth provisions for the payment of school impact fees by new development by "mitigating impacts on school facilities that occur (as a result of the planning, use, or development of real property" (Section 65996[a]). The legislation states that the payment of school impact fees "are hereby deemed to provide full and complete school facilities mitigation" under CEQA (Section 65996[b]).

Developers are required to pay a school impact fee to the school district to offset the increased demands on school facilities caused by the proposed residential development project. The school district is responsible for implementing the specific methods for mitigating school impacts under the Government Code.

Regional and Local

Countywide Trails Master Plan

The Santa Clara County Trails Master Plan Update is a regional trails plan approved by the Santa Clara County Board of Supervisors. It provides a framework for implementing the County's vision of providing a contiguous trail network that connects cities to one another, cities to the county's regional open space resources, County parks to other County parks, and the northern and southern urbanized regions of the County. The plan identifies regional trail routes, sub-regional trail routes, connector trail routes, and historic trails.

Sunnyvale General Plan

The General Plan includes policies for the purpose of avoiding or mitigating impacts from planned development in the City. The goal and policies below are specific to public services and are applicable to the proposed project.

Goal SN-3: *Safe and secure city – provide a safe and secure environment for people and property in the community by providing effective public safety response and prevention and education services.*

Policy SN-3.1: Provide rapid and timely response to all emergencies.

4.15.1.2 *Existing Conditions*

Police and Fire Service

Police and fire protection services for the project site are provided by the Sunnyvale Department of Public Safety. The department is divided into three divisions: Bureau of Police Services, Fire Service Bureau, and Special Operations.

The Bureau of Police Services includes five squads that patrol the City 24 hours a day.[56] In 2019, the most frequent crimes in the City were property crimes including larceny/theft, burglary, and motor vehicle theft.[57] The Sunnyvale Police Department is located at 700 All America Way, five miles southwest of the project site.

The Fire Service Bureau operates a total of six fire stations that serve the City of Sunnyvale. The nearest fire station to the project site is Sunnyvale Fire Station #6. It is located at 1282 Lawrence Station Road, approximately one mile northeast of the site.

The City of Sunnyvale participates in a mutual aid program with neighboring cities, including Mountain View, Santa Clara, and San José. Through this program, should Sunnyvale need additional assistance, one or more of the mutual aid cities would provide assistance in whatever capacity was needed.

Schools

The nearest public schools to the project site are Fairwood Explorer Elementary School (0.8 mile east of the site), Columbia Middle School (2.7 miles west of the site), and Fremont High School (5.5 miles south of the site). Lakewood Elementary School is located directly adjacent to the site at 750 Lakechime Drive.

Parks

The City of Sunnyvale provides parklands, open space, and community facilities for public recreation and community services. The City's Parks and Recreation Department maintains a total of 772 acres of parks and open space areas.[58]

The project site is located within Lakewood Park, a neighborhood-serving public park that includes a non-operational pool facility, playground equipment, open turf area, and tennis and basketball courts.

[56] The number of officers per squad varies depending on the time of day and work shift.
[57] City of Sunnyvale. Public Safety: Crime Information. Ten-year Crime Comparison Report (2010 to 2019). https://sunnyvale.ca.gov/civicax/filebank/blobdload.aspx?BlobID=22968. Accessed September 10, 2020.
[58] City of Sunnyvale. Recreation and Community: Parks. Available at <https://sunnyvale.ca.gov/community/parks/default.htm>. Accessed August 14, 2020.

Libraries

The Sunnyvale Public Library is located five miles south of the project site at 665 W Olive Avenue.

4.15.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:				
1) Fire Protection?	☐	☐	☒	☐
2) Police Protection?	☐	☐	☒	☐
3) Schools?	☐	☐	☐	☒
4) Parks?	☐	☐	☒	☐
5) Other Public Facilities?	☐	☐	☐	☒

Impact PS-1:	**The project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for fire protection services. (Less than Significant Impact)**

The proposed project would construct a new library. This new occupied structure would likely intensify the use of the project site compared to existing conditions. However, the library would be built in accordance with the California Building Code and would be required to be maintained in accordance with applicable City policies to promote public and property safety. Additionally, the proposed project would be in conformance with the General Plan, and would not increase demand beyond what is expected and assumed in the General Plan. For these reasons, the project would not require new or expanded fire protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios. **(Less than Significant Impact)**

Impact PS-2:	**The project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for police protection services. (Less than Significant Impact)**

The project site is currently served by the Department of Public Safety. As with fire protection services, discussed under Impact PS-1, the proposed project could incrementally increase the demand for police protection services to the site. As discussed under Impact PS-2, the library would be built in accordance with the California Building Code and would conform with the General Plan, and would not increase demand beyond what is expected and assumed in the General Plan. The incremental increase in police protection services would not require new or expanded police protection facilities, the construction of which could cause environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for police protection services. In addition, the Department of Public Safety would review the final site design to ensure that the project would provide adequate safety and security measures. **(Less than Significant Impact)**

Impact PS-3:	**The project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for schools. (No Impact)**

The project proposes public and community uses, which would serve the existing and planned population in the City. The project does not propose housing units or other uses that would generate new students and impact school facilities. The project, therefore, would not require new or expanded school facilities, the construction of which could cause significant environmental impacts. **(No Impact)**

Impact PS-4:	**The project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance for parks. (Less than Significant Impact)**

New residents increase demand for parks. The proposed project would not generate new residents and, therefore, would not generate demand for parks. The project would construct a library and learning center that would serve the existing and planned population in the City. As discussed in Section 4.16 Recreation in response to Impact REC-2, construction of the proposed project would not result in a significant impact to the environment with implementation of Standard Project Conditions. **(Less than Significant Impact)**

Impact PS-5:	**The project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for other public facilities. (No Impact)**

New residents increase demand on library facilities. The proposed project is a library and learning center that would serve the existing and planned population in the City. The project would not generate new residents. Since the project itself is a library, it would not require new or expanded library facilities, the construction of which could cause significant environmental impacts. The environmental effects of the construction and operation of the proposed library are discussed throughout this Initial Study. **(No Impact)**

4.16 RECREATION

4.16.1 Environmental Setting

4.16.1.1 *Regulatory Framework*

State

Government Code Section 66477

The Quimby Act (included within Government Code Section 66477) requires local governments to set aside parkland and open space for recreational purposes. It provides provisions for the dedication of parkland and/or payment of fees in lieu of parkland dedication to help mitigate the impacts from new residential developments. The Quimby Act authorizes local governments to establish ordinances requiring developers of new residential subdivisions to dedicate parks, pay a fee in lieu of parkland dedication, or perform a combination of the two.

Sunnyvale General Plan

The General Plan includes policies for the purpose of avoiding or mitigating impacts from planned development in the City. The goal and policies below are specific to recreation and are applicable to the proposed project.

Goal LT-9: *Adequate and balanced open space: Provide and maintain adequate and balanced open space and recreation facilities for the benefit of maintaining a healthy community based on community needs and the ability of the city to finance, construction, maintain and operate these facilities now and in the future.*

Policy LT-9.5: Maintain existing park and open space tree inventory through the replacement of trees with an equal or greater number of trees when trees are removed due to disease, park development or other reasons.

Policy LT-9.14: Mitigate as feasible the open space need in areas identified as underserved through the acquisition of new parkland and/or the addition of amenities in order to bring sites in line with design and development guidelines.

4.16.1.2 *Existing Conditions*

The City of Sunnyvale provides parklands, open space, and community facilities for public recreation and community services. The City's Parks and Recreation Department maintains a total of 772 acres of parks and open space areas.[59] The project site is located within the Lakewood Park, a neighborhood-serving public park that includes a nonoperational pool facility, playground equipment, open turf area, and tennis and basketball courts.

[59] City of Sunnyvale. Recreation and Community: Parks. Available at <https://sunnyvale.ca.gov/community/parks/default.htm>. Accessed August 14, 2020.

4.16.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
1) 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?	☐	☐	☒	☐
2) 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?	☐	☐	☒	☐

Impact REC-1: The project would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated. (Less than Significant Impact)

As discussed in Section 4.15 Public Services, the proposed project would not generate new residents and, therefore, would not increase demand for parks or other recreational facilities. The project proposes to demolish the existing nonoperational public swimming pool and construct a library that would serve the existing and planned population in the City.

Implementation of the proposed project would intensify the use of the project site compared to existing conditions with the addition of a new library. The project, however, would not result in substantial adverse physical impacts to the park. For these reasons, the substantial physical deterioration of the facility would not occur or be accelerated. **(Less than Significant Impact)**

Impact REC-2: The project does not include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment. (Less than Significant Impact)

The project proposes to construct a library and learning center on the project site. The Standard Conditions identified in Sections 4.3 Air Quality, 4.4 Biological Services, 4.6 Energy, 4.7 Geology and Soils, and 4.10 Hydrology would ensure that the project would not have significant adverse physical effects on the environment. **(Less than Significant Impact)**

4.17 TRANSPORTATION

The following discussion is based in part on a Traffic Impact Analysis (TIA) prepared by Hexagon Transportation Consultants, Inc. on July 22, 2021. The report is attached as Appendix F.

4.17.1 Environmental Setting

4.17.1.1 *Regulatory Framework*

State

Regional Transportation Plan

MTC is the transportation planning, coordinating, and financing agency for the nine-county San Francisco Bay Area, including Santa Clara County. MTC is charged with regularly updating the Regional Transportation Plan, a comprehensive blueprint for the development of mass transit, highway, airport, seaport, railroad, bicycle, and pedestrian facilities in the region. MTC and ABAG adopted Plan Bay Area 2040 in July 2017, which includes a Regional Transportation Plan to guide regional transportation investment for revenues from federal, state, regional and local sources through 2040.

Senate Bill 743

SB 743 establishes criteria for determining the significance of transportation impacts using a vehicle miles traveled (VMT) metric intended to promote the reduction of GHG emissions, the development of multimodal transportation networks, and a diversity of land uses. Specifically, SB 743 requires analysis of VMT in determining the significance of transportation impacts. Local jurisdictions are required by Governor's Office of Planning and Research (OPR) to implement a VMT policy by July 1, 2020.

SB 743 did not authorize OPR to set specific VMT impact thresholds, but it did direct OPR to develop guidelines for jurisdictions to utilize. CEQA Guidelines Section 15064.3(b)(1) describes factors that might indicate whether a development project's VMT may be significant. Notably, projects located within 0.50 mile of transit should be considered to have a less than significant transportation impact based on OPR guidance.

Regional and Local

Congestion Management Program

VTA oversees the Congestion Management Program (CMP), which is aimed at reducing regional traffic congestion. The relevant state legislation requires that urbanized counties in California prepare a CMP in order to obtain each county's share of gas tax revenues. State legislation requires that each CMP define traffic LOS standards, transit service standards, a trip reduction and transportation demand management plan, a land use impact analysis program, and a capital improvement element. VTA has review responsibility for proposed development projects that are expected to affect CMP-designated intersections.

City of Sunnyvale Vehicle Miles Traveled (VMT) Policy

As of June 2020, the City of Sunnyvale adopted a new VMT Policy to meet the state requirements set by SB 743. The policy establishes VMT to comply with CEQA required assessments of transportation impacts, baselines and thresholds for measuring CEQA transportation impacts, exemptions from VMT analysis, and requirements for a Local Transportation Analysis (LTA) to meet the Congestion Management Program (CMP).

Sunnyvale General Plan

The General Plan includes policies for the purpose of avoiding or mitigating impacts from planned development in the City. The goal and policies below are specific to transportation and are applicable to the proposed project.

Goal LT-3: *An effective multimodal transportation system: Offer the community a variety of transportation modes for local travel that are also integrated with the regional transportation system and land use pattern. Favor accommodation of alternative modes to the automobile as a means to enhance efficient transit use, bicycling, and walking and corresponding benefits to the environment, person-throughput, and qualitative improvements to the transportation system environment.*

Policy LT-3.1: Use land use planning, including mixed and higher-intensity uses, to support alternatives to the single-occupant automobile such as walking and bicycling and to attract and support high investment transit such as light rail, buses, and commuter rail.

Policy LT-3.5: Follow California Environmental Quality Act requirements, congestion management program requirements, and additional city requirements when analyzing the transportation impacts of proposed projects and assessing the need for offsetting transportation system improvements or limiting transportation demand.

4.17.1.2 *Existing Conditions*

Existing Roadway Network

Roadways within or near the project area are described below.

Lawrence Expressway is a north-south, eight-lane expressway with a speed limit of 50 miles per hour. It begins at Saratoga Avenue in the south, crosses through Sunnyvale, and extends northward and transitions into Caribbean Drive. Lawrence Expressway connects with US 101 and SR 237 via full-access freeway interchanges. Lawrence Expressway provides access to the project site via Lakebird Drive and Lakehaven Drive.

Tasman Drive is a two- to four-lane roadway with a speed limit of 40 miles per hour in the project vicinity. It begins at Morse Avenue in the west and extends east past I-880 and transitions into Great Mall Parkway. Tasman Drive includes sidewalks along some segments in both directions of travel

and crosswalks at signalized intersections. Tasman Drive provides access to the project site via Lawrence Expressway.

Lakehaven Drive is an east-west, two-lane local roadway that begins west of Lakewood Drive and transitions into Sandia Avenue in the east at Lawrence Expressway. In the project vicinity, Lakehaven drive has a speed limit of 25 miles per hour and includes sidewalks along both sides of the road. Lakehaven Drive provides access to the project site via its intersection with Silverlake Drive.

Lakechime Drive is an east-west two-lane roadway that extends from Lakefair Drive in the west and ends at Silverlake Drive. Lakechime has a speed limit of 25 miles per hour and includes sidewalks along both sides of the ride. Lakechime Drive provides direct access to the project site.

Existing Transit Service

Transit services near the project site are provided by the Santa Clara Valley Transportation Authority (VTA). The closest bus stop to the project site is located on Lakebird Drive, approximately 720 feet from the project site, and is served by local bus route 55, which serves De Anza College to Old Ironsides Station. The closest VTA Light Rail Transit (LRT) station is approximately 0.7 mile from the project site, located on Tasman Drive. This LRT station is served by the Mountain View-Alum Rock LRT Line.

Existing Pedestrian and Bicycle Facilities

Pedestrian Facilities

Sidewalks are present along the streets in the vicinity of the project site, including Lakechime Drive, Meadowlake Drive, Lakebird Drive, Silverlake Drive, Lakehaven Drive, and Lawrence Expressway. Crosswalks are present at the signalized intersections in the vicinity of the project site.

Bicycle Facilities

The bicycle facilities that exist within the vicinity of the project site include bike paths (Class I bike path), striped bike lanes (Class II bikeways), and signed bike routes (Class III bikeway). Bike paths are shared between pedestrians and bicyclists and separated from motor vehicle traffic. Bike lanes are lanes on roadways designated for use by bicycles. Bike lanes have special lane markings, pavement legends, and signage. Bike routes are typically designated only with signage or with painted shared lane markings on a road that indicate to motorists that bicyclists may use the full travel lane.

Within the project area, the John W. Christian Greenbelt bike path is present within Lakewood Park, south of the project site. The bike path connects to the bike route on Wedding Street to continue along bike facilities on Fair Oaks Avenue and Tasman Drive. Bike lanes are present along Lakedale Way, which connects to Lawrence Expressway via a pedestrian overpass. The pedestrian overpass also connects to the bike lanes on Blazingwood Drive, which intersects the continuation of the Greenbelt bike path. Signed bike routes are present at Fair Oaks Avenue, and transition into bike lanes north of Tasman Drive. Biking is permitted along both sides of Lawrence Expressway.

Existing bicycle facilities in the vicinity of the project site are well-connected and provide access to the project site.

Existing Intersection Level of Service

The intersection level of service at the study intersections were evaluated against the City's and CMP standards. The results of the intersection level of service analysis under existing conditions are summarized in Table 4.17-1 below.

Table 4.17-1: Existing Level of Service

No.	Intersection	LOS Standards	Peak Hour	Count Date	Average Delay	LOS
1	Lawrence Expressway and Tasman Drive	E	AM PM	2/6/20 11/1/18	49.6 55.0	D D-
2	Lawrence Expressway and Lakehaven Drive/Sandia Avenue	E	AM PM	2/6/20 2/6/20	95.7 71.5	F E

Source: Hexagon Transportation Consultants, Inc. *Lakewood Park Library Development Traffic Impact Analysis Report.* July 22, 2021.

The results of the analysis show that the Lawrence Expressway and Lakehaven Drive/Sandia Avenue intersection operates at an unacceptable LOS F during the AM peak hour.

4.17.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadways, bicycle lanes, and pedestrian facilities?	☐	☐	☒	☐
2) Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?	☐	☐	☐	☒
3) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☒	☐
4) Result in inadequate emergency access?	☐	☐	☒	☐

Impact TRN-1:	The project would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadways, bicycle lanes, and pedestrian facilities. (Less than Significant Impact)

According to the City of Sunnyvale VMT policy, city facilities such as parks and branch libraries are considered exempt from a detailed VMT analysis. The proposed library project is considered to be a city facility, and therefore would not result in significant increases to VMT. The new library would serve the surrounding neighborhoods by providing a shorter route to a library than existing libraries, thereby serving to limit VMT.

The TIA analyzed two signalized CMP intersections: Lawrence Expressway and Tasman Drive, and Lawrence Expressway and Lakehaven Drive/Sandia Avenue. The definition of an impact at a CMP intersection is the same for the City of Sunnyvale, except that the standard for acceptable level of service for all CMP and regional intersections is LOS E or better. However, for Sunnyvale intersections on roadways that are designated as regionally significant, the minimum level of service is LOS E. In the study area, signalized intersections within Sunnyvale along Lawrence Expressway are considered regionally significant. Thus, the minimum level of service required at the study intersections is LOS E.

Traffic conditions were analyzed for the weekday AM and PM peak hours of traffic. The weekday AM peak hour of traffic generally falls within the 7:00 to 10:00 AM period and the weekday PM peak hour is typically in the 4:00 to 7:00 PM period. It is during these times that the most congested traffic conditions occur on a typical weekday.

Traffic conditions were evaluated under the following conditions:

Scenario 1: *Existing Conditions.* Existing traffic volumes at study intersections were estimated based on available traffic counts conducted for local traffic studies and the 2019 Congestion Management Program (CMP) monitoring report. The study intersections were evaluated with a level of service analysis using Traffic software in accordance with the 2010 Highway Capacity Manual methodology.

Scenario 2: *Background Conditions.* Background conditions were estimated by adding to existing traffic volumes the project traffic from approved but not yet completed and occupied developments in the study area. Approved project trips information was obtained from the City of Sunnyvale and the City of Santa Clara. In addition, roadway improvements associated with the approved developments were assumed as directed by City Staff.

Scenario 3: *Existing Plus Project Conditions.* Existing plus project conditions were estimated by adding to existing traffic volumes the additional traffic generated by the project. Existing plus project conditions were evaluated relative to existing conditions in order to determine the effects the project would have on the existing roadway network.

Scenario 4: *Background Plus Project Conditions.* Background traffic volumes with the project were estimated by adding to background traffic volumes the additional traffic generated by the project. Background plus project conditions were evaluated relative to background conditions in order to determine potential project impacts.

Scenario 5: *Cumulative No Project Conditions.* Cumulative No Project traffic volumes were estimated from 2030 forecasts from the Sunnyvale travel demand model and adding vehicle trips from approved and pending development projects in the study area.

Scenario 6: *Cumulative Plus Project Conditions.* Cumulative Plus Project traffic conditions were estimated by adding to the Cumulative No Project volumes the additional traffic generated by the project. Cumulative plus project conditions were evaluated relative to Cumulative No Project conditions in order to determine potential project impacts.

Project Trip Generation

Trip generation estimates are based on trip generation rates from the Institute of Transportation Engineers' (ITE's) *Trip Generation Manual*, Tenth Edition. The estimates for the proposed project are shown in Table 4.17-2 below.

Table 4.17-2: Project Trip Generation Estimates

Proposed Land Use	Size	Daily	AM Peak Hour			PM Peak Hour		
		Trip Total	In	Out	Total	In	Out	Total
Library[1]	20,125 square feet	1,450	14	6	**20**	79	85	**164**

Source: Hexagon Transportation Consultants, Inc. *Lakewood Park Library Development Traffic Impact Analysis Report.* July 22, 2021.

[1]Average ITE trip rates for library (Land Use 590) are used to estimate the trips for the proposed library.

The calculated number of trips in Table 4.17-2 reflect the project description at the time the analysis was conducted, i.e., construction of a 20,125 square foot building with 112 parking spaces on 2.38 acres of land. As discussed in Section 3.0 Project Description, the proposed project has been refined and the updated project description would disturb a total of 2.86 acres, consisting of a 22,771 square foot building with 100 parking spaces and 21,000 square feet of ground disturbance for utilities improvements. The project changes would be negligible to the overall analysis.

Intersection Level of Service Analysis

Existing Plus Project Conditions

The results of the intersection level of service analysis under existing plus project conditions are summarized in Table 4.17-3 below.

Table 4.17-3: Study Intersections Level of Service – Existing Plus Project Conditions							
No.	**Intersection**	**Peak Hour**	**Existing**		**Existing Plus Project**		
			Average Delay	**LOS**	**Average Delay**	**LOS**	**Increase in Critical V/C**
1	Lawrence Expressway and Tasman Drive	AM	49.6	D	49.6	D	0.1
		PM	55.0	D-	55.6	E+	0.4
2	Lawrence Expressway and Lakehaven Drive/Sandia Avenue	AM	95.7	F	96.6	F	1.1
		PM	71.5	E	84.6	F	13.9
Source: Hexagon Transportation Consultants, Inc. *Lakewood Park Library Development Traffic Impact Analysis Report.* July 22, 2021.							

The results show that the Lawrence Expressway and Tasman Drive intersection would operate at an acceptable LOS during both the AM and PM peak hour, since the minimum level of service required at the study intersections is LOS E, as explained previously.

The Lawrence Expressway and Lakehaven Drive/Sandia Avenue intersection would operate at an unacceptable LOS F during both the AM and PM peak hour. The project would have an adverse effect on the intersection of Lawrence Expressway and Lakehaven Drive/Sandia Avenue during the PM peak hour under existing plus project conditions.

Background Plus Project Conditions

The results of the intersection level of service analysis under background plus project conditions are summarized in Table 4.17-3 below.

Table 4.17-4: Study Intersections Level of Service – Background Plus Project Conditions							
No.	**Intersection**	**Peak Hour**	**Existing**		**Existing Plus Project**		
			Average Delay	**LOS**	**Average Delay**	**LOS**	**Increase in Critical V/C**
1	Lawrence Expressway and Tasman Drive	AM	92.9	F	92.9	F	0.0
		PM	82.8	F	83.8	F	-0.2
2	Lawrence Expressway and Lakehaven Drive/Sandia Avenue	AM	92.3	F	93.1	F	0.8
		PM	80.8	F	92.6	F	11.4
Source: Hexagon Transportation Consultants, Inc. *Lakewood Park Library Development Traffic Impact Analysis Report.* July 22, 2021.							

The results show that the Lawrence Expressway and Lakehaven Drive/Sandia Avenue intersection would operate at an unacceptable LOS F during both the PM peak hour under background without project conditions. The addition of project traffic would cause the delay to increase by 11.4 seconds and the critical V/C to increase by 0.05 during the PM peak hour. This constitutes an unacceptable level of delay according to the thresholds established by the City of Sunnyvale.

Cumulative Conditions

The cumulative no project traffic volumes were estimated using the 2030 forecasts from the Sunnyvale travel demand model and adding vehicle trips from approved and pending development projects in the study area. Five pending projects, located in the City of Santa Clara, were included in the cumulative scenario based on their proximity to the project site.[60]

The cumulative plus project traffic volumes were calculated by adding together the project trip estimates shown in Table 4.17-2 and the cumulative no-project traffic volumes.

The results of the intersection level of service analysis, shown in Table 4.17-5 show that both intersections would operate at unacceptable levels of service (LOS F) under both cumulative no project conditions and cumulative with project conditions.

Table 4.17-5: Cumulative Conditions Intersection Levels of Service Results

No.	Intersection	Peak Hour	Cumulative				
			No Project		With Project		
			Average Delay	LOS	Average Delay	LOS	Increase in Critical V/C
1	Lawrence Expressway and Tasman Drive	AM	>120	F	>120	F	0.000
		PM	>120	F	>120	F	0.011
2	Lawrence Expressway and Lakehaven Drive/Sandia Avenue	AM	>120	F	>120	F	0.002
		PM	>120	F	>120	F	0.063

Source: Hexagon Transportation Consultants, Inc. *Lakewood Park Library Development Traffic Impact Analysis Report.* July 22, 2021.

The project would have an adverse effect on the intersection of Lawrence Expressway and Lakehaven Drive/Sandia Avenue during the PM peak hour under cumulative plus project conditions. Improvements are not planned at the Lawrence Expressway and Lakehaven Drive/Sandia Avenue intersection. The added project traffic would not result in a noticeable adverse effect at the Lawrence Expressway and Tasman Drive intersection.

[60] The five projects are located at 3005 Democracy Way, 2101 Tasman Drive, 5185 Lafayette Street, 2263 Calle Del Muno, and 5155/5120 Stars and Stripes Drive in Santa Clara.

Potential Improvements

The traffic report analyzed two improvement possibilities, discussed below.

Potential At-Grade Improvement: The City's General Plan identifies the Lawrence Expressway and Lake Haven/Sandia Drive intersection as having deficiencies under year 2035 conditions. The General Plan recognizes that a potential at-grade improvement could improve the intersection operations. At-grade improvement would require widening the northbound leg to include a total of two left-turn lanes, four through lanes, and one right-turn lane. The southbound leg would need to be widened to two left-turn lanes, five through lanes, and one right-turn lane. The eastbound leg would need to be widened to two left-turn lanes, one shared through-right lane, and one right-turn lane. The westbound leg would require a third left-turn lane. However, the County of Santa Clara currently has no plans to add capacity to Lawrence Expressway. All components of the improvement would require additional right-of-way acquisition and displacement of homes and businesses. Widening the intersection would also extend the pedestrian and bicycle exposure time to traffic, which could lead to secondary pedestrian and bicycle impacts. Therefore, there exists no feasible at-grade improvement at this intersection because the County has no plans for at-grade improvements; the improvement would displace homes and businesses; and the improvement would lead to secondary pedestrian and bicycle impacts.

Potential Grade-Separation Improvement: The General Plan states that an interchange would eliminate the impact at this intersection. However, this intersection is within County of Santa Clara jurisdiction, and the County currently has no plans to construct an interchange at this intersection.

Given the identified improvements are not feasible, the project would contribute to unacceptable LOS at the two study intersections under project, background, and cumulative conditions. The project would be inconsistent with the CMP. However, with the effective date of the CEQA Guidelines implementing SB 743, a project's contribution to increased vehicle delay or congestion is no longer considered an impact on the environment. Therefore, the inconsistency with CMP would not lead to adverse environmental effects, given there are no feasible roadway improvements, and project impacts would be less than significant, despite the projected increased delay. **(Less than Significant Impact)**

Impacts to Pedestrian, Bicycle, and Transit Facilities

Pedestrian Facilities

Pedestrian facilities consist of sidewalks, crosswalks, and pedestrian signals at signalized intersections. The project site is easily accessible for pedestrians. The proposed project would generate pedestrian walking trips between the library and neighborhood. The project proposes to provide new sidewalks along the frontage of Lakechime Drive.

Bicycle Facilities

Bicycle facilities in the project vicinity include bike paths and bike lanes. Within the project area, a bike path is present in Lakewood Park, just south of the project site, and a bike lane is present along Lakedale Way. Bicyclists are permitted along Lawrence Expressway. Although bike facilities are not

present within the surrounding streets, the streets carry low traffic volumes and are conducive to bicyclists. Overall, the site is easily accessible by bicycle.

Transit Facilities

The project site is located about one mile north of the Lawrence Caltrain Station. It is not expected that future library patrons would utilize Caltrain services.

Currently, VTA bus route 55 travels within the project vicinity through both of the study intersections. It is expected that the proposed library would only generate minimal transit trips during the AM and PM peak hours. This new ridership generated by the project could be accommodated by the existing and planned transit services.

The proposed project would have less than significant impacts to pedestrian, bicycle, and transit facilities. **(Less than Significant)**

Impact TRN-2:	**The project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b). (No Impact)**

The proposed library project would provide local residents with improved access to library facilities closer than current options provided elsewhere in the City. As discussed under Impact TRN-1, the project is considered to be a city facility and is exempt from VMT analysis. The project would not be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b). **(No Impact)**

Impact TRN-3:	**The project would not substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). (Less than Significant Impact)**

The proposed project does not propose to incorporate sharp curves into the design, make changes to existing intersections, or increase the use of incompatible uses. However, the project would increase traffic at the intersections listed below:

- Meadowlake Drive and Lakebird Drive
- Silverlake Drive and Lakebird Drive
- Silverlake Drive and Lakechime Drive
- Silverlake Drive and Lakehaven Drive

To facilitate safe pedestrian access to the proposed library, all-way stop signs and crosswalks shall be installed at the listed intersections.

Furthermore, in accordance with the City of Sunnyvale Zoning Code, the project design would implement the following:

- The one-way driveway shall be at least 12 feet wide, and the two-way driveways shall be at least 20 feet wide.

- Two-way drive aisles shall be 24 feet wide where 90-degree parking is provided.
- Parking spaces shall be 18 feet long by 8.5 feet wide for standard parking spaces and 18 feet long by 9 feet wide for accessible parking spaces.
- A passenger loading zone shall be provided along the project frontage.
- Four ADA accessible spaces shall be provided, including one van accessible space.
- The project shall provide six bicycle spaces. At least five of the required bicycle spaces should be Class II bicycle racks. Bicycle racks should be provided along the project frontage, between the parking lot and building. At least one secure, long-term bicycle parking space should be provided.

The project shall comply with the Department of Public Works standard inspection process to ensure safe pedestrian and bicycle access at the project site and in the project site vicinity during construction activities. Therefore, the project would have a less than significant impact. **(Less than Significant Impact)**

Impact TRN-4:	**The project would not result in inadequate emergency access. (Less than Significant Impact)**

Emergency access would be maintained for the period of construction of the project. Once constructed, the project would ensure free and clear accessways are maintained for emergency situations during operation of the project. Thus, the project would not result in inadequate emergency access and the impact is less than significant. **(Less than Significant Impact)**

4.18 TRIBAL CULTURAL RESOURCES

The discussion below is based in part on a Cultural Report prepared by Holman & Associates, Inc. on August 25, 2020. The report is on file with the City.

4.18.1 Environmental Setting

4.18.1.1 *Regulatory Framework*

State

Assembly Bill 52

AB 52, effective July 2015, established a new category of resources for consideration by public agencies called Tribal Cultural Resources (TCRs). AB 52 requires lead agencies to provide notice of projects to tribes that are traditionally and culturally affiliated with the geographic area if they have requested to be notified. Where a project may have a significant impact on a tribal cultural resource, consultation is required until the parties agree to measures to mitigate or avoid a significant effect on a tribal cultural resource or until it is concluded that mutual agreement cannot be reached.

Under AB 52, TCRs are defined as follows:

- Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are also either:
    - Included or determined to be eligible for inclusion in the California Register of Historic Resources, or
    - Included in a local register of historical resources as defined in Public Resources Code Section 5020.1(k).
- A resource determined by the lead agency to be a TCR.

4.18.1.2 *Existing Conditions*

According to the Cultural Report completed by Holman & Associates, Inc., no tribal cultural resources or features are known to exist within the project site.

AB 52 requires lead agencies to conduct formal consultations with California Native American tribes during the CEQA process, when tribes request it, to identify tribal cultural resources that may be subject to significant impacts by a project. Where a project may have a significant impact on a tribal cultural resource, the lead agency's environmental document must discuss the impact and whether feasible alternatives or mitigation measures could avoid or substantially lessen the impact.

This consultation requirement applies to tribes that have sent written requests for notification of projects to the lead agency. Tamien Nation requested formal notice and information on all proposed projects within the City of Sunnyvale on June 14, 2021. On August 16, 2023, the City sent letters to Tamien Nation tribe representatives notifying them of the Lakewood Branch Library Facility Project. The City did not receive a response requesting consultation within the specified 30-day timeframe.

4.18.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
1) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?	☐	☐	☒	☐
2) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying 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.	☐	☐	☒	☐

Impact TCR-1: The project would not cause a substantial adverse change in the significance of a tribal cultural resource that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k). **(Less than Significant Impact)**

As discussed in Section 4.18.1.2, no known tribal cultural resources (TCRs) are present on-site and no tribes have requested consultation for the project. For this reason, the project would not cause an adverse change in the significance of TCRs listed on the California Register or City of Sunnyvale historic properties inventory. However, there is the potential for unknown Native American artifacts or human remains to be present in the area. In the event that cultural resources are unearthed, impacts would be reduced to a less than significant level with implementation of mitigation measures MM CUL-1.1 and MM CUL-1.2 described in Section 4.5 Cultural Resources, related to discovery of archaeological resources or human remains. **(Less Than Significant Impact)**

Impact TCR-2:	**The project would not cause a substantial adverse change in the significance of a tribal cultural resource that is 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. (Less than Significant Impact)**

As discussed under Impact TCR-1, it is unlikely that any TCRs would be found on the project site. However, in the case that TCRs are unearthed during project construction, compliance with MM CUL-1.1 and MM CUL-1.2, as discussed under Impact CUL-1, would reduce impacts to a less-than-significant level. **(Less than Significant Impact)**

4.19 UTILITIES AND SERVICE SYSTEMS

4.19.1 Environmental Setting

4.19.1.1 *Regulatory Framework*

State

State Water Code

Pursuant to the State Water Code, water suppliers providing water for municipal purposes to more than 3,000 customers or supplying more than 3,000 acre-feet (approximately 980 million gallons) of water annually must prepare and adopt an urban water management plan (UWMP) and update it every five years. As part of a UWMP, water agencies are required to evaluate and describe their water resource supplies and projected needs over a 20-year planning horizon, water conservation, water service reliability, water recycling, opportunities for water transfers, and contingency plans for drought events.

Assembly Bill 939

The California Integrated Waste Management Act of 1989, or AB 939, established the Integrated Waste Management Board, required the implementation of integrated waste management plans, and mandated that local jurisdictions divert at least 50 percent of solid waste generated (from 1990 levels), beginning January 1, 2000, and divert at least 75 percent by 2010. Projects that would have an adverse effect on waste diversion goals are required to include waste diversion mitigation measures.

Assembly Bill 341

AB 341 sets forth the requirements of the statewide mandatory commercial recycling program Businesses that generate four or more cubic yards of garbage per week and multi-family dwellings with five or more units in California are required to recycle. AB 341 sets a statewide goal for 75 percent disposal reduction by the year 2020.

Senate Bill 1383

SB 1383 establishes targets to achieve a 50 percent reduction in the level of the statewide disposal of organic waste from the 2014 level by 2020 and a 75 percent reduction by 2025. The bill grants CalRecycle the regulatory authority required to achieve the organic waste disposal reduction targets and establishes an additional target that at least 20 percent of currently disposed edible food is recovered for human consumption by 2025.

California Green Building Standards Code

In January 2010, the State of California adopted the California Green Building Standards Code, establishing mandatory green building standards for all buildings in California. The code covers five categories: planning and design, energy efficiency, water efficiency and conservation, material conservation and resources efficiency, and indoor environmental quality. These standards include the

following mandatory set of measures, as well as more rigorous voluntary guidelines, for new construction projects to achieve specific green building performance levels:

- Reducing indoor water use by 20 percent;
- Reducing wastewater by 20 percent;
- Recycling and/or salvaging 50 percent of nonhazardous construction and demolition debris; and
- Providing readily accessible areas for recycling by occupants.

Local

Sunnyvale General Plan

The General Plan includes policies for the purpose of avoiding or mitigating impacts from planned development in the City. The goal and policies below are specific to utilities and are applicable to the proposed project.

Goal EM-14:	*Recycling and Source Reduction Programs: Reduce solid waste disposal to 50% or less of the amount generated in 1990 (as adjusted to reflect population and economic changes) in the most cost-effective manner.*
Policy EM-14.1:	Reduce generation of solid waste by providing source reduction programs and promoting reduction behavior.
Policy EM-14.3:	Meet or exceed all federal, state, and local laws and regulations concerning solid waste diversion and implementation of recycling and source reduction programs.
Goal EM-15:	*Environmentally Sound Disposal: Dispose of solid waste in an environmentally sound, dependable, and cost-effective manner.*
Policy EM-15.1:	Assure that the City possess a minimum of five years of refuse disposal capacity at all times.
Policy EM-15.2:	Reduce the amount of refuse being disposed, generate recycling revenues, and minimize truck travel to the disposal site through use of the Sunnyvale Materials Recovery and Transfer (SMaRT) Station.

4.19.1.2 *Existing Conditions*

Water Service

The City's water supply is a combination of imported water, recycled water, and groundwater.[61] Approximately 92 percent of the water supply is imported from the San Francisco Public Utilities

[61] The percentage of water from each source can vary.

Commission (SFPUC) and the Santa Clara Valley Water District (SCVWD), five percent from groundwater, and three percent from recycled water. The City's total water demand in 2010 was 21,465 acre-feet per year (AFY), and the City projects a demand of 25,506 AFY by 2030.

Water is provided to the site by the SFPUC, who manages the Hetch-Hetchy water system (imported from the Sierra Nevada). Based on a water supply agreement in 2009 with the SFPUC, the City of Sunnyvale is provided a minimum of 8.93 million gallons per day (MGD) of water, equivalent to 10,003 AFY.

There is an eight-inch water supply line in Lakechime Drive that serves the project site. Under existing conditions, the project site's only water demand is for the baseball field, since the pool is not operational.

Storm Drainage

The City of Sunnyvale owns and maintains the municipal storm drainage system which serves the project site. The majority of the project site is impervious, e.g., the parking lot and pool. Runoff from the site flows into drains that empty into Calabazas Creek. Calabazas Creek flows north, carrying the runoff from the storm drains into San Francisco Bay. There is no overland release of stormwater directly into any water body from the project site. There is an eight-inch storm drain line in Lakechime Drive that serves the project site.

Wastewater

Wastewater from the City is treated at the Sunnyvale Water Pollution Control Plant (WPCP), located north of CA-237 on Borregas Avenue.[62] The WPCP is owned by the City and provides primary, secondary, and tertiary treatment of wastewater and has an average dry weather and wet weather flow capacity of 29.5 and 40.0 MGD of wastewater, respectively. The WPCP treats wastewater from residential, commercial, and industrial sources in Sunnyvale, the Rancho Rinconada portion of Cupertino, and Moffett Federal Airfield. Sewage generated in the City is collected via a system of sewer lines and trunks and conveyed through five interceptors (the Lawrence, Borregas, Lockheed, Moffett, and Cannery interceptors) to the WPCP.[63] Treated wastewater from the WPCP is discharged to San Francisco Bay via the Guadalupe Slough.

The WPCP uses advanced secondary treatment consisting of the following process: primary treatment (sedimentation), secondary treatment (biological oxidation), and advanced secondary treatment (filtration and disinfection). These processes provide treatment to a level that meets or exceeds the NPDES discharge requirements. The amount and quality of this effluent is regulated by the RWQCB. The WPCP's permitted average dry weather flow (ADWF) design capacity is 29.5 mgd and the peak wet weather flow (PWWF) design capacity is 40 mgd with capability of handling instantaneous flows of 55 mgd.[64] The amount of influent wastewater handled by the WPCP varies within the time of day and within seasonal changes in demand. In 2021, the ADWF was

[62] City of Sunnyvale. Water Pollution Control Plant. Available at: https://sunnyvale.ca.gov/property/water/sewer/controlplant.htm. Accessed September 10, 2020.
[63] City of Sunnyvale. *City of Sunnyvale 2015 Urban Water Management Plan*. June 2016. Page 7-15.
[64] City of Sunnyvale. *Water Pollution Control Plant 2021 Annual NPDES Report.* February 1, 2022. Page 3.

approximately 12.5 mgd and the peak hourly maximum was 29.5 mgd.[65] The ADWF processing capacity of the WPCP was reduced from 29.5 mgd to 19.5 mgd[66] at the end of 2022.[67]

Sanitary sewer lines that serve the project site are maintained by the City's Environmental Services Department (ESD). There is an eight-inch sanitary sewer line in Lakechime Drive that serves the project site.

Solid Waste

Solid waste in the City of Sunnyvale is hauled to the Sunnyvale Materials Recover and Transfer Station (SMaRT Station) which has a permitted capacity of 1,500 tons per day.[68] The SMaRT station currently processes approximately 1,100 tons of solid waste, source-separated recyclables, and compostable materials per day (260,000 tpy), allowing for an additional 400 tons per day to be processed.

In 2018, the City diverted approximately 45 percent of solid waste from the landfill.[69] Additionally, the City has adopted a Zero Waste Strategic Plan that calls for 75 percent diversion by 2020 and 90 percent diversion by 2030.[70] Diverted materials include aluminum, cardboard, metals, concrete, soil, mixed paper, newsprint, glass, wood, yard waste and other compostable material, plastic, mattresses, and large appliances.

The City has an agreement for solid waste disposal with Waste Management, Inc., which landfills the City's waste at Kirby Canyon Landfill, through 2031.[71] Kirby Canyon Landfill has a capacity of 36.4 million cubic yards, with a remaining capacity of 15 million cubic yards as of January 1, 2020.[72] Based on the current remaining capacity available and projected volumes, Kirby Canyon Landfill is projected to close in 2068.[73]

[65] Ibid. Page 13.
[66] City of Sunnyvale. *Draft Sunnyvale Water Pollution Control Plant Master Plan Program Environmental Impact Report*. February 2016.
[67] Jennifer Ng, Assistant Director, City of Sunnyvale Department of Public Works. Personal Communication. March 22, 2022.
[68] CalRecycle. SWIS Facility/Site Activity Details. Sunnyvale MRF & Transfer Station (43-AA-0009). Available at: https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/1348?siteID=3376. Accessed September 10, 2020.
[69] City of Sunnyvale. Environmental Services Department. SMaRT Station Annual Report 2018-2019. Available at: https://sunnyvale.ca.gov/civicax/filebank/blobdload.aspx?blobid=25741. Accessed September 10, 2020.
[70] City of Sunnyvale. Zero Waste Strategic Plan: A Quantifiable Approach. February 2013. Accessed September 10, 2020.
[71] City of Sunnyvale. *Land Use and Transportation Element Draft Environmental Impact Report*. August 2016. (SCH#:2012032003). Page 3.11-24.
[72]Becky Azevedo, Technical Manager, Waste Management, Inc. Personal Communication. September 14, 2020.
[73] Ibid.

4.19.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☒	☐
2) Have insufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☒	☐
3) Result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☒	☐
4) 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?	☐	☐	☒	☐
5) Be noncompliant with federal, state, or local management and reduction statutes and regulations related to solid waste?	☐	☐	☒	☐

Impact UTL-1: The project would not require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects. (Less than Significant Impact)

The proposed project would install new water lines, sanitary sewer lines, and storm drain lines that would connect to existing utility lines on Lakechime Drive and Silverlake Drive.

Water

The proposed project's water demand was calculated using standard water use rates for the library land use type from the California Emissions Estimator Model (CalEEMod). The proposed library project would demand approximately 1,901 gallons of water per day (gpd)[74] for indoor use and 2,973

[74] CalEEMod Appendix D, Table 9.1: Water Use Rates. Library Land Use Type. Indoor Water.
31,289 gal / 1,000 sq ft x 22,177 sq ft proposed = 693,896.15 gal/year / 365 days/year = 1,901 gpd

gpd[75] for outdoor use, for a total demand of 4,874 gpd or 1,779,010 gallons per year, or about five AFY, less than one percent of the City's projected demand of 25,506 AFY by 2030. The proposed use would lead to an increase in water demand on the project site since the existing swimming pool is not operational and does not require water. **(Less than Significant Impact)**

Wastewater Treatment Facilities

The proposed project would connect to the City's existing sanitary sewer system through a sewer line in Lakechime Drive. As discussed in Section 4.19.1.2 Existing Conditions, the WPCP's processing capacity is 19.5 mgd. The proposed project, combined with the existing uses on-site, would generate approximately 1,615 gpd[76] of wastewater. The proposed project would generate less than one percent of the WPCP's processing capacity. Therefore, the proposed project would have a less than significant impact. **(Less than Significant Impact)**

Storm Drainage

The on-site storm drains would connect to the existing storm drain on Meadowlake Drive via an extension, and the project would contain 3,175 square feet of bioretention areas within the parking lot on the north side of the project site. The project would be consistent with the City's Stormwater Management Guidance Manual for Low Impact Development and Post-Construction Requirements and Storm Drainage Master Plan, and, therefore, would not cause the City's storm drainage system to exceed capacity. The on-site retention would be designed to convey a 10-year storm event. The City's existing storm drainage system has the capacity to serve the site. Therefore, impacts would be less than significant. **(Less Than Significant Impact)**

Electric Power, Natural Gas, and Telecommunications

The project would connect to existing electric power, and telecommunication lines in the project area. The project does not propose relocation of these utilities. Therefore, the project would not result in a significant environmental effect from the construction or relocation of electricity or telecommunication utilities. Silicon Valley Clean Energy (SVCE) is the official electricity provider for Sunnyvale. SVCE purchases carbon-free electricity and partners with PG&E to deliver this electricity over existing power lines. SVCE provides 100 percent carbon-free energy and customers in the City of Sunnyvale are automatically enrolled in the SVCE GreenStart default program, which offers electricity that is carbon-free and with 50 percent of the power from renewable sources. **(Less than Significant Impact)**

Impact UTL-2:	**The project would not have insufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years. (Less than Significant Impact)**

As discussed under Impact UTL-1 above, implementation of the proposed project would result in a total water demand of five AFY. According to the Water Supply Assessment (WSA) completed for

[75] CalEEMod Appendix D, Table 9.1: Water Use Rates. Library Land Use Type. Outdoor Water. 48,939 gal / 1,000 sq ft x 22,177 sq ft proposed = 1,085,320.20 gal/year / 365 days/year = 2,973 gpd

[76] Wastewater is calculated based on 85% of indoor use. 1,901 x 0.85 = 1,615 gpd.

the City's Land Use and Transportation Element (LUTE), the City has a sufficient program of water supply to serve the buildout of the City through 2035.[77] Furthermore, in the event of a drought, the City has a water shortage contingency plan that includes mandatory and voluntary water use restrictions, rate block adjustment, and approaches for enforcement. The WSA concluded that the City will meet its future water demand through 2035 from existing water supply contracts with the Santa Clara Valley Water District and San Francisco Public Utilities Commission as well as sources currently being planned, developed, and implemented (including expanding the service area for recycled water). For these reasons, there would be sufficient water supplies available to serve the project. Therefore, despite the increased water demand on the project site, the proposed project would have a less-than-significant impact. **(Less than Significant)**

Impact UTL-3:	**The project would not result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments. (Less than Significant Impact)**

The project site is currently served by an eight-inch sanitary sewer line located on Lakechime Drive. The proposed project would connect to the existing sewer line. Based on the increase in sewage generation described under Impact UTL-1, it is anticipated that the existing sewer line has sufficient capacity to accommodate project flows. Therefore, the proposed project would have a less-than-significant impact. **(Less than Significant Impact)**

Impact UTL-4:	**The project would not 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. (Less than Significant Impact)**

Solid waste generation was calculated using standard water use rates for the library land use type from the California Emissions Estimator Model (CalEEMod). The proposed library project would generate approximately 20.4 tons per year (tpy)[78]. The existing development generates minimal solid waste since the existing swimming pool is not operational and does not have regular visitors or employees.

As mentioned, the SMaRT station has a capacity of 1,500 tpy, and currently processes approximately 1,100 tons of solid waste, source-separated recyclables, and compostable materials per day (260,000 tpy), allowing for an additional 400 tons per day to be processed. The proposed project's generation of 18.5 tpy is equivalent to approximately 101 pounds of solid waste per day. Although redevelopment of the project site would increase solid waste generation, the proposed project would not generate excess solid waste because there is sufficient processing capacity at the SMaRT Station

[77] Michael Baker International. *California Senate Bill 610 Water Supply Assessment for Sunnyvale General Plan – Land Use and Transportation Element (LUTE).* November 2015.

[78] CalEEMod Appendix D, Table 10.1: Solid Waste Disposal Rates. Library Land Use Type.
0.92 tons / 1,000 sq ft x 22,177 sq ft proposed = 20.4 tons/year

to serve the project, as well as available capacity at the receiving landfill. Therefore, impacts would be less than significant. **(Less than Significant Impact)**

Impact UTL-5:	**The project would not be noncompliant with federal, state, or local management and reduction statutes and regulations related to solid waste. (Less than Significant Impact)**

The project would comply with requirements set forth by SB 341, SB 1383, and the City's General Plan. Therefore, impacts would be less than significant. **(Less than Significant Impact)**

4.20 WILDFIRE

4.20.1 Environmental Setting

4.20.1.1 *Regulatory Framework*

State

Fire Hazard Severity Zones

CAL FIRE is required by law to map areas of significant fire hazards based on fuels, terrain, weather, and other relevant factors. Referred to as Fire Hazard Severity Zones (FHSZs), these maps influence how people construct buildings and protect property to reduce risk associated with wildland fires. FHSZs are divided into areas where the state has financial responsibility for wildland fire protection, known as state responsibility areas (SRAs), and areas where local governments have financial responsibility for wildland fire protection, known as local responsibility areas (LRAs). Homeowners living in an SRA are responsible for ensuring that their property is in compliance with California's building and fire codes. Only lands zoned for very high fire hazard are identified within LRAs.

California Fire Code Chapter 47

Chapter 47 of the California Fire Code sets requirements for wildland-urban interface fire areas that increase the ability of buildings to resist the intrusion of flame or burning embers being projected by a vegetation fire, in addition to systematically reducing conflagration losses through the use of performance and prescriptive requirements.

California Public Resources Code Section 4442 through 4431

The California Public Resources Code includes fire safety regulations that restrict the use of equipment that may produce a spark, flame, or fire; require the use of spark arrestors on construction equipment that uses an internal combustion engine; specify requirements for the safe use of gasoline-powered tools on forest-covered land, brush-covered land, or grass-covered land; and specify fire suppression equipment that must be provided onsite for various types of work in fire-prone areas. These regulations include the following:

- Earthmoving and portable equipment with internal combustion engines would be equipped with a spark arrestor to reduce the potential for igniting a wildland fire (Public Resources Code Section 4442);
- Appropriate fire suppression equipment would be maintained during the highest fire danger period, from April 1 to December 1 (Public Resources Code Section 4428);
- On days when a burning permit is required, flammable materials would be removed to a distance of 10 feet from any equipment that could produce a spark, fire, or flame, and the construction contractor would maintain appropriate fire suppression equipment (Public Resources Code Section 4427); and
- On days when a burning permit is required, portable tools powered by gasoline-fueled internal combustion engines would not be used within 25 feet of any flammable materials (Public Resources Code Section 4431).

California Code of Regulations Title 14

The California Board of Forestry and Fire Protection has adopted regulations, known as SRA Fire Safe Regulations, which apply basic wildland fire protection standards for building, construction, and development occurring in a SRA. The future design and construction of structures, subdivisions, and developments in SRAs are required to provide for the basic emergency access and perimeter wildfire protection measures discussed in Title 14 of the California Code of Regulations.

4.20.1.2 *Existing Conditions*

CAL FIRE is required by law to map areas of significant fire hazards based on fuels, terrain, weather, and other relevant factors. Referred to as Fire Hazard Severity Zones (FHSZ), these maps influence how people construct buildings and protect property to reduce risk associated with wildland fires. The project site is not located in a FHSZ.[79]

4.20.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
1) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
2) 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?	☐	☐	☐	☒
3) 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?	☐	☐	☐	☒
4) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☐	☒

The project site is not located in or near state responsibility areas or lands classified as very high fire hazard severity zones; therefore, the project would not result in wildfire impacts. **(No Impact)**

[79] CAL FIRE. Fire Hazard Severity Zones Viewer. Accessed August 10, 2020. Available at <https://osfm.fire.ca.gov/media/5935/san_jose.pdf>.

4.21 MANDATORY FINDINGS OF SIGNIFICANCE

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
1)	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?	☐	☒	☐	☐
2)	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.)	☐	☒	☐	☐
3)	Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

Impact MFS-1: The project does not have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory. (Less than Significant Impact with Mitigation Incorporated)

As discussed in the previous sections of this Initial Study, the proposed project would not degrade the quality of the environment with implementation of the Standard Conditions and Mitigation Measures identified throughout the document. As discussed in Section 4.4 Biological Resources, implementation of MM BIO-1.1 would ensure the project would not disturb nesting activity and the project would have impacts on sensitive habitats or species. As discussed in Section 4.5 Cultural Resources and Section 4.18 Tribal Cultural Resources, MM CUL-1.1 and MM CUL-1.2 would reduce impacts on archaeological resources. The project would have no impact on historic resources. **(Less than Significant Impact with Mitigation Incorporated)**

Impact MFS-2:	The project does not have impacts that are individually limited, but cumulatively considerable. (Less than Significant Impact with Mitigation Incorporated)

Under Section 15065(a)(3) of the CEQA Guidelines, a lead agency shall find that a project may have a significant effect on the environment where there is substantial evidence that the project has potential environmental effects "that are individually limited, but cumulatively considerable." As defined in Section 15065(a)(3) of the CEQA Guidelines, cumulatively considerable means "that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects." This Initial Study evaluates the environmental impacts of the proposed library project. This Initial Study also takes into account other past, pending, and probable future projects whose impacts could combine to produce cumulative impacts.

Resource Topics not Impacted by the Project

The project would result in no wildfire hazards and would have no impact on Aesthetic Resources, Agricultural Resources, Land Use, Mineral Resources, Population and Housing, Public Services, or Recreational Facilities; therefore, the project has no potential to combine with other projects to result in cumulative impacts to those resources. **(No Cumulative Impact)**

Cumulative Air Quality Impacts

By its very nature, air pollution is largely a cumulative impact. The geographic area for cumulative air quality impacts is the San Francisco Bay Area Air Basin. No single project is sufficient in size, by itself, to result in nonattainment of ambient air quality standards. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. The project would emit criteria air pollutants and contribute to the overall regional emissions of these pollutants. The project-level thresholds identified by BAAQMD (which the project's impacts were compared to in Section 4.3, Air Quality) are the basis for determining whether a project has a cumulatively considerable contribution to the existing cumulatively significant air quality impact. The project's construction and operational criteria air pollutant emissions would be below BAAQMD thresholds for these pollutants. Additionally, the project would implement mitigation measure MM AIR-3.1 and Standard Condition AIR-1 to reduce community health risk impacts to sensitive receptors to a less-than-significant level. Therefore, the project would result in a less than cumulatively considerable contribution to significant regional air quality impact and to localized community health risks. **(Less Than Cumulatively Considerable Contribution to a Significant Cumulative Impact)**

Cumulative Biological Resources Impacts

The geographic area for cumulative impacts to trees includes the project site and adjacent parcels. There is a pending Lakewood Park Renovation and Enhancement project that would take place in the park area adjacent to the proposed Lakewood Library project. At the time of preparation of this Initial Study, the Lakewood Park Renovation and Enhancement project was in the preliminary design phases, and the City had not commenced environmental review of that adjacent park project. The park improvement project would involve upgrades to park infrastructure and furnishings, playground equipment, new dog park, mini skate park and water play areas, new lighting and lighting upgrades,

removal of existing concession stand, installation of modular restrooms, picnic tables, and replacement of existing grass field with synthetic grass.

All projects occurring within Sunnyvale that propose tree removal, including the proposed library project and pending park improvement project, would comply with the tree replacement requirements required by the City's Tree Preservation Ordinance. Therefore, the two combined projects (and any other cumulative projects) would have a less than significant cumulative impact. **(Less than Significant Cumulative Impact)**

The geographic area for cumulative impacts to sensitive habitats such as wetland, riparian habitats, and serpentine habitats, and special-status species would be Santa Clara County. The project would have no impact on riparian, wetland habitats or special-status species, and therefore, would not combine impacts to these habitats with other projects elsewhere. **(No Cumulative Impact)**

The project site is not located within an adopted Habitat Conservation Plan; therefore, the applicant is not required to pay Habitat Plan fees and the project would not have a cumulative impact. **(No Cumulative Impact)**

The geographic area for cumulative impacts to migratory wildlife would be Santa Clara County. Construction of projects throughout the County, including the proposed project, could result in a significant cumulative impact on nesting birds. Each project is subject to federal, state, and local regulations (including the MBTA, Fish and Game Code, and CEQA), which would avoid and/or minimize impacts to nesting birds. The project, with the implementation of mitigation measure MM BIO-1.1 and MM BIO-1.2, would comply with the MBTA and Fish and Game Code, would not result in a cumulatively considerable contribution to a significant cumulative impact to nesting birds. **(Less Than Cumulatively Considerable Contribution to Significant Cumulative Impact)**

Cumulative Cultural Resources Impacts

The project would have no impact on historic resources and, therefore, would not combine impacts to these resources with other projects or contribute to any cumulative impacts to these resources. **(No Cumulative Impact)**

The geographic area for cumulative archaeological resources and human remains impacts are locations within approximately 1,000 feet of the site. The pending Lakewood Park Renovation and Enhancement project would take place immediately adjacent to the project site.

Any proposed projects would be required to implement standard permit conditions and/or mitigation measures such as MM CUL-1.1 and MM CUL-1.2 to reduce potential impacts to archaeological resources and human remains during construction to less than significant. The two combined projects (and any other cumulative projects) would, therefore, have a less than significant cumulative impact on archaeological resources and human remains. **(Less Than Significant Cumulative Impact with Mitigation)**

Cumulative Geology and Soils Impacts

The geographic area for cumulative geological impacts would be locations adjacent to the site, since geological impacts are limited to the project site and adjacent properties. The pending Lakewood Park Renovation and Enhancement project would take place immediately adjacent to the project site. All projects occurring within Sunnyvale would be required to implement the same standard conditions and measures related to construction water quality and soil erosion as the proposed project (including preparation of a SWPPP if disturbance if greater than one acre). For these reasons, the cumulative projects, including the proposed project, would not result in significant cumulative geological resources impacts. **(Less than Significant Cumulative Impact)**

Cumulative GHG Impacts

The proposed project and past, present, present and future development projects worldwide contribute to global climate change. No single project is sufficient in size to, by itself, change the global average temperature. Therefore, due to the nature of GHG impacts, a significant project impact is a significant cumulative impact. As discussed in Section 4.8 Greenhouse Gas Emissions, the project's operational emissions would not exceed the 660 MT of CO_2e per year bright-line threshold and the project would comply with CALGreen, Title 24, and City's Reach Code. The project would, therefore, not result in significant GHG impact. For these reasons, the project would not result in a cumulatively considerable contribution to a significant cumulative GHG impact. **(Less Than Significant Cumulative Impact)**

Cumulative Hazards and Hazardous Materials and Impacts

The geographic area for cumulative hazardous materials impacts would be within 1,000 feet of the project site. The pending Lakewood Park Renovation and Enhancement project would take place immediately adjacent to the project site. Similar to the proposed library project, the park enhancement project is not expected to propose the use of substantial hazardous materials on-site, is not located near any public airport or private air strip, and is not located within a fire hazard severity zone. The City's standard development review process would ensure design standards are met and that the park enhancement project would prevent design hazards, incompatible uses, and provide adequate emergency access. In addition, the park enhancement project is subject to a site-specific database search and hazards evaluation, though it is expected that it is not identified on regulatory databases or on the Cortese list due to its proximity to the proposed project. For these reasons, the cumulative projects, including the proposed project, would not result in significant cumulative hazardous materials impacts. **(Less Than Significant Cumulative Impact)**

The project would not result in an aircraft hazard given the project site is not located within an AIA of a Comprehensive Land Use Plan and is not located within an FAA height restriction area for new structures. The project would, therefore, not result in cumulative impacts due to aircraft hazards when combined with the impacts of other projects. **(No Cumulative Impact)**

Cumulative Hydrology Impacts

The geographic area for cumulative hydrology and water quality impacts is the Santa Clara Valley Groundwater Basin and the Calabazas Creek watershed. Cumulative developments near the project, such as the Lakewood Park Renovation and Enhancement project, would be subject to similar hydrological and urban runoff conditions. Both the proposed library project and park enhancement project are located within Flood Zone AE. Though project specifics are unknown at this time, the pending park enhancement project could introduce new structures and/or additional impervious surfaces that would redirect flood flows. Similar to the library project, the park enhancement project would be subject to project-specific environmental review to ensure it would not contribute to impeding or redirection of flood waters, per Sunnyvale Municipal Code Chapter 16.62.

In addition, as discussed in Section 4.10.1.2 Hydrology and Water Quality, Valley Water is implementing the Sunnyvale East and West Channel Flood Protection Project, which would take the entire area (of both the proposed library project and the park enhancement project) out of Flood Zone AE. The flood protection project is a long-term solution that would eliminate the issue of altered drainage patterns resulting in flooding on- or off-site.

Furthermore, all projects occurring within Sunnyvale would be required to implement the same standard conditions and measures related to construction water quality as the proposed project (including preparation of a SWPPP if disturbance if greater than one acre). In addition, all current and probable future projects that would disturb more than one acre of soil or replace/add more at least 10,000 square feet of impervious surfaces would be required to meet applicable RWQCB requirements and the City's Storm Drainage requirements on a project-specific basis. For these reasons, the cumulative projects, including the proposed project, would not result in significant cumulative hydrology or water quality impacts. **(Less than Significant Cumulative Impact)**

Cumulative Noise and Vibration Impacts

The geographic area for cumulative noise impacts is approximately a 1,000 feet radius from the site. The pending Lakewood Park Renovation and Enhancement project would take place immediately adjacent to the project site.

Construction

Construction of the proposed project would take approximately 16 months, and there would be no overlap in construction with the park renovation project because it is in preliminary design phases and construction would be expected to start after the proposed library project is constructed. Furthermore, project construction would be subject to mitigation measures MM NOI-1.1 and MM NOI-2.1 as discussed in Section 4.13 Noise and Vibration to reduce temporary construction noise and vibration impacts to acceptable levels. Therefore, the adjacent projects would result in a less than significant cumulative construction noise impact. **(Less Than Significant Cumulative Impact with Mitigation Incorporated)**

Operation

As discussed in Section 4.13 Noise and Vibration, the existing ADT along Lawrence Expressway and Tasman Drive is 48,315 and the ADT along Lawrence Expressway and Lakehaven Drive/Sandia Avenue is 41,090. The project would generate 1,450 daily trips and would increase existing traffic noise levels by less than 1 dBA L_{dn} along the Lawrence Expressway/Tasman Drive and Lawrence Expressway/Lakehaven Drive roadways. The TIA for the proposed project did not account for cumulative trips from the Lakewood Park Renovation and Enhancement project. The park enhancement project will prepare a project-specific TIA, including trip generation, once environmental review for the project begins. Given the trip generation from the park enhancement project is not currently known, it is not possible to precisely describe the combined trips from the library project and the park enhancement project. Nonetheless, it is not possible they would result in a doubling of the large traffic volumes on the major roads serving the area noted above, given the library generates 1,450 daily trips and the park enhancement would be expected to be on a similar order of magnitude. The cumulative analysis for the park enhancement project would account for the traffic from the proposed library project and their combined effects based on the trip generation predicted for the park enhancement. Therefore, the project would result in a less than cumulatively considerable contribution to a significant cumulative traffic noise impact. **(Less Than Significant Cumulative Impact)**

Cumulative Traffic Impacts

The geographic area for cumulative transportation resource impacts includes the project site and its surrounding area. As discussed in Section 4.17 Transportation, Hexagon's TIA identified five pending developments northeast of the project site that would take place in the City of Santa Clara. As discussed in Section 4.17, Transportation, cumulative with project and cumulative no project conditions would have unacceptable LOS at the two study intersections. However, according to the newly implemented SB 743, a project's contribution to increased vehicle delay or congestion is no longer considered an impact on the environment. Therefore, the project's inconsistency with CMP would not lead to adverse environmental effects, given there are no feasible roadway improvements, and project impacts would be less than significant. The TIA for the proposed project did not account for cumulative trips from the Lakewood Park Renovation and Enhancement project. The park enhancement project will prepare a project-specific TIA once that project is settled and environmental review for the project begins. The cumulative analysis for the park enhancement project would account for the traffic from the proposed library project and their combined effects. Furthermore, all cumulative projects (including the project) would comply with current building and fire codes and be reviewed by the Fire Department to ensure adequate emergency access. For these reasons, the cumulative projects would not result in a significant cumulative impact to emergency access. **(Less than Significant Cumulative Impact)**

Cumulative Utilities Impacts

The geographic area for cumulative utility and service systems is the City boundaries. The project would contribute to cumulative demands on utilities and service systems (water, sewer, solid waste, storm drainage). Implementation of the proposed project would generate additional demand of about five AFY, a small fraction of the City's projected demand of 25,506 AFY by 2030, and not cause the City to exceed cumulative water demand projections, as disclosed in the City's General Plan LUTE.

The final drainage system design for each of the cumulative projects would be subject to review and approval by the City, who would confirm that the proposed drainage system for each project is consistent with the City's stormwater-related conditions of approval and NPDES regulations. Therefore, the combined projects would not result in a significant cumulative impact to storm drainage systems, as disclosed in the City's General Plan LUTE. The City is aware an update to the WPCP Master Plan is needed to plan for adequate wastewater treatment that includes the buildout of the approved Lawrence Station Area Plan and the Downtown Specific Plan Amendments and specific development projects, as well as other future growth in the City. Subsequent environmental review for the WPCP Master Plan update will be completed by the City, once the details of the WPCP improvements are defined. The specific design and improvements needed are unknown at this time, therefore, it is speculative to evaluate the environmental impacts of these undetermined improvements. The proposed library project would have an insignificant contribution to the overall cumulative increase in wastewater generated above the WPCP's planned capacity; therefore, the project's contribution to the cumulative wastewater treatment impact is considered less than significant.

As discussed in Section 4.19, Utilities and Service Systems, the landfills serving the project site and the City as a whole, have remaining capacity through 2068.

Based on the above reasons, the combined projects would not result in significant cumulative impacts to the City's water, sewer, solid waste and storm drainage facilities. **(Less Than Significant Cumulative Impact)**

The project would not relocate natural gas, electricity or telecommunications lines. The project would not combine with other projects to result in impacts to these utility lines, therefore, no cumulative impacts to these utilities would result from the combined projects. **(No Cumulative Impact)**

Impact MFS-3:	**The project does not have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly. (Less than Significant Impact with Mitigation Incorporated)**

Consistent with Section 15065(a)(4) of the CEQA Guidelines, a lead agency shall find that a project may have a significant effect on the environment where there is substantial evidence that the project has the potential to cause substantial adverse effects on human beings, either directly or indirectly. Pursuant to this standard, a change to the physical environment that might otherwise be minor must be treated as significant if people would be significantly affected. This factor relates to adverse changes to the environment of human beings generally, and not to effects on particular individuals. While changes to the environment that could indirectly affect human beings would be represented by all of the designated CEQA issue areas, those that could directly affect human beings include air quality, and noise. Implementation of the best management practices, standard permit conditions, mitigation measures, and adherence to General Plan, City Code, and state and federal regulations described in these sections of the report, would avoid significant impacts. No other direct or indirect

adverse effects on human beings have been identified. **(Less Than Significant Impact with Mitigation Incorporated)**

SECTION 5.0 REFERENCES

The analysis in this Initial Study is based on the professional judgement and expertise of the environmental specialists preparing this document, based upon review of the site, surrounding conditions, site plans, and the following references:

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SECTION 6.0 LEAD AGENCY AND CONSULTANTS

6.1 LEAD AGENCY

City of Sunnyvale
Nathan Scribner, Assistant City Engineer

6.2 CONSULTANTS

David J. Powers & Associates, Inc.
Environmental Consultants and Planners
Akoni Danielsen, Principal Project Manager
Maria Kisyova, Project Manager
Ryan Osako, Graphic Artist

Hexagon Transportation Consultants, Inc.
Transportation Consultants
Robert Del Rio, Vice President

HMH
Landscape Architects
William Sowa, Certified Arborist

Holman & Associates
Archaeological and Cultural Resources Consultants
Sunsine Psota, Senior Associate

Illingworth & Rodkin, Inc.
Air Quality & Acoustics Consultants
Jay Witt, Air Quality Consultant
James Reyff, Air Quality Consultant
Michael Thill, Noise Consultant
Carrie Janello, Senior Consultant
Mimi McNamara, Staff Consultant

SECTION 7.0 ACRONYMS AND ABBREVIATIONS

2017 CAP	Bay Area 2017 Clean Air Plan
AB	Assembly Bill
ABAG	Association of Bay Area Governments
ACM	asbestos containing material
AIA	Airport Influence Area
ALUC	Airport Land Use
BAAQMD	Bay Area Air Quality Management District
Basin Plan	Water Quality Control Plan for the San Francisco Bay Basin
BMP	Best Management Practice
Btu	British thermal units
CalEEMod	California Emissions Estimator Model
CalEPA	California Environmental Protection Agency
CAL FIRE	California Department of Forestry and Fire Protection
Cal/OSHA	California Department of Industrial Relations, Division of Occupational Safety and Health
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CBC	California Building Standards Code
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CGS	California Geological Survey
CH_4	methane
CLUP	Comprehensive Land Use Plan
CMP	Congestion Management Program
CNEL	Community Noise Equivalent Level
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalents
CRHR	California Register of Historical Resources
CUPA	Certified Unified Program Agency

dBA	A-weighted decibel
DNL	Day-Night Level
DPM	diesel particulate matter
DTSC	Department of Toxic Substances Control
EIR	Environmental Impact Report
EPA	Environmental Protection Agency
ESD	Environmental Services Department
FAA	Federal Aviation Administration
FAR Part 77	Federal Aviation Regulations, Part 77 Objects Affecting Navigable Airspace
FEMA	Federal Emergency Management Agency
FHSZ	Fire hazard severity zone
FIRM	Flood Insurance Rate Map
FMMP	Farmland Mapping and Monitoring Program
FTA	Federal Transit Authority
GHG	Greenhouse gas
GPA	General Plan Amendment
GWh	gigawatt hours
GWP	Global warming potential
Habitat Plan	Santa Clara Valley Habitat Plan/Natural Community Conservation Plan
HFCs	Hydrofluorocarbons
HOV	High occupancy vehicle
L_{eq}	Average energy level intensity
L_{max}	Maximum A-weighted noise level
LID	Low Impact Development
LOS	Level of Service
LUTE	Land Use and Transportation Element
MBTA	Migratory Bird Treaty Act
mgd	million gallons per day
MLD	Most Likely Descendant
$MMTCO_2e$	million metrics tons of carbon dioxide equivalent
MND	Mitigated Negative Declaration
mpg	miles per gallon
MTC	Metropolitan Transportation Commission

NAHC	Native American Heritage Commission
NFIP	National Flood Insurance Program
NHPA	National Historic Preservation Act
NOD	Notice of Determination
NOI	Notice of Intent
N_2O	nitrous oxide
NO_x	nitrogen oxides
NO_2	nitrogen dioxide
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
O_3	ground-level ozone
OEHHA	California Office of Environmental Health Hazard Assessment
OITC	Outdoor-Indoor Transmission Class
OPR	Office of Planning and Research
PDAs	Priority Development Areas
PFCs	Perfluorocarbons
PG&E	Pacific Gas and Electric Company
PM	particulate matter
$PM_{2.5}$	fine particulate matter
PM_{10}	coarse particulate matter
PPV	Peak Particle Velocity
RHNA	Regional Housing Need Allocation
ROG	reactive organic gases
RWQCB	Regional Water Quality Control Board
SB	Senate Bill
SCS	Sustainable Communities Strategy
SCRWA	South County Regional Wastewater Authority
SCVWD	Santa Clara Valley Water District
SHMA	Seismic Hazards Mapping Act
SF_6	Sulfur hexafluoride
SFHAs	Special Flood Hazard Areas
SMARA	Surface Mining and Reclamation Act
SMGB	State Mining and Geology Board

SO_x	sulfur oxides
SR	State Route
STC	Sound Transmission Class
SVCE	Silicon Valley Clean Energy
SWPCP	Sunnyvale Water Pollution Control Plant
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TACs	Toxic air contaminants
TCRs	Tribal Cultural Resources
TIA	Traffic Impact Analysis
tpy	tons per year
USACE	United States Army Corps of Engineers
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
UWMP	Urban Water Management Plan
VTA	Santa Clara Valley Transportation Authority