## Initial Study/Mitigated Negative Declaration

# **Presentation High School Master Plan**

File No.: SP18-008



May 2020

# Planning, Building and Code Enforcement ROSALYNN HUGHEY, DIRECTOR

#### MITIGATED NEGATIVE DECLARATION

The Director of Planning, Building and Code Enforcement has reviewed the proposed project described below to determine whether it could have a significant effect on the environment as a result of project completion. "Significant effect on the environment" means a substantial or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance.

**PROJECT NAME:** Presentation High School Master Plan

**PROJECT FILE NUMBER: SP18-008** 

**PROJECT DESCRIPTION:** Special Use Permit to allow the demolition of approximately 59,494 square feet of existing student center, chapel, and classroom buildings on the Presentation High School campus, and the construction of approximately 106,902 square feet of new multi-purpose, student union, administration, chapel, facilities workshop and classroom buildings in four phases. The Master Plan also includes the expansion of on-site parking areas and the addition of an on-site circulation loop, and construction of new plaza, courtyard and landscaped areas. The Special Use Permit would allow an increase in enrollment from 750 students to 850 students, and the faculty would increase from 60 to 110.

**PROJECT LOCATION:** The project is located on an approximately 8.8-acre site in suburban San José, bounded by Booksin Avenue on the west and Plummer Avenue on the east (2281 Plummer Avenue).

**ASSESSORS PARCEL NO.:** 446-38-035

**COUNCIL DISTRICT: 6** 

**APPLICANT CONTACT INFORMATION:** Presentation High School (Holly Elkins, President), 2281 Plummer Avenue, San José, CA 95125. (408) 264-1664. helkins@presentationhs.org

#### **FINDING**

The Director of Planning, Building and Code Enforcement finds the project described above would not have a significant effect on the environment if certain mitigation measures are incorporated into the project. The attached Initial Study identifies one or more potentially significant effects on the environment for which the project applicant, before public release of this Mitigated Negative Declaration (MND), has made or agrees to make project revisions that will clearly mitigate the potentially significant effects to a less than significant level.

# MITIGATION MEASURES INCLUDED IN THE PROJECT TO REDUCE POTENTIALLY SIGNIFICANT EFFECTS TO A LESS THAN SIGNIFICANT LEVEL

**A. AESTHETICS** – The project would not have a significant impact on this resource, therefore no mitigation is required.

**B. AGRICULTURE AND FORESTRY RESOURCES** – The project would not have a significant impact on this resource, therefore no mitigation is required.

#### C. AIR QUALITY.

**Impact AQ-3:** Project construction would result in an infant cancer risk of 17.4 in one million at the maximally exposed individual (MEI), which exceeds the BAAQMD's cancer risk significance threshold of 10 in one million.

MM AQ-3: The project applicant shall develop a construction operations plan demonstrating that the off-road equipment used on-site to construct the project would achieve a fleet-wide average of at least a 45 percent reduction in diesel particulate matter (DPM) exhaust emissions or greater. Feasible measures to achieve this reduction can include, but are not limited to, the following:

- All mobile diesel-powered off-road equipment larger than 25 horsepower and operating on the site for more than two days shall meet, at a minimum, U.S. EPA particulate matter emissions standards for Tier 4 engines or equivalent.
- The use of equipment that includes CARB-certified Level 3 Diesel Particulate Filters or alternatively-fueled equipment (i.e., non-diesel), added exhaust devices, or a combination of measures.

The construction contractor may use other measures to minimize construction period DPM emissions to reduce the estimated cancer risk below the thresholds. If any of these alternative measures are proposed, the construction operations plan must include specifications of the equipment to be used during ground disturbing activities. The plan shall be accompanied by a letter signed by a qualified air quality specialist, verifying the equipment included in the plan meets the standards set forth in this mitigation measure to the satisfaction of the Director of Planning.

Prior to the issuance of any grading permits, the project applicant shall submit a construction operations plan to the Director of the Department of Planning, Building and Code Enforcement or the Director's designee, which includes specifications of the equipment to be used during construction and confirmation this requirement is met.

#### D. BIOLOGICAL RESOURCES.

**Impact BIO-4:** Project construction, including tree removals, that occur during the breeding season could result in a significant impact to nesting raptors and other protected migratory bird species.

MM BIO-4: The project applicant shall schedule all construction and ground disturbance activities, such as demolition, grading, construction, and tree removals to avoid the nesting season (February 1st to August 31st, inclusive). If construction activities cannot be scheduled construction between September 1st and January 31st, inclusive, pre-construction nesting bird surveys shall be completed prior to tree removal or construction activities if removal or construction is proposed to commence during the breeding season. The project applicant shall

retain a qualified biologist or ornithologist to conduct the pre-construction surveys. Surveys shall be completed by a qualified biologist or ornithologist no more than 14 days prior to the initiation of construction activities during the early part of the breeding season (February 1st through April 30th, inclusive) and no more than 30 days prior to the initiation of these activities during the late part of the breeding season (May 1st through August 31st, inclusive). During this survey, the qualified biologist or ornithologist shall inspect all trees and other nesting habitats in and immediately adjacent to the construction areas for nests.

If an active nest is found in an area that will be disturbed by the ground disturbance activities, the qualified biologist or ornithologist shall designate an adequate buffer zone to be established around the nest, in consultation with the California Department of Fish and Wildlife (CDFW). The buffer will ensure that nests shall not be disturbed during project construction.

The project applicant shall submit a report indicating the results of the survey and any designated buffer zones to the satisfaction of the Director of the Department of Planning, Building and Code Enforcement or the Director's designee, prior to the issuance of any grading permit or demolition permit.

**Impact BIO-5:** Construction activities during the various phases of implementation of the proposed project could result in damage to existing trees to be retained.

**MM BIO-5:** Prior to the removal of any vegetation and the issuance of any demolition, grading, or tree removal permits, the project applicant shall retain a Certified Arborist to review the project plans for tree-related impacts: site construction, grading, drainage, underground utility, planting, and irrigation.

The Certified Arborist will review all work procedures, access routes, storage areas, and tree protection measures. Based on that information, the Certified Arborist shall prepare a tree protection plan for the project. The tree protection plan shall include:

- The staging area and access routes shall be located outside the tree canopies that shall be retained.
- All existing or unused lines or pipes beneath the canopies of trees to be retained shall be abandoned in place or cut off at existing soil grade.
- Establish a Tree Protection Zone (TPZ) around the trees to remain, based on the outside edge of existing sidewalk cut-out planting space.
- Install hay bales around the trunk or erect fencing at the outside edge of the cut-out. Use wooden fencing; orange plastic is not to be permitted.
- Limit spoils and runoff from traveling into root zones. Techniques may include locating silt fence and/or straw rolls along the outer edge of the canopy of each tree in the TPZ.
- Trees to be removed shall be felled so as to fall away from any TPZs; the contractor shall take care to avoid the pulling and breaking of roots of trees to remain. If roots

- are entwined, under the direction of a Certified Arborist, the major woody root mass shall be severed before extracting the trees, or grinding the stump below ground.
- Design irrigation systems so that no trenching will occur within the Tree Protection Zone.
- Route underground services including utilities, sub-drains, water, or sewer around the TPZ. Boxes, meters, or vaults should be installed outside of the trees' canopies.
   Where encroachment cannot be avoided, special construction techniques such as hand digging or tunneling under roots shall be employed where necessary to minimize root injury.
- Trees to be preserved must be irrigated during the construction period. The irrigation schedule to be determined by a Certified Arborist.
- Any grading, construction, demolition, or other work that would encounter roots of trees to be preserved shall be monitored by a Certified Arborist.
- If injury occurs to any tree during construction, it shall be evaluated as soon as possible by the Certified Arborist so that appropriate treatments can be applied.
- Fences are to remain until all site work has been completed. Fences may not be relocated or removed without permission of the project superintendent.

The tree protection plan shall be submitted to the Director of the Department of Planning, Building and Code Enforcement or the Director's designee prior to vegetation removals and the issuance of any demolition or grading permits.

- **E. CULTURAL RESOURCES** The project would not have a significant impact on this resource, therefore no mitigation is required.
- **F. GEOLOGY AND SOILS** The project would not have a significant impact on this resource, therefore no mitigation is required.
- **G. GREENHOUSE GAS EMISSIONS** The project would not have a significant impact on this resource, therefore no mitigation is required.
- **H. HAZARDS AND HAZARDOUS MATERIALS** The project would not have a significant impact on this resource, therefore no mitigation is required.
- **I. HYDROLOGY AND WATER QUALITY** The project would not have a significant impact on this resource, therefore no mitigation is required.
- **J. LAND USE AND PLANNING** The project would not have a significant impact on this resource, therefore no mitigation is required.
- **K. MINERAL RESOURCES** The project would not have a significant impact on this resource, therefore no mitigation is required.
- L. NOISE.

Impact NOI-1: Noise from mechanical equipment could exceed 55 dBA DNL at noise-

sensitive land uses in the immediate project vicinity, which represents a potentially significant impact. In addition, existing noise-sensitive land uses would be exposed to a temporary increase in ambient noise levels due to project construction activities.

#### MM NOI-1.1: The project applicant shall implement the following mitigation measures:

• Prior to the issuance of any building permits, mechanical equipment shall be selected and designed to reduce noise impacts on surrounding uses to meet the City of San José's General Plan noise policies. A qualified acoustical consultant shall be retained by the project applicant to review mechanical noise as the equipment systems are selected in order to determine specific noise reduction measures necessary to reduce noise to comply with the City's 55 dBA DNL noise limit at the shared property line at the southern boundary of the project site. Noise reduction measures could include, but are not limited to, selection of equipment that emits low noise levels and/installation of noise barriers such as enclosures and parapet walls to block the line of sight between the noise source and the nearest receptors. The mechanical equipment systems selected shall be submitted for review and approval by the Director of Planning or Director's designee of the Department of Planning, Building, and Code Enforcement prior to the issuance of any building permits.

MM NOI-1.2: In accordance with the provisions of the City's General Plan and the Municipal Code, temporary construction work within 500 feet of residential land uses shall be limited to between the hours of 7:00 a.m. and 7:00 p.m. Monday through Friday and is prohibited on weekends. These limitations shall be included on construction plans and specifications.

MM NOI-1.3: The project applicant shall retain a qualified professional to prepare a construction noise control plan. The construction noise control plan shall specify hours of construction, noise and vibration minimization measures, posting or notification of construction schedules, and designation of a noise disturbance coordinator who would respond to neighborhood. Measures from this plan shall be included on construction plans and specifications. Measures to be included in the plan shall include, but not be limited to:

- In accordance with Policy EC-1.7 of the City's General Plan, utilize the best available noise suppression devices and techniques during construction activities.
- Construct temporary noise barriers, where feasible, to screen stationary noise-generating equipment.
- Equip all internal combustion engine-driven equipment with intake and exhaust mufflers that are in good condition and appropriate for the equipment.
- Unnecessary idling of internal combustion engines should be strictly prohibited.
- Locate stationary noise-generating equipment, such as air compressors or portable power generators, as far as possible from sensitive receptors as feasible. If the stationary noise generation equipment must be located near receptors, adequate muffling (with enclosures where feasible and appropriate) shall be used to reduce noise levels to below the City's residential, school and/or commercial decibel level thresholds at the property lines of the adjacent sensitive receptors. Any enclosure openings or venting shall face away from sensitive receptors.
- Utilize "quiet" air compressors and other stationary noise sources where technology exists.

- 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.
- Erect a temporary noise control blanket barrier, if necessary, along building facades facing construction sites. This mitigation would only be necessary if conflicts occurred which were irresolvable by proper scheduling. Noise control blanket barriers can be rented and quickly erected.
- 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 residential property boundaries.
- The contractor shall prepare a detailed construction plan identifying the schedule for major noise-generating construction activities and notify in writing all adjacent business, residences, and other noise-sensitive land uses of the construction schedule. 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 shall determine the cause of the noise complaint (e.g., bad muffler, etc.) and will ensure that reasonable measures be implemented to correct the problem. A telephone number for the disturbance coordinator shall be conspicuously posted at the construction site and shall also be included in the notice sent to neighbors regarding the construction schedule.

The construction crew shall adhere to the construction noise control plan to reduce construction noise levels emanating from the site to within the applicable thresholds and minimize disruption and annoyance at existing noise-sensitive receptors in the project vicinity. The construction noise control plan shall be reviewed and approved by the Director of the Department of Planning, Building and Code Enforcement or the Director's designee prior to issuance of any grading permit and/or building permits.

**Impact NOI-2:** Construction of the project could potentially produce vibration levels that would be above the threshold 0.2 in/sec PPV at the nearest sensitive receptors of the health care center to the south.

MM NOI-2: Prior to issuance of any grading permits, the project applicant shall prepare a vibration plan to reduce vibration impacts from construction activities to below the 0.2 in/sec PPV threshold. Measures from this plan shall be included on construction plans and specifications. Measures to be included in the plan shall include, but not be limited to:

- Prohibit the use of heavy vibration-generating construction equipment, such as vibratory rollers or excavation using clam shell or chisel drops, within 30 feet of any adjacent building.
- 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.

The vibration plan shall be submitted to the Director of the Department of Planning, Building and Code Enforcement or the Director's designee prior to issuance of any grading permit.

- **M. POPULATION AND HOUSING** The project would not have a significant impact on this resource, therefore no mitigation is required.
- **N. PUBLIC SERVICES** The project would not have a significant impact on this resource, therefore no mitigation is required.
- **O. RECREATION** The project would not have a significant impact on this resource, therefore no mitigation is required.
- **P. TRANSPORTATION / TRAFFIC.** The project would not have a significant impact on this resource, therefore no mitigation is required.
- **Q. TRIBAL CULTURAL RESOURCES** The project would not have a significant impact on this resource, therefore no mitigation is required.
- **R. UTILITIES AND SERVICE SYSTEMS** The project would not have a significant impact on this resource, therefore no mitigation is required.
- **S. WILDFIRE** The project would not have a significant impact on this resource, therefore no mitigation is required.

#### T. MANDATORY FINDINGS OF SIGNIFICANCE.

Cumulative impacts would be less than significant. The proposed Project would implement the identified mitigation measures and would have either have no impacts or less-than-significant impacts on riparian habitat or other sensitive natural communities, migration of species, or applicable biological resources protection ordinances. Therefore, the proposed Project would not contribute to any cumulative impact for these resources. The Project would not cause changes in the environment that have any potential to cause substantial adverse direct or indirect effects on human beings.

#### **PUBLIC REVIEW PERIOD**

Before 5:00 p.m. on Friday June 22, 2020 any person may:

- 1. Review the Draft Mitigated Negative Declaration (MND) as an informational document only; or
- 2. Submit <u>written comments</u> regarding the information and analysis in the Draft MND. Before the MND is adopted, Planning 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.

	Rosalynn Hughey, Director Planning, Building and Code Enforcement
Date	Deputy
Meenaxi Raval Environmental Project Manager	

Circulation period: May 22, 2020 to June 22, 2020

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Appendix F Noise and Vibration Assessment Appendix G Transportation Impact Analysis

#### SECTION 1.0 INTRODUCTION AND PURPOSE

#### 1.1 PURPOSE OF THE INITIAL STUDY

The City of San José, as the Lead Agency, has prepared this Initial Study for the Presentation High School Master Plan in compliance with the California Environmental Quality Act (CEQA), the CEQA Guidelines (California Code of Regulations §15000 et. seq.) and the regulations and policies of the City of San José, California.

The project proposes to redevelop a portion of the existing Presentation High School campus in four phases through the demolition of existing buildings and site development including the construction of new buildings. The current phasing plan would occur in the following order: (1) multipurpose and student union buildings, (2) classroom buildings, (3) classroom and administration buildings, and (4) chapel and facilities building. The project also includes the reconfiguration of on-site parking lots and driveways to accommodate the parking and vehicle circulation needs of the project. Presentation High School (the project applicant) has requested approval of a Special Use Permit (SUP) application for the overall Master Plan. As the Master Plan is developed, each phase will require subsequent development permit amendments (e.g., SUP Amendments) which, based on their scope, may require additional environmental review. This Initial Study/Mitigated Negative Declaration (IS/MND) evaluates the environmental impacts that might reasonably be anticipated to result from implementation of the Master Plan, but future SUP Amendments would be able to tier off of this document for CEQA.

#### 1.2 PUBLIC REVIEW PERIOD

Publication of this Initial Study marks the beginning of a 30-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 30-day public review period should be sent to:

Meenaxi Raval, AICP City of San José
Department of Planning, Building & Code Enforcement
200 E. Santa Clara Street, 3<sup>rd</sup> Floor
San José, CA 95113
Meenaxi.Raval@sanjoseca.gov

#### 1.3 CONSIDERATION OF THE INITIAL STUDY AND PROJECT

Following the conclusion of the public review period, the City of San José 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 San José 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

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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

Presentation High School Master Plan (File No. SP18-008)

#### 2.2 LEAD AGENCY CONTACT

City of San José Planning, Building and Code Enforcement Meenaxi Raval, AICP Meenaxi.Raval@sanjoséca.gov (408) 535-7874 200 East Santa Clara Street San José, CA 95113

#### 2.3 PROJECT APPLICANT

Holly Elkins, President Presentation High School 2281 Plummer Avenue San José, CA 95125 (408) 264-1664 helkins@presentationhs.org

#### 2.4 PROJECT LOCATION

The approximately 8.8-acre project site is located at 2281 Plummer Avenue, in central San José. The site is comprised of a single parcel that extends from the east side of Booksin Avenue on the west to Plummer Avenue on the east and approximately 550 feet southerly of Curtner Avenue. The location of the project site is shown on the following figures:

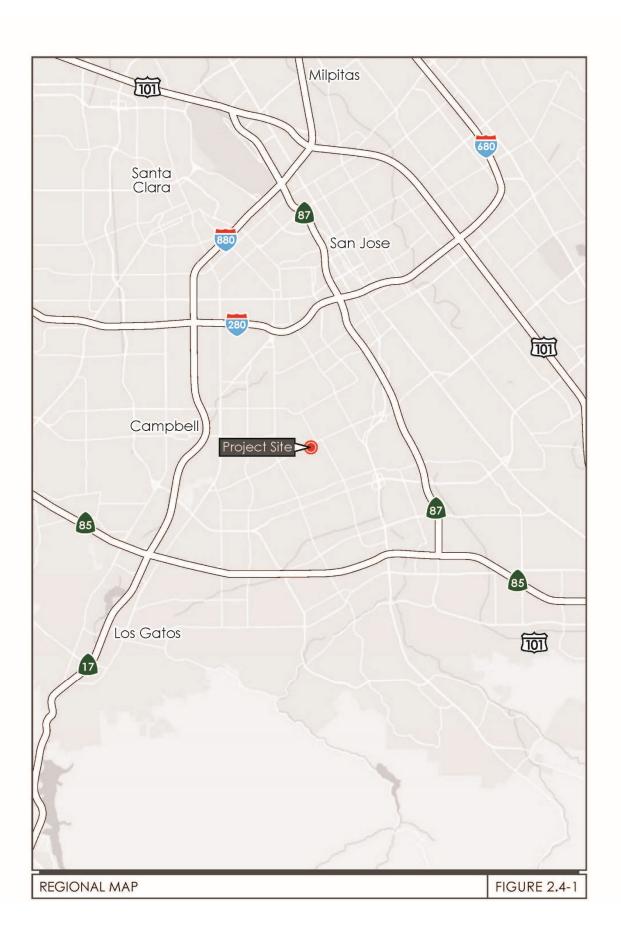
- Figure 2.4-1 Regional Map
- Figure 2.4-2 Vicinity Map
- Figure 2.4-3 Aerial Photograph and Surrounding Land Uses

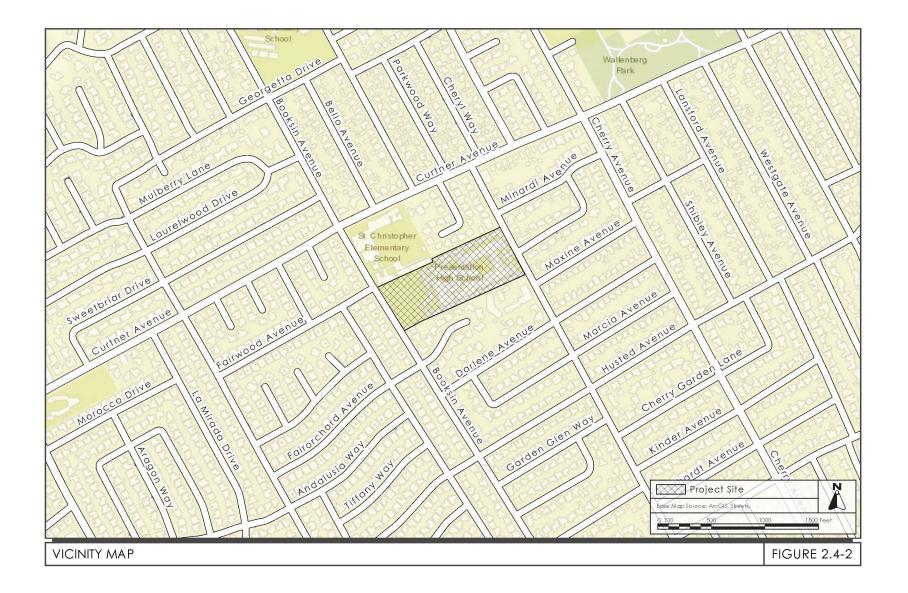
#### 2.5 ASSESSOR'S PARCEL NUMBER

446-38-035

#### 2.6 GENERAL PLAN DESIGNATION AND ZONING DISTRICT

The project site is designated PQP - Public/Quasi-Public under the City of San José's General Plan and is in the Public/Quasi-Public Zoning District.







#### 2.7 HABITAT PLAN DESIGNATION

Land Cover Designation: Urban-Suburban

Development Zone: Urban Development Equal to or Greater than Two Acres Covered

Fee Zone: None Wildlife Survey Zone: None

### 2.8 PROJECT-RELATED APPROVALS, AGREEMENTS, AND PERMITS

- Special Use Permit
- Tree Removal Permit
- Building Clearances including, but not limited to Demolition, and Building Permits
- Public Works Clearances including, but not limited to Grading Permit, Public Improvements Permit

#### SECTION 3.0 PROJECT DESCRIPTION

Presentation High School is a private high school currently located on an approximately 8.8-acre site in suburban San José, bounded by Booksin Avenue on the west and Plummer Avenue on the east (2281 Plummer Avenue). The site is surrounded on the east and west sides by single-family residences, as well as by a private K-8 school (St. Christopher School) and single-family residences adjacent on the north. There are single-family residences and a health care center (Herman Health Care Center) adjacent to the southern border of the site.

#### **Background**

Presentation High School was constructed on the site in 1962 with the issuance of a building permit, as private school uses were allowed by right and issuance of a Site Development Permit was not required at that time. Subsequent Site Development Permits were issued for the construction of additional classroom buildings, a theater, and a new chapel on the site in 1994 and 2001. In 2004, a Conditional Use Permit (CP-03-055) was approved to demolish two residential units and a tennis court for the construction of a swimming pool, a 2,500-square foot coach's building, new playing fields, and reconfigured parking areas. This permit included a condition limiting the enrollment of the school to 750 students. An additional Conditional Use Permit was approved in 2014 to allow a 7,127-square foot second floor addition to an existing locker room building. The project site was rezoned from R-1-8 Single Family Residence District to PQP Public/Quasi-Public District under a Conforming Rezoning in 2017.

There are currently 814 students enrolled in the school (2018-2019 school year), with 94 staff members. Over the past number of years, enrollment experienced some creep and not unlike many other schools, exceeded permitted levels. The proposed Master Plan and SUP are intended to remedy this overage and provide a new enrollment number anticipated for the school's near-and long-term program. The proposed Master Plan would allow up to 850 students and 110 staff members, which would accommodate the current increase over the existing permit limits. The conceptual site plan for the project is shown on Figure 3.0-1 (Conceptual Site Plan).

#### **Phasing**

The proposed Master Plan project would include redevelopment of the school in four phases. As buildings are constructed, parking areas would be reconfigured and expanded, and a new plaza, courtyard areas, and landscaping would be installed. The maximum enrollment at the school would increase from the permitted 750 students up to 850 students, and the faculty would increase from the permitted 60 up to 110. School would remain in session as the project is constructed utilizing portable buildings to be installed in areas of the site where construction is not occurring. The phasing of the proposed demolition and new building construction is shown on Figure 3.0-2 (Conceptual Phasing Plan), and the site configuration at the completion of all four phases is shown on Figure 3.0-1. The proposed increase in enrollment and staff to 850 students and 110 staff is not tied to any particular phase of the project, but would be assumed upon approval of the Special Use Permit for the project. Table 3.0-1 provides a summary of the four proposed development phases, and descriptions of each phase follow the table.

Table 3.0-1: Proposed Master Plan Development Phases						
Phase	Demolition (s.f.)	Existing Buildings to be Demolished	New Construction (s.f.)	New Buildings	Other Improvements	
1	14,325	Student center, chapel, classrooms	30,989	Multi-purpose building, student union building		
2	22,376	Classrooms	29,171	Classrooms	Expand parking area at southeast side of site	
3	22,793	Classrooms	42,555	Classrooms, administration building	Expand parking area on northeast side of site, construct on- site circulation loop	
4	-	-	4,187	Facilities workshop building, chapel		
Totals	59,494		106,902			

#### Phase 1

The first phase proposes to demolish the existing student center and chapel buildings and a portion of the existing main classroom building totaling 14,325 square feet, and construct a new 12,278-square foot, two-level multi-purpose building, a new 2,240-square foot first floor patio, and a new 16,471-square foot two-level student union building, for a total of 30,989 square feet of new construction. The multi-purpose facility will contain event space (no new classrooms), and the student union building will house a cafeteria, student lounge, study center, library, and student support services.

#### Phase 2

Phase 2 proposes to demolish a 22,376-square foot portion of the existing classroom building at the southeast side of the site, reconfigure and expand the parking aisle adjacent to the existing building, and construct a new 29,171-square foot classroom building.

#### Phase 3

The proposed third phase of the project would demolish a 22,793-square foot portion of the existing classroom building at the northeast side of the site, and construct a new 24,146-square foot classroom building and a new 18,409-square foot administration building, for a total of 42,555 square feet of new construction. In addition, the northern parking aisle would be reconfigured to add additional parking stalls and a drop-off lane.

#### Phase 4

Phase 4 would consist of the construction of a new 2,612-square foot facilities workshop building and a new 1,575-square foot chapel building, for a total of 4,187 square feet of new construction.

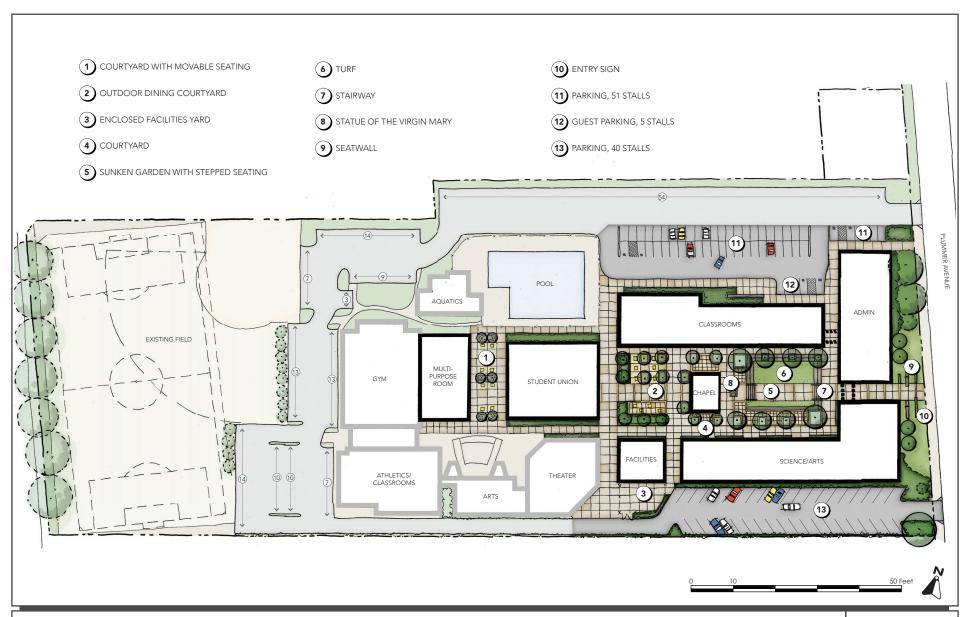
#### **Vehicle Access and Parking**

Under the current configuration, vehicle access to the school is from Plummer Avenue, with a two-way driveway at the northeast corner of the site, and an exit-only driveway located at the southeast corner of the site. The two-way driveway provides access to an internal loop drive aisle containing perpendicular and diagonal parking stalls as well as a small parking lot at the southwest corner of the site. A one-way lane with diagonal parking stalls runs along the southern edge of the site and leads to the exit driveway on Plummer Avenue at the southeast corner of the site. There is no vehicular access to the campus from Booksin Avenue. The project would not change the points of access, but would expand the parking areas near the Plummer Avenue driveways to increase the parking in those areas from 54 spaces to 96 spaces. The number of spaces adjacent to the classroom buildings adjacent to classroom buildings by the southern driveway would increase from 20 existing spaces to 40 spaces.

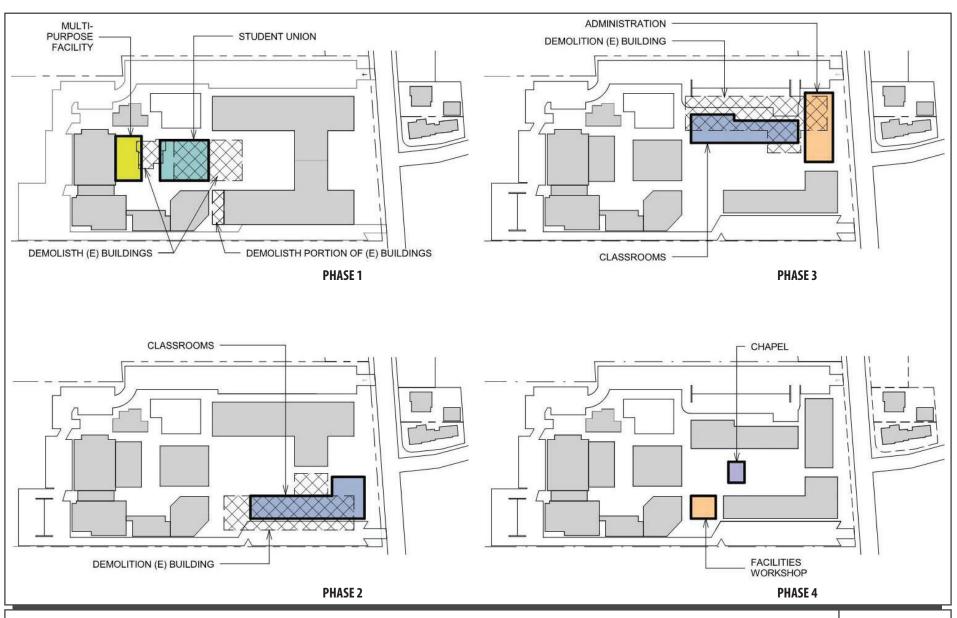
The reconfiguration of the southern parking aisle is shown in Phase 2, and the reconfiguration of the northern parking aisle and parking lot is shown on Phase 3 of the Conceptual Phasing Plan. As the Master Plan is developed, each phase will require subsequent development permit amendments (e.g., Special Use Permit Amendment) which, based on their scope, may require additional environmental review.

#### **Energy Efficiency**

Presentation High School is currently using a web-based facility and energy management system (enteliWEB) to maximize energy efficiency in the existing buildings on campus. This system will be expanded to include the future buildings as they are developed with the Master Plan



CONCEPTUAL SITE PLAN FIGURE 3.0-1



CONCEPTUAL PHASING PLAN

FIGURE 3.0-2

# 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 <u>Environmental Setting</u>

### 4.1.1.1 Regulatory Framework

#### California Scenic Highway Program

The intent of the California Scenic Highway Program (Streets and Highway Code Sections 260 et seq.) is to provide and enhance California's natural beauty and protect the social and economic values provided by the State's scenic resources. The California Department of Transportation (Caltrans) defines a scenic highway as any freeway, highway, road, or other public right-of-way that traverses an area of exceptional scenic quality.

Suitability for designation as a State Scenic Highway is based on vividness, intactness, and unity. Caltrans' California Scenic Highway Mapping System lists one Officially Designated Scenic Highway in Santa Clara County. California State Route 9 is approximately six miles southwest of the project site, and is not visible from the site.

#### Envision San José 2040 General Plan

The General Plan includes policies for the purpose of avoiding or mitigating impacts resulting from planned development within the City. The following policies are specific to aesthetic resources and are applicable to the proposed project:

General Plan Policies: Aesthetics					
Vibrant, Attra	ctive, and Complete Neighborhoods				
Policy VN-1.6	/N-1.6 Design new development to contribute to the positive identity of neighborhood and encourage pedestrian activity.				
Policy VN-1.9	Cluster parking, make use of shared parking facilities, and minimize the visual impact of surface parking lots to the degree possible to promote pedestrian and bicycle activity and to improve the City's aesthetic environment.				
Policy VN- 1.12	Design new public and private development to build upon the vital character and desirable qualities of existing neighborhoods.				
Attractive City	Attractive City				
Policy CD-1.1	Require the highest standards of architectural and site design, and apply strong design controls for all development projects, both public and private, for the enhancement and development of community character and for the proper transition between areas with different types of land uses.				
Policy CD-1.7	Require developers to provide pedestrian amenities, such as trees, lighting, recycling and refuse containers, seating, awnings, art, or other amenities, in pedestrian areas along project frontages. When funding is available, install pedestrian amenities in public rights-of-ways.				

<sup>&</sup>lt;sup>1</sup> California Department of Transportation. "California Scenic Highway Mapping System: Santa Clara County." Accessed May 17, 2019. Available at:

http://www.dot.ca.gov/hq/LandArch/16 livability/scenic highways/index.htm.

General Plan Policies: Aesthetics				
Policy CD-	To create a more pleasing pedestrian-oriented environment, for new building			
1.11	frontages, include design elements with a human scale, varied and articulated facades using a variety of materials, and entries oriented to public sidewalks or pedestrian pathways. Provide windows or entries along sidewalks and pathways; avoid blank walls that do not enhance the pedestrian experience. Encourage inviting, transparent facades for ground-floor commercial spaces that			
D 1: CD	attract customers by revealing active uses and merchandise displays.			
Policy CD- 1.12	Use building design to reflect both the unique character of a specific site and the context of surrounding development and to support pedestrian movement throughout the building site by providing convenient means of entry from public streets and transit facilities where applicable, and by designing ground-level building frontages to create an attractive pedestrian environment along building frontages. Unless it is appropriate to the site and context, franchise-style architecture is strongly discouraged.			
Policy CD-	Use design review to encourage creative, high-quality, innovative, and			
1.13	distinctive architecture that helps to create unique, vibrant places that are both desirable urban places to live, work, and play, and that lead to competitive advantages over other regions.			
Policy CD- 1.19	Encourage the location of new and relocation of existing utility structures into underground vaults or within structures to minimize their visibility and reduce their potential to detract from pedestrian activity. When above-ground or outside placement is necessary, screen utilities with art or landscaping.			
Policy CD- 1.22	Include adequate, drought-tolerant landscaped areas in development and require provisions for ongoing landscape maintenance.			
Policy CD- 1.23	Further the Community Forest Goals and Policies in this Plan by requiring new development to plant and maintain trees at appropriate locations on private property and along public street frontages. Use trees to help soften the appearance of the built environment, help provide transitions between land uses, and shade pedestrian and bicycle areas.			
Policy CD- 1.24	Within new development projects, include preservation of ordinance-sized and other significant trees, particularly natives. Avoid any adverse effect on the health and longevity of such trees through design measures, construction, and best maintenance practices. When tree preservation is not feasible, include replacements or alternative mitigation measures in the project to maintain and enhance our Community Forest.			
Policy CD- 1.27	When approving new construction, require the undergrounding of distribution utility lines serving the development. Encourage programs for undergrounding existing overhead distribution lines. Overhead lines providing electrical power to light rail transit vehicles and high tension electrical transmission lines are exempt from this policy.			
Compatibility				
Policy CD-4.4	In non-growth areas, design new development and subdivisions to reflect the character of predominant existing development of the same type in the			

General Plan Policies: Aesthetics				
	surrounding area through the regulation of lot size, street frontage, height,			
	building scale, siting/setbacks, and building orientation.			
Policy CD-4.9	For development subject to design review, ensure the design of new or remodeled structures is consistent or complementary with the surrounding neighborhood fabric (including but not limited to prevalent building scale,			
	building materials, and orientation of structures to the street).			

#### **City Council Outdoor Lighting Policy (4-3)**

City Council Outdoor Lighting Policy 4-3 requires that low-pressure sodium illumination be used in the outdoor areas of new private developments. The regulation of outdoor lighting fixtures has resulted in energy conservation which furthers the goals of the Sustainable City Major Strategy of the San José 2020 General Plan. The purpose of this policy is to promote energy-efficient outdoor lighting on private development in the City of San José that provides adequate light for nighttime activities while benefiting the continued enjoyment of the night sky and continuing operation of the Lick Observatory by reducing light pollution and sky glow.

#### 4.1.1.2 Existing Conditions

#### **Project Site**

The approximately 8.8-acre project site is located at 2281 Plummer Avenue in the City of San José, bounded by Booksin Avenue on the west and Plummer Avenue on the east. The current condition of the project site is shown in photo exhibits on the following pages.

#### **Surrounding Area**

The project site is surrounded by a St. Christopher Church and St. Christopher School to the northwest and Herman Health Care to the south. Single-family residential neighborhoods surround the project site on all sides.

#### Scenic Views and Resources

The City has many scenic resources including the hills and mountains that frame the valley floor, the baylands, and the urban skyline itself, particularly high-rise development.

#### **Scenic Corridors**

The project site is not located along a state-designated scenic highway. The nearest state-designated highway is State Route (SR) 9, approximately six miles southwest of the site (at the SR 17 interchange).

The City's General Plan identifies Gateways and Urban Corridors where preservation and enhancement of views of the natural and man-made environment are high priorities. Gateways are locations which announce to a visitor or resident that they are entering the City, or a unique neighborhood. San José has a number of Gateway locations. Together, Gateways and Urban

Corridors contribute greatly to the overall image of San José and the image of its individual communities. When made and kept attractive and inviting, Gateways and Urban Corridors contribute to the lasting positive impression of a city or area, contribute to the quality of life, and can encourage private investment and economic activity. There are no Gateways or Urban Corridors in the vicinity of the project site. The nearest Gateway to the project site is located on Almaden Avenue where it transects California State Route (SR) 87, approximately 1.5 mile northeast of the site.



**Photo 1:** Viewing west toward the school entrance from Plummer Avenue.



**Photo 2:** Viewing east along the northern site boundary toward Plummer Avenue.

PHOTOS 1 and 2



**Photo 3:** Viewing south across the front of the existing gym building.



Photo 4: Viewing north toward the existing chapel building.

PHOTOS 3 and 4



**Photo 5:** Front side of the existing student center building.



Photo 6: Viewing northeast across the courtyard, toward the existing classroom building.

#### 4.1.2 Impact Discussion

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Wo	uld the project:				
1)	Have a substantial adverse effect on a scenic vista?				
2)	Substantially damage scenic resources,			$\boxtimes$	
	including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				
3)	Substantially degrade the existing visual character or quality of public views <sup>2</sup> of the site and its surroundings? 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?				
AE	AES-1: The project would not have a substantial adverse effect on a scenic vista. (Less than Significant Impact)				

The City of San José has many scenic resources which include the broad views of the Santa Clara Valley, the hills and mountains which frame the Valley floor, the baylands and the urban skyline itself, including high-rise development. The project site is not located along or visible from a designated state scenic highway or City scenic rural corridor, and views of the foothills and mountains that border the Santa Clara Valley on the east and west from the project area are obscured by existing residential development. Views of the project site are limited to the immediate area. Redevelopment of the project site, therefore, would not have a significant adverse effect on a scenic vista.

# 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)

As mentioned above, the project site is not visible from a state scenic highway or City scenic rural corridor. The project site is currently developed with the existing Presentation High School and does not contain any scenic resources on site. Implementation of the project, therefore, would not substantially damage scenic resources.

<sup>&</sup>lt;sup>2</sup> Public views are those that are experienced from publicly accessible vantage points.

## Impact AES-3: The project would not conflict with applicable zoning and other regulations governing scenic quality. (Less than Significant Impact)

As previously described, the project site is located within a developed suburban neighborhood, and does not include any scenic resources. Although the proposed phased redevelopment of the existing high school campus would represent a visual change from the existing high school, it would not be inconsistent with the existing campus in terms of the types of structures or their mass and scale. The existing perimeter buildings on the western half of the campus would remain unchanged with the project.

The project would be required to incorporate high-quality architecture and materials in the building design to conform to the policies of the General Plan, and would maintain street trees and pedestrian access along the sidewalk frontage on Plummer Avenue. The proposed project, therefore, would not conflict with any zoning or regulations regarding scenic quality.

# 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)

As discussed above, development on the project site would be visible from the immediate area. The General Plan EIR concluded that while new development and redevelopment under the General Plan could create additional sources of nighttime light and daytime glare, implementation of adopted plans, and conformance with adopted City policies and regulations including General Plan policies would avoid substantial light and glare impacts. In addition, the project is required to be consistent with City Council Lighting Policy 4-3, and any proposed lighting plans will be reviewed subsequent to approval of the Special Use Permit. As a result, the proposed project would not significantly impact adjacent land uses with increased nighttime light levels or daytime glare from building materials

#### 4.2 AGRICULTURE AND FORESTRY RESOURCES

#### 4.2.1 <u>Environmental Setting</u>

#### 4.2.1.1 Regulatory Framework

#### **California Department of Conservation**

The California Department of Conservation manages the Farmland Mapping and Monitoring Program to assess and record how suitable a particular tract of land is for agricultural purposes. In each county, the land is analyzed for soil and irrigation quality, and the highest quality land is designated as *Prime Farmland*.

#### Williamson Act

The Williamson Act, officially known as the California Land Conservation Act of 1965, enables local governments to enter into contracts with private landowners for the purpose of restricting specific parcels of land to agricultural or related open space use. In return, landowners receive property tax assessments which are much lower than normal because they are based upon farming and open space uses as opposed to full market value.<sup>3</sup>

#### 4.2.1.2 Existing Conditions

The project site is not designated as *Prime Farmland* or other farmland and is not the subject of a Williamson Act contract.<sup>4</sup> The project site is designated as *Urban and Built-Up Land* on the Santa Clara County Important Farmland Map. Common examples of this land type include residential, industrial, commercial, and institutional facilities. The project site does not meet the definition of forest land or timberland.<sup>5</sup>

<sup>&</sup>lt;sup>3</sup> California Department of Conservation. *The Land Conservation Act.* 2017.

<sup>&</sup>lt;sup>4</sup> 1) Santa Clara County. Santa Clara County Important Farmland Map. 2012. 2) Santa Clara County. Santa Clara County Williamson Act Map. 2013/2014

<sup>&</sup>lt;sup>5</sup> According to California Public Resources Code Section 12220(g), Forest Land is land that can support 10-percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits. According to California Public Resources Code Section 4526, "Timberland" means land, other than land owned by the federal government and land designated by the board as experimental forest land, which is available for, and capable of, growing a crop of trees of any commercial species used to produce lumber and other forest products, including Christmas trees.

#### 4.2.2 <u>Impact Discussion</u>

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Wo	uld 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?				
AC	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 proposes to demolish some of the existing buildings on the site and redevelop the campus with the construction of seven new buildings. The project would not convert *Prime Farmland*, *Unique Farmland*, or *Farmland of Statewide Importance* to non-agricultural uses and would not conflict with existing zoning for agricultural operations or facilitate unplanned conversion of farmland elsewhere in San José or Santa Clara County to non-agricultural uses. The project site is not utilized as forest lands (nor are there forest lands in the vicinity) or timberland and would not result in the loss of forest lands in Santa Clara County. For these reasons, the project would not result in a significant impact to agriculture or forestry resources.

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

Refer to discussion under AG-1.

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)

Refer to discussion under AG-1.

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

Refer to discussion under AG-1.

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)

Refer to discussion under AG-1.

#### 4.3 AIR QUALITY

The following discussion and analyses are based, in part, on a Construction Air Quality Assessment prepared for the project by *Illingworth and Rodkin, Inc.* A copy of the report, dated March 28, 2018, is included in Appendix A of this Initial Study.

#### 4.3.1 <u>Environmental Setting</u>

#### 4.3.1.1 Regulatory Framework

#### **United States Environmental Protection Agency**

The United States Environmental Protection Agency (EPA) sets nationwide emission standards for mobile sources, which include on-road (highway) motor vehicles such trucks, buses, and automobiles, and non-road (off-road) vehicles and equipment used in construction, agricultural, industrial, and mining activities (such as bulldozers and loaders). The EPA also sets nationwide fuel standards. California also has the ability to set motor vehicle emission standards and standards for fuel used in California, as long as they are the same or more stringent than the federal standards.

In the past decade the EPA has established a number of emission standards for on- and non-road heavy-duty diesel engines used in trucks and other equipment. This was done in part because diesel engines are a significant source of NO<sub>X</sub> and particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>) and because the EPA has identified diesel particulate matter (DPM) as a probable carcinogen. Implementation of the heavy-duty diesel on-road vehicle standards and the non-road diesel engine standards are estimated to reduce particulate matter and NO<sub>X</sub> emissions from diesel engines up to 95 percent in 2030 when the heavy-duty vehicle fleet is completely replaced with newer heavy-duty vehicles that comply with these emission standards.<sup>6</sup>

In concert with the diesel engine emission standards, the EPA has also substantially reduced the amount of sulfur allowed in diesel fuels. The sulfur contained in diesel fuel is a significant contributor to the formation of particulate matter in diesel-fueled engine exhaust. The new standards reduced the amount of sulfur allowed by 97 percent for highway diesel fuel (from 500 parts per million by weight [ppmw] to 15 ppmw), and by 99 percent for off-highway diesel fuel (from about 3,000 ppmw to 15 ppmw). The low sulfur highway fuel (15 ppmw sulfur), also called ultra-low sulfur diesel (ULSD), is currently required for use by all vehicles in the U.S.

All of the above federal diesel engine and diesel fuel requirements have been adopted by California, in some cases with modifications making the requirements more stringent or the implementation dates sooner.

#### California Air Resources Board

To address the issue of diesel emissions in the state, the California Air Resources Board (CARB) developed the Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled

<sup>&</sup>lt;sup>6</sup> USEPA, 2000. Regulatory Announcement, Heavy-Duty Engine and Vehicle Standards and Highway Diesel Fuel Sulfur Control Requirements. EPA420-F-00-057. December 2000.

Engines and Vehicles.<sup>7</sup> 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, a significant component of the plan involves application of emission control strategies to existing diesel vehicles and equipment. Many of the measures of the Diesel Risk Reduction Plan have been approved and adopted, including the federal on-road and non-road diesel engine emission standards for new engines, as well as adoption of regulations for low sulfur fuel in California.

CARB has adopted and implemented a number of regulations for stationary and mobile sources to reduce emissions of DPM. Several of these regulatory programs affect medium and heavy duty diesel trucks that represent the bulk of DPM emissions from California highways. CARB regulations require on-road diesel trucks to be retrofitted with particulate matter controls or replaced to meet 2010 or later engine standards that have much lower DPM and PM<sub>2.5</sub> emissions. This regulation will substantially reduce these emissions between 2013 and 2023. While new trucks and buses will meet strict federal standards, this measure is intended to accelerate the rate at which the fleet either turns over so there are more cleaner vehicles on the road, or is retrofitted to meet similar standards. With this regulation, older, more polluting trucks would be removed from the roads sooner.

CARB has also adopted and implemented regulations to reduce DPM and NO<sub>X</sub> emissions from inuse (existing) and new off-road heavy-duty diesel vehicles (e.g., loaders, tractors, bulldozers, backhoes, off-highway trucks, etc.). The regulations apply to diesel-powered off-road vehicles with engines 25 horsepower (hp) or greater. The regulations are intended to reduce particulate matter and NO<sub>X</sub> exhaust emissions by requiring owners to turn over their fleet (replace older equipment with newer equipment) or retrofit existing equipment in order to achieve specified fleet-averaged emission rates. Implementation of this regulation, in conjunction with stringent federal off-road equipment engine emission limits for new vehicles, will significantly reduce emissions of DPM and NO<sub>X</sub>.

#### **Bay Area Air Quality Management District**

The Bay Area Air Quality Management District (BAAQMD) has jurisdiction over an approximately 5,600-square mile area, commonly referred to as the San Francisco Bay Area Air Basin (Bay Area). The District's boundary encompasses the nine San Francisco Bay Area counties, including Alameda County, Contra Costa County, Marin County, San Francisco County, San Mateo County, Santa Clara County, Napa County, southwestern Solano County, and southern Sonoma County.

BAAQMD is the lead agency in developing plans to address attainment and maintenance of the National Ambient Air Quality Standards and California Ambient Air Quality Standards. The District also has permit authority over most types of stationary equipment utilized for the proposed project. The BAAQMD is responsible for permitting and inspection of stationary sources; enforcement of regulations, including setting fees, levying fines, and enforcement actions; and ensuring that public nuisances are minimized.

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<sup>&</sup>lt;sup>7</sup> California Air Resources Board, 2000. Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles. October 2000.

The BAAQMD California Environmental Quality Act (*CEQA*) Air Quality Guidelines<sup>8</sup> were prepared to assist in the evaluation of air quality impacts of projects and plans proposed within the Bay Area. The guidelines provide recommended procedures for evaluating potential air impacts during the environmental review process consistent with CEQA requirements including thresholds of significance, mitigation measures, and background air quality information. They also include assessment methodologies for air toxics, odors, and greenhouse gas emissions.

#### Envision San José 2040 General Plan

The General Plan includes policies for the purpose of avoiding or mitigating impacts resulting from planned development within the City. The following policies are specific to air quality and are applicable to the proposed project:

General Plan Policies: Air Quality					
Air Pollutant Emi	ission Reduction Policies				
Policy MS-10.1	Assess projected air emissions from new development in conformance with the Bay Area Air Quality Management District (BAAQMD) CEQA Guidelines and relative to state and federal standards. Identify and implement feasible air emission reduction measures.				
Toxic Air Contan	ninants Policies and Actions				
Policy MS-11.1	Require completion of air quality modeling for sensitive land uses such as new residential developments that are located near sources of pollution such as freeways and industrial uses. Require new residential development projects and projects categorized as sensitive receptors to incorporate effective mitigation into project designs or be located an adequate distance from sources of toxic air contaminants (TACs) to avoid significant risks to health and safety.				
Policy MS-11.2	For projects that emit toxic air contaminants, require project proponents to prepare health risk assessments in accordance with BAAQMD-recommended procedures as part of environmental review and employ effective mitigation to reduce possible health risks to a less than significant level. Alternatively, require new projects (such as, but not limited to, industrial, manufacturing, and processing facilities) that are sources of TACs to be located an adequate distance from residential areas and other sensitive receptors.				
Objectionable Od	Objectionable Odor Policies				
Policy MS-12.2	Require new residential development projects and projects categorized as sensitive receptors to be located an adequate distance from facilities that are existing and potential sources of odor. An adequate separate distance will be determined based upon the type, size and operations of the facility.				
Construction Air Emissions					

<sup>&</sup>lt;sup>8</sup> Bay Area Air Quality Management District. CEQA Air Quality Guidelines. May 2017.

Policy MS-13.1	Include dust, particulate matter, and construction equipment exhaust control				
	measures as conditions of approval for subdivision maps, site development				
	and planned development permits, grading permits, and demolition permits.				
	At a minimum, conditions shall conform to construction mitigation measures				
	recommended in the current BAAQMD CEQA Guidelines for the relevant				
	project size and type.				
Policy MS-13.2	Construction and/or demolition project that have the potential to disturb				
	asbestos (from soil or building material) shall comply with all the				
	requirements of the California Air Resources Board's air toxics control				
	measures (ATCMs) for Construction, Grading, Quarrying, and Surface Mining				
	Operations.				
Action MS-13.4	Adopt and periodically update dust, particulate, and exhaust control standard				
	measures for demolition and grading activities to include on project plans as				
	conditions of approval based upon construction mitigation measures in the				
	BAAQMD CEQA Guidelines.				
Action MS-13.5	Prevent silt loading on roadways that generates particulate matter air pollution				
	by prohibiting unpaved or unprotected access to public roadways from				
	construction sites.				
Action MS-13.6	Revise the grading ordinance and condition grading permits to require that				
	graded areas be stabilized from the completion of grading to commencement				
	of construction.				

#### 4.3.1.2 Existing Conditions

#### **Climate and Topography**

The City of San José is located in the Santa Clara Valley within the San Francisco Bay Area Air Basin. The project area's proximity to both the Pacific Ocean and the San Francisco Bay has a moderating influence on the climate. The Santa Clara Valley is bounded to the east and west by the Diablo Range and Santa Cruz Mountains, respectively. The surrounding terrain greatly influences winds in the valley, resulting in a prevailing wind that follows the valley's northwest-southwest axis.

#### **Regional and Local Criteria Pollutants**

The project is located in Santa Clara County, which is in the San Francisco Bay Area Air Basin. Ambient air quality standards have been established at both the State and federal level. Major criteria pollutants, listed in criteria documents by the EPA and CARB include ozone (O<sub>3</sub>), carbon monoxide (CO), nitrogen dioxide (NO<sub>X</sub>), sulfur dioxide (SO<sub>2</sub>), and suspended particulate matter (PM<sub>2.5</sub> and PM<sub>10</sub>). The Bay Area meets all ambient air quality standards with the exception of ground-level ozone and fine particulate matter (PM<sub>2.5</sub>) for state and federal standards, and respirable particulate matter (PM<sub>10</sub>) for state standards.

High ozone levels are caused by the cumulative emissions of reactive organic gases (ROG) and nitrogen oxides (NO<sub>X</sub>). These precursor pollutants react under certain meteorological conditions to form high ozone levels. Controlling the emissions of these precursor pollutants is the focus of the Bay Area's attempts to reduce ozone levels. The highest ozone levels in the Bay Area occur in the eastern and southern inland valleys that are downwind of air pollutant sources. High ozone levels

aggravate respiratory and cardiovascular diseases, reduced lung function, and increase coughing and chest discomfort.

Particulate matter is a problematic air pollutant in the Bay Area. Particulate matter is assessed and measured in terms of respirable particulate matter or particles that have a diameter of 10 micrometers or less (PM<sub>10</sub>) and fine particulate matter where particles have a diameter of 2.5 micrometers or less (PM<sub>2.5</sub>). Elevated concentrations of PM<sub>10</sub> and PM<sub>2.5</sub> are the result of both region-wide (or cumulative) emissions and localized emissions. High particulate matter levels aggravate respiratory and cardiovascular diseases, reduce lung function, increase mortality (e.g., lung cancer), and result in reduced lung function growth in children

Carbon monoxide is a local pollutant (i.e., high concentrations are normally only found very near sources). The major source of carbon monoxide – a colorless, odorless, poisonous gas – is automobile traffic. Elevated concentrations, therefore, are usually only found near areas of high traffic volumes.

#### Local Community Risks/Toxic Air Contaminants and Fine Particulate Matter

Besides criteria air pollutants, there is another group of substances found in ambient air referred to as Toxic Air Contaminants (TACs). TACs are a broad class of compounds known to cause morbidity or mortality (usually because they cause cancer) and include, but are not limited to, the criteria air pollutants. TACs are found in ambient air, especially in urban areas, and are caused by industry, agriculture, 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). Because chronic exposure can result in adverse health effects, TACs are regulated at the regional, State, and federal level.

Diesel exhaust is the predominant TAC in urban air and is estimated to represent about three-quarters of the cancer risk from TACs (based on the Bay Area average). According to the California Air Resources Board (CARB), diesel exhaust is a complex mixture of gases, vapors, and fine particles. This complexity makes the evaluation of health effects of diesel exhaust a complex scientific issue. Some of the chemicals in diesel exhaust, such as benzene and formaldehyde, have been previously identified as TACs by the CARB, and are listed as carcinogens either under the State's Proposition 65 or under the Federal Hazardous Air Pollutants programs. The most recent Office of Environmental Health Hazard Assessment (OEHHA) risk assessment guidelines were published in February of 2015.

Fine Particulate Matter (PM<sub>2.5</sub>) is a complex mixture of substances that includes elements such as carbon and metals; compounds such as nitrates, organics, and sulfates; and complex mixtures such as diesel exhaust and wood smoke. Long-term and short-term exposure to PM<sub>2.5</sub> can cause a wide range of health effects. Common stationary sources of TACs and PM<sub>2.5</sub> include gasoline stations, dry cleaners, and diesel backup generators. The other more significant, common source is motor vehicles on roadways and freeways.

<sup>&</sup>lt;sup>9</sup> OEHHA, 2015. Air Toxics Hot Spots Program Risk Assessment Guidelines, The Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments. Office of Environmental Health Hazard Assessment. February.

#### **Sensitive Receptors**

There are groups of people 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, the elderly over 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. For cancer risk assessments, children are the most sensitive receptors, since they are more susceptible to cancer causing TACs. Residential locations are assumed to include infants and small children. The closest sensitive receptors to the project site are residences immediately north, east and south of the project site. There are additional residences at farther distances to the west of the project site. St. Christopher School (kindergarten through 8<sup>th</sup> grade) is immediately northwest of the project site. The Presentation High School includes students that are considered sensitive receptors, however, the student population does not include infants or small children and this is accounted for in the health risk assessment. The Herman Health Care Center is located adjacent to the southeast side of the site; however, this facility does not include infants or small children that would experience chronic exposures from construction.

#### **Odors**

Odors are generally regarded as an annoyance rather than a health hazard. The ability to detect odors varies considerably among the population, and people may have different reactions to the same odor.

The BAAQMD CEQA Guidelines provide a list of recommended odor screening distances for specific odor-generating facilities. The General Plan EIR does not identify any potential odor sources in the Willow Glen Planning Area, where the project is located.

#### 4.3.2 <u>Impact Discussion</u>

		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?			N-2	
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?		Ш		
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?				

#### 4.3.2.1 Thresholds of Significance

The CEQA Guidelines prepared by BAAQMD in 2011 used significance criteria to evaluate the impacts caused by projects. BAAQMD's adoption of the 2011 thresholds was called into question by a trial court order issued March 5, 2012, in California Building Industry Association v. BAAQMD (Alameda Superior Court Case No. RGI0548693) that determined the adoption of the thresholds was a project under CEQA, but did not address the substantive validity, merits or scientific basis of the thresholds. The California Court of Appeal for the Fifth District reversed the trial court decision and the Court of Appeal's decision was appealed to the California Supreme Court. In a December 2015 opinion [California Building Industry Association v. Bay Area Air Quality Management District, 62 Cal. 4th 369 (No. S 213478)] the California Supreme Court confirmed that CEQA, with several specific exceptions, is concerned with the impacts of a project on the environment, not the effects the existing environment may have on a project. The opinion did not negate the BAAQMD thresholds.

The issues in the California Building Industry Association v. BAAQMD lawsuit are not relevant to the scientific basis of BAAQMD's analysis of what levels of pollutants should be deemed significant. The City has determined that the scientific information in BAAQMD's proposed thresholds of significance analysis provides substantial evidence to support the thresholds and regards these thresholds to be based on the best information available for the San Francisco Bay Area Air Basin. Therefore, the thresholds and methodologies from BAAQMD's May 2011, now updated in May 2017, CEQA Air Quality Guidelines are appropriate for use in this analysis to determine whether there would be any project operational impacts in terms of criteria pollutants, toxic air contaminants and odors. The BAAQMD updated CEQA Air Quality Guidelines in 2017 were used in the *Illingworth & Rodkin* assessment for the project. These thresholds are summarized in Table 4.3-1.

Table 4.3-1: Air Quality Significance Thresholds						
D #	Construction Thresholds	Operationa	l Thresholds			
Pollutant	Average Daily Emissions (lbs./day)	Average Daily Emissions (lbs./day)	Annual Average Emissions (tons/year)			
Criteria Air Pollutants						
ROG	54	54	10			
$NO_x$	54	54	10			
$PM_{10}$	82 (Exhaust)	82 15				
$PM_{2.5}$	54 (Exhaust)	54 10				
СО	Not Applicable	9.0 ppm (8-hour average) or 20.0 ppm (1-hour average)				
Fugitive Dust	Construction Dust Ordinance or other Best Management Practices	st Not Applicable				
Health Risks and Haza	Health Risks and Hazards for Single Sources					
Excess Cancer Risk	>10 per one million					
Hazard Index	>1.0					
Incremental annual PM <sub>2.5</sub>	>0.3 μg/m <sup>3</sup>					

Table 4.3-1: Air Quality Significance Thresholds						
Construction Operational Thresholds						
Pollutant	Average Daily	Average Daily	Annual Average			
	Emissions (lbs./day) Emissions (lbs./day)		Emissions (tons/year)			
Health Risks and Hazar	ds for Combined Sources (	Cumulative from all sour	ces within 1,000-foot			
zone of influence)						
Excess Cancer Risk		>100 per one million				
Hazard Index		>10.0				
Annual Average PM <sub>2.5</sub> >0.8 μg/m <sup>3</sup>						
Note: ROG = reactive organic gases, NOx = nitrogen oxides, PM <sub>10</sub> = course particulate matter or particulates with an aerodynamic diameter of 10 micrometers (µm) or less, PM <sub>2.5</sub> = fine particulate matter or particulates with an aerodynamic diameter of 2 5µm or less						

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

BAAQMD's most recently adopted plan is the Bay Area 2017 Clean Air Plan (2017 CAP). The 2017 CAP focuses on two closely-related BAAQMD goals: protecting public health, and protecting the climate. To protect public health, the plan describes how the BAAQMD will continue its progress toward attaining all state and federal air quality standards and eliminating health risk disparities from exposure to air pollution among Bay Area communities.

The 2017 CAP includes a wide range of control measures designed to decrease emissions of the air pollutants that are most harmful to Bay Area residents, such as particulate matter, ozone, and toxic air contaminants; 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. Determining consistency with the 2017 CAP involves assessing whether applicable control measures in the 2017 Clean Air Plan are implemented. Implementation of the control measures improves air quality and protects health. The proposed project is consistent with the control measures shown in Table 4.3-2.

Table 4.3-2:					
Ba	y Area 2017 Clean Air Plan A	pplicable Control Measures			
<b>Control Measures</b>	Control Measures Description Project Consistency				
Transportation Contro	ol Measures				
Support Local Land Use Strategies	Promote land use patterns, policies, and infrastructure investments that support mixed-use, transit-oriented development that reduce motor vehicle dependence and facilitate walking, bicycling, and transit use.	The project proposes modifications to a private school site near transit. The project vicinity is served by existing transit (VTA local bus Route 26, with stops located on Curtner Avenue, within ¼-mile of the school), bicycle, and pedestrian facilities. There are sidewalks on all of the streets surrounding the school campus, and bike lanes are provided on major thoroughfares in the vicinity (Cherry Avenue, Curtner Avenue, Meridian Avenue)Based on			

Table 4.3-2: Bay Area 2017 Clean Air Plan Applicable Control Measures			
Control Measures	<b>Description</b>	Project Consistency	
CONTROL PROBLEM	Description	the transportation options available to students and employees (school staff), the project is consistent with this control measure.	
<b>Building Control Mea</b>	sures		
Green Building	Identify barriers to effective local implementation of the CalGreen (Title 24) statewide building energy code; develop solutions to improve implementation/enforcement. Engage with additional partners to target reducing emissions from specific types of buildings.	The project would comply with the City's Green Building Ordinance and the California Green Building Standards Code (CalGreen). The project, therefore, is consistent with this measure.	
Decrease Electricity Demands	Work with local governments to adopt additional energy efficiency policies and programs. Support local government energy efficiency program via best practices, model ordinances, and technical support. Work with partners to develop messaging to decrease electricity demand during peak times.	The proposed building would be constructed in compliance with the San José Green Building Policy (Policy 6-32), Building Code (Municipal Code Title 17) and the California Green Building Standards Code (Part 11 of Title 24, California Code of Regulations).	
Energy and Climate N	1easures	771	
Energy Efficiency	Increase efficiency and conservation to decrease fossil fuel use in the Bay Area.	The project will comply with the current California Energy Code and reduce residential energy consumption by 15 percent over 2005 Title 24 standards. The project is consistent with this control measure.	
Urban Heat Island Mitigation	Mitigate the "urban heat island" effect by promoting the implementation of cool roofing, cool paving, and other strategies.	Although the project does not propose the use of cool roofing or paving, the project would generally maintain plantings of street trees and increase on-site tree plantings. Landscape tree retention and additional plantings will reduce the "urban heat island" effect and thus the project is consistent with this control measure.	
Tree-Planting	Promote planting of low-VOC- emitting shade trees to reduce urban heat island effects, save energy, and absorb CO <sub>2</sub> and other air pollutants.	The project includes the removal of approximately 54 trees, but proposes the replacement planting of 108 trees as well as planting replacement trees in accordance with the City's standard tree mitigation replacement ratios. Implementation of tree mitigation measures will reduce the urban heat island	

Table 4.3-2: Bay Area 2017 Clean Air Plan Applicable Control Measures					
<b>Control Measures</b>	Description	Project Consistency			
		effect. The proposed project is consistent with this control measure.			
Waste Management C	Control Measures				
Recycling and Waste Reduction  Develop or identify and promote model ordinances on community-wide zero waste goals and recycling of construction and demolition materials in commercial and public construction projects.		The City adopted the Zero Waste Strategic Plan which outlines policies to help the City foster a healthier community and achieve its Climate Smart San José goals, including Fiscally Sustainable Waste Management, Waste Diversion, Waste Reduction, and Solid Waste Materials Recovery/Landfill. In addition, the project would comply with the City's Construction and Demolition Diversion Program during construction which ensures that at least 75 percent of construction waste generated by the project is recovered and diverted from landfills. Therefore, the project is consistent with this control measure.			
Water Control Measu	res				
Support Water Conservation	Develop a list of best practices that reduce water consumption and increase on-site water recycling in new and existing buildings; incorporate into local planning guidance.	The project would comply with CalGreen and reduce potable indoor water consumption and outdoor water use by including water efficient fixtures and planting drought tolerant non-invasive landscaping. The project, therefore, would be consistent with this measure.			
Natural and Working	Lands Measures				
Urban Tree Planting	Develop or identify an existing model municipal tree planting ordinance and encourage local governments to adopt such an ordinance. Include tree planting recommendations, the Air District's technical guidance, best management practices for local plans, and CEQA review.	The project would be required to adhere to the City's tree replacement policy. Therefore, the project is consistent with this control measure.			

The project includes transportation and energy control measures and is generally consistent with the Clean Air Plan. The project by itself, therefore, would not result in a significant impact related to consistency with the 2017 CAP.

## AQ-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)

The project proposes to expand the existing high school from 107,884 to 152,425 gross square feet in four development phases. BAAQMD developed screening criteria for criteria pollutants to provide a conservative indication of whether a project could result in potentially significant air quality impacts (e.g., emissions of 54 pounds per day of ROG, NO<sub>x</sub>, PM<sub>2.5</sub>, and 82 pounds per day of PM<sub>10</sub>). For operational impacts from criteria pollutants, the BAAQMD screening size for a "high school" is 311,000 square feet. Projects that are smaller than the screening size would have a less than significant operational air quality impacts.

The project is 127, 586 square feet less than the screening size for high schools. Therefore, the project would have a less than significant operational air quality impact.

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

#### **Project Community Risk Impacts**

Community risk impacts associated with the project would occur primarily from construction activity. When operating, the project may generate automobile traffic and infrequent truck traffic. These emissions are anticipated to result in fairly low impacts in terms of TAC or PM<sub>2.5</sub> exposure and were not evaluated. Cumulative impacts were evaluated with respect to the project construction and effects from local high-volume roadways and stationary sources permitted by BAAQMD.

#### **Project Construction Activity**

The project is proposed to be constructed in four phases, beginning in 2022 with completion scheduled for 2036. A more aggressive construction schedule would result in greater impact to sensitive receptors that are infants and children (the most sensitive type) because they would be exposed to higher emissions during times in their lives when they are most sensitive. As a credible worst-case assessment, emissions from the project were assumed to occur with no breaks between phases from 2020 through 2026.

Construction equipment and associated heavy-duty truck traffic generates diesel exhaust, which is a known TAC. These exhaust air pollutant emissions would not be considered to contribute substantially to existing or projected air quality violations. Construction exhaust emissions may still pose health risks for sensitive receptors such as surrounding residents. The primary community risk impact issues associated with construction emissions are cancer risk and exposure to PM<sub>2.5</sub>. 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

of sensitive receptors at these nearby residences from construction emissions of diesel particulate matter (DPM) and PM<sub>2.5</sub>.<sup>10</sup>

The closest sensitive receptors to the project site are residences located adjacent to the campus boundaries, as well as students that attend the school. Dispersion modeling was conducted to predict the off-site concentrations resulting from project construction, so that lifetime cancer risks and noncancer health effects could be evaluated.

Construction activity is anticipated to include demolition, grading and site preparation, building construction, and paving. Construction period emissions were modeled using the California Emissions Estimator Model, Version 2016.3.2 (CalEEMod). A build-out construction schedule including equipment usage assumptions was developed based on CalEEMod defaults for each project phase, where inputs to the model were the project type and size (in terms of square feet) and the size of the building to be demolished.

The CalEEMod model provided total annual PM<sub>10</sub> exhaust emissions (assumed to be DPM) for the off-road construction equipment and for exhaust emissions from on-road vehicles. The on-road emissions are a result of haul truck travel during demolition and grading activities, worker travel, and vendor deliveries during construction. A trip length of one mile was used to represent vehicle travel while at or near the construction site. It was assumed that these emissions from on-road vehicles traveling at or near the site would occur at the construction site. Fugitive PM<sub>2.5</sub> dust emissions were calculated by CalEEMod. The CalEEMod inputs along with the construction emissions are summarized in Table 4.3-3.

Table 4.3-3: CalEEMod Construction Modeling Scenarios						
	Unmitigated Emission					
Phase	Year	PM <sub>10</sub> Exhaust (tons)	PM <sub>2.5</sub> Fugitive (tons)			
1	2020-21	High School, New = 28,750 sf, Demo = 28,749 sf	0.0304	0.0020		
2	2022-23	High School, New = 28,750 sf, Demo = 28,749 sf	0.0217	0.0027		
3	2024	High School, New = 28,750 sf, Demo = 28,749 sf	0.0165	0.0027		
4	2025	High School, New = 28,750 sf, Demo = 28,749 sf	0.0141	0.0005		

During any construction period ground disturbance, the applicant shall ensure that the project contractor implement measures to control dust and exhaust. Implementation of the basic construction measures recommended by BAAQMD and listed below as Standard Permit Conditions would reduce the air quality impacts associated with grading and new construction to a less than significant level. The contractor shall implement the following best management practices that are required of all projects.

#### **Standard Permit Conditions:**

1. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.

<sup>&</sup>lt;sup>10</sup> DPM is identified by California as a toxic air contaminant due to the potential to cause cancer.

- 2. All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
- 3. 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.
- 4. All vehicle speeds on unpaved roads shall be limited to 15 miles per hour (mph).
- 5. 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.
- 6. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.
- 7. 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.
- 8. 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.

Emissions models typically make an assumption that watering reduces fugitive dust emissions by 50 percent, as stated in Appendix B of the BAAQMD CEQA Guidelines. Further, the modeling methodology for calculating exhaust emissions described in Appendix B states that a five percent reduction could be applied for NOx, PM<sub>10</sub>, and PM<sub>2.5</sub> emissions to account for implementation of the basic construction measures. <sup>11</sup> Therefore, implementation of these *Standard Permit Conditions* would be considered to reduce exhaust emissions by five percent and fugitive dust emissions by 50 percent.

#### **Dispersion Modeling**

The U.S. EPA AERMOD dispersion model was used to predict DPM and PM<sub>2.5</sub> concentrations at existing sensitive receptors (residences and school) in the vicinity of the project. The AERMOD dispersion model is a BAAQMD-recommended model for use in modeling analysis of these types of emission activities for CEQA projects.<sup>12</sup>

Annual concentrations were computed for the four construction phases during the years 2020-2025. The AERMOD modeling of these emissions utilized ten area sources to represent the on-site emissions, with five areas for exhaust emissions and five areas for fugitive dust emissions. To

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<sup>&</sup>lt;sup>11</sup> Illingworth & Rodkin, *Presentation High School Master Plan Construction Air Quality Assessment, San José, California, Page 13*, March 28, 2018.

<sup>&</sup>lt;sup>12</sup> Bay Area Air Quality Management District (BAAQMD), 2012, *Recommended Methods for Screening and Modeling Local Risks and Hazards, Version 3.0.* May.

represent the construction equipment exhaust emissions, an emission release height of 6 meters (19.7 feet) was used for the area sources. The elevated source height reflects the height of the equipment exhaust pipes plus an additional distance for the height of the exhaust plume above the exhaust pipes to account for plume rise of the exhaust gases. For modeling fugitive PM<sub>2.5</sub> emissions, a near-ground level release height of 2 meters (6.6 feet) was used for the area sources. Emissions from the construction equipment and on-road vehicle travel were distributed throughout the modeled area sources. Construction emissions were modeled as occurring daily between 7:00 a.m. to 4:00 p.m., when the majority of construction activity would occur.

The modeling used a 5-year meteorological data set (2006 – 2010) from the San José Norman Y. Mineta International Airport meteorological station prepared for use with the AERMOD model by the BAAQMD. Annual DPM and PM<sub>2.5</sub> concentrations from construction activities during the 2020 – 2025 period were calculated using the model. DPM and PM<sub>2.5</sub> concentrations were calculated at existing off-site sensitive receptors (nearby residences) and at receptors placed within the Presentation High School and St. Christopher School areas using a grid of receptors with 7 meter (23 feet) spacing to represent locations where school student exposures could occur during construction activities. Receptor heights of 1.5 meters (4.9 feet) were used to represent the breathing height of nearby residences and school students. Figure 4.3-1 shows the project site, the area sources used for modeling each project phase, and off-site and on-site receptor locations where health impacts were evaluated.

#### **Estimated Cancer Risk and Hazards**

Figure 4.3-1 shows the locations where the maximum-modeled DPM and PM<sub>2.5</sub> concentrations occurred. Two locations or receptors were identified for maximum impacts: (1) a residence; and (2) on-site at the Presentation High School (where students grade 9 through 12 attend). The maximum annual modeled DPM concentrations at each of these receptors were used to compute the maximum increased cancer risk. The receptors (or locations of sensitive land uses) where the highest impacts occur is referred to as the maximally exposed individual (MEI). The impacts in terms of cancer risk, hazards and PM<sub>2.5</sub> are computed only at the MEI using BAAQMD-recommended methods. The cancer risk calculations are based on applying the BAAQMD-recommended age sensitivity factors to the TAC concentrations. Age-sensitivity factors reflect the greater sensitivity of infants and small children to cancer causing TACs.

BAAQMD-recommended exposure parameters were used for the cancer risk calculations. In calculating cancer risks for the residential MEI exposures, 3<sup>rd</sup> trimester exposures were assumed to occur during the first year of construction, as were infant and child exposures. Child exposures were assumed to occur at the Presentation High School MEI receptor. Child exposures were also assumed for students at the St. Christopher School.

Results of this assessment are shown in Table 4.3-4. The maximum increased cancer risk would be 17.4 chances in one million, assuming infant/child exposure (at the Residential MEI) and 0.3 chances in one million for an adult exposure. The maximum cancer risk at the on-site Presentation High School MEI would be 7.9 chances per million. The maximum school child cancer risk at the St. Christopher School would be 1.6 chances per million. The maximum residential excess cancer risk would be above the significance threshold of 10.0 in one million.

#### Estimated Annual PM<sub>2.5</sub> Concentration

The maximum-modeled annual  $PM_{2.5}$  concentration at an off-site residential receptor, which is based on combined exhaust and fugitive dust emissions, was  $0.10 \,\mu\text{g/m}^3$ . The maximum-modeled annual  $PM_{2.5}$  concentration at an on-site Presentation High School student receptor was  $0.20 \,\mu\text{g/m}^3$ . These maximum annual  $PM_{2.5}$  concentrations would be below the BAAQMD significance threshold of greater than  $0.3 \,\mu\text{g/m}^3$ . The locations of the receptors with the maximum  $PM_{2.5}$  concentrations would be the same as where the maximum cancer risks would occur and are shown in Figure 4.3-1.

#### **Non-Cancer Hazards**

The maximum modeled annual diesel particulate matter or DPM concentration (i.e., from construction exhaust) was  $0.1154 \,\mu\text{g/m}^3$ . The maximum computed Hazard Index (HI) based on this DPM concentration is 0.02, which is much lower than the BAAQMD significance criterion of a HI greater than 1.0.

4127000 St. Christopher School 4126900 UTM - North (meters) 4126800 Presentation High School 4126700 597550 597600 597200 597250 597400 597450 597500 UTM - East (meters) **Areas Used for Construction Modeling** Phase 1 Construction Areas Phase 2 Construction Area Phase 3 Construction Area Phase 4 Construction Area Off-Site Residential Receptor Locations Residential MEI Location Presentation High School Student Receptor Locations Presentation High School MEI Location St. Christopher School Student Receptor Locations

Figure 4.3-1 Project Site, Modeled Construction Areas and Receptors and MEI Locations

#### Cumulative Impact on Construction MEI

Operation of the project is not expected to cause any localized emissions that could expose sensitive receptors to unhealthy air pollutant levels. No stationary sources of TACs, such as generators, are proposed as part of the project.

Contributing sources of TAC and PM<sub>2.5</sub> emissions within a 1,000-foot radius of the site were considered in a cumulative analysis. These sources and the influence area (1,000 feet) are shown on Figure 4.3-2. Cumulative sources included local high-volume roadways (i.e., Curtner Ave.), and one permitted stationary source that is a permitted diesel generator operated by the school. The project impacts along with impacts from cumulative sources are shown in Table 4.3-3.

Curtner Ave Presentation High School 916995

Figure 4.3-2 Project Site, 1,000 foot Influence Area and Identified Sources

Table 4.3-4: Impacts from Combined Sources at Construction MEI						
Source	Cancer Risk (per million)	PM <sub>2.5</sub> Concentration (µg/m³)	Hazard Index			
Project Construction  - Unmitigated Resident MEI  - Unmitigated School MEI	<b>17.4 (infant)</b> 7.2 (child)	0.10 0.20	0.02 0.02			
Project Construction  – Mitigated Resident MEI	1.6 (infant)	0.01	0.002			
Local Roadway – Curtner Ave (850 feet from Res. MEI) with 30,000 ADT	1.5 Res.	0.05 Res.	0.00 Res.			
Stationary Source – Plant 16995 – Diesel Generator at ~150 feet from Res. MEI	10.0 Res.	0.0 Res.	0.1 Res.			
Combined Sources at Residential MEI	• • •	0.15	0.00			
<ul><li>Unmitigated Construction</li><li>Mitigated Construction</li></ul>	28.9 13.1	0.15 0.06	0.02 0.00			
BAAQMD Threshold – Single Source	10.0	0.3	1.0			
BAAQMD Threshold – Combined Sources	100	0.8	10.0			
Significant?	Yes	No	No			

The project would have a significant impact with respect to community risk caused by project construction activities since the project itself, a single source, would result in 17.4 chance per million cancer risk for infant exposure that exceeds the 10.0 chance per million BAAQMD threshold. To mitigate this impact, on-site emissions would have to be reduced by 45 percent. Other single source impacts and cumulative source impacts would be below the significance thresholds.

# MM AQ-3: The project applicant shall develop a construction operations plan demonstrating that the off-road equipment used on-site to construct the project would achieve a fleet-wide average of at least a 45 percent reduction in diesel particulate matter (DPM) exhaust emissions or greater. Feasible measures to achieve this reduction can include, but are not limited to, the following:

- All mobile diesel-powered off-road equipment larger than 25 horsepower and operating on the site for more than two days shall meet, at a minimum, U.S. EPA particulate matter emissions standards for Tier 4 engines or equivalent.
- The use of equipment that includes CARB-certified Level 3 Diesel Particulate Filters<sup>13</sup> or alternatively-fueled equipment (i.e., non-diesel), added exhaust devices, or a combination of measures.

The construction contractor may use other measures to minimize construction period DPM emissions to reduce the estimated cancer risk below the thresholds. If any of these alternative measures are proposed, the construction operations plan must

<sup>&</sup>lt;sup>13</sup> See <a href="http://www.arb.ca.gov/diesel/verdev/vt/cvt.htm">http://www.arb.ca.gov/diesel/verdev/vt/cvt.htm</a>.

include specifications of the equipment to be used during ground disturbing activities. The plan shall be accompanied by a letter signed by a qualified air quality specialist, verifying the equipment included in the plan meets the standards set forth in this mitigation measure to the satisfaction of the Director of Planning.

Prior to the issuance of any grading permits, the project applicant shall submit a construction operations plan to the Director of the Department of Planning, Building and Code Enforcement or the Director's designee, which includes specifications of the equipment to be used during construction and confirmation this requirement is met.

Based on the results of the modeling used in the *Illingworth & Rodkin* report, described above, the use of Tier 4 equipment on-site would reduce diesel emissions by 90 percent. The report estimated an 80 to 90 percent overall reduction, due to the possibility that there could be a contribution form traffic that cannot be fully mitigated. Model results also showed that implementation of the other alternative contained in the mitigation measure (use of equipment that includes CARB-certified Level 3 Diesel Particulate Filters or alternatively-fueled equipment, added exhaust devices, or a combination of measures) would achieve a reduction of 80 to 85 percent. With mitigation MM AQ-1, the computed maximum increased lifetime residential cancer risk from construction, assuming infant exposure at the Residential MEI, would be reduced to below the BAAQMD threshold of 10 per one million for cancer risk. Details of the methodology utilized by *Illingworth & Rodkin* to establish the modeling results are contained in <u>Attachment 1: Health Impact Evaluation Methodology</u>, included in their report (see Appendix A of this Initial Study). Implementation of this mitigation measure, as well as the above listed dust and exhaust control measures, would therefore reduce the community risk impacts to a less than significant level.

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 are not likely to affect people off-site. Implementation of the proposed project would not result in long-term or short-term odor impacts.

#### 4.4 BIOLOGICAL RESOURCES

#### 4.4.1 <u>Environmental Setting</u>

#### 4.4.1.1 Regulatory Framework

#### **Endangered Species Acts**

Special-status species are those plants and animals listed under the federal and state Endangered Species Acts as threatened, endangered, proposed threatened, proposed endangered, or a candidate species. The federal Endangered Species Act (FESA) prohibits the take of any fish or wildlife species that is federally listed as threatened or endangered without prior approval. "Take" is broadly defined as to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in any such conduct. Take can also include habitat modification or degradation that directly results in death or injury of a listed wildlife species.

Special status species in California include plants or animals that are listed as threatened or endangered under the California Endangered Species Act (CESA), species identified by the California Department of Fish and Wildlife (CDFW) as California Species of Special Concern, as well as plants identified by the California Native Plant Society (CNPS) as rare, threatened, or endangered. The CDFW has jurisdiction over state-listed species and regulate activities that may result in take of individuals

#### **Migratory Bird Treaty Act**

The federal Migratory Bird Treaty Act (MBTA) prohibits killing, possessing, or trading in migratory birds except in accordance with regulations prescribed by the Secretary of the Interior. This act encompasses whole birds, parts of birds, and bird nests and eggs. Construction disturbance during the breeding season could result in the incidental loss of fertile eggs or nestlings, or otherwise lead to nest abandonment, a violation of the MBTA. Additionally, nesting birds are considered special-status species and are protected by the U.S. Fish and Wildlife Service (USFWS) and CDFW under the MBTA.

#### Santa Clara Valley Habitat Plan

The Santa Clara Valley Habitat Plan (SCVHP) is a conservation program intended to promote the recovery of endangered species and enhance ecological diversity and function, while accommodating planned growth on approximately 500,000 acres in southern Santa Clara County. <sup>14</sup> The SCVHP is a regional partnership between six local partners (the County of Santa Clara, Santa Clara Valley Transportation Authority, Santa Clara Valley Water District, and the cities of San José, Gilroy, and Morgan Hill) and two Wildlife Agencies (the California Department of Fish and Wildlife and the U.S. Fish and Wildlife Service).

The SCVHP identifies and preserves land that provides important habitat for endangered and threatened species. The land preservation is both to mitigate for the environmental impacts of planned development, public infrastructure operations, and maintenance activities as well as to

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<sup>&</sup>lt;sup>14</sup> Santa Clara Valley Habitat Agency. Final Santa Clara Valley Habitat Plan. August 2012 (adopted October 2013)

enhance the long term viability of endangered species. Species of concern include, but are not limited to, the California tiger salamander, California red-legged frog, western burrowing owl, Bay checkerspot butterfly, and numerous plant species endemic to serpentine grassland and scrub.

The proposed project is located within the SCVHP study area and is designated as *Urban-Suburban*. *Urban-Suburban* land comprises areas where natural vegetation has been cleared for residential, commercial, industrial, transportation, or recreational structures, and has a density of one or more structures per 2.5 acres. The project site is not identified as important habitat for endangered and threatened species in the SCVHP. The SCVHP designations pertinent to this project are listed in *Section 2.7* of this Initial Study.

#### Nitrogen Deposition Fee

All development within the SCVHP study area is required to pay a nitrogen deposition fee as mitigation for cumulative impacts to serpentine habitat in the SCVHP area. Nitrogen deposition is known to have damaging effects on many of the serpentine plants in the SCVHP area, as well as the host plants that support the Bay checkerspot butterfly. All major remaining populations of the butterfly, and many of the sensitive serpentine plant populations occur in areas subject to air pollution from vehicle exhaust and other sources throughout the Bay Area including the project site. Because serpentine soils tend to be nutrient poor, and nitrogen deposition artificially fertilizes serpentine soils, nitrogen deposition facilitates the spread of invasive plant species onto serpentine habitat displacing native plant species. The displacement of these native plant species, and subsequent decline of the several federally-listed plant and animal species, including the Bay Checkerspot butterfly and its larval host plants, has been documented on Coyote Ridge in central Santa Clara County. Nitrogen tends to be efficiently recycled by the plants and microbes in infertile soils such as those derived from serpentine, so that fertilization impacts could persist for years. The impacts of nitrogen deposition upon serpentine habitat and the Bay checkerspot butterfly can be correlated to the amount of new vehicle trips that a project is expected to generate. The nitrogen deposition fees collected under the SCVHP for new vehicle trips will be used as mitigation to purchase and manage conservation land for the Bay checkerspot butterfly and other sensitive species.

#### City of San José Tree Removal Ordinance

The City of San José Tree Removal Controls (San José Municipal Code, Sections 13.31.010 to 13.32.100) serve to protect all trees having a trunk that measures 38 inches or more in circumference (12.1 inches in diameter) at the height of 54 inches above the natural grade of slope. The ordinance protects both native and non-native tree species. A tree removal permit is required from the City of San José for the removal of ordinance-sized trees. On private property, tree removal permits are issued by the Department of Planning, Building and Code Enforcement. Tree removal or modifications to all trees on public right-of-way (e.g., street trees within a parking strip or the area between the curb and sidewalk) are handled by the Department of Transportation.

#### Envision San José 2040 General Plan

The General Plan includes policies for the purpose of avoiding or mitigating impacts resulting from planned development within the City. The following policies are specific to biological resources and are applicable to the proposed project:

	General Plan Policies: Biological Resources			
Community For	rest			
Policy MS-21.4	Encourage the maintenance of mature trees, especially natives, on public and private property as an integral part of the community forest. Prior to allowing the removal of any mature tree, pursue all reasonable measures to preserve it.			
Policy MS-21.5	As part of the development review process, preserve protected trees (as defined by the Municipal Code), and other significant trees. Avoid any adverse effect on the health and longevity of protected or other significant trees through appropriate design measures and construction practices. Special priority should be given to the preservation of native oaks and native sycamores. When tree preservation is not feasible, include appropriate tree replacement, both in number and spread of canopy.			
Policy MS-21.6	Policy MS-21.6 As a condition of new development, require, where appropriate, the planting and maintenance of both street trees and trees on private property to achieve a level of tree coverage in compliance with and that implements City laws, policies or guidelines.			
Migratory Birds	S			
Policy ER-5.1	Avoid implementing activities that result in the loss of active native birds' nests, including both direct loss and indirect loss through abandonment, of native birds. Avoidance activities that could result in impacts to nests during the breeding season or maintenance of buffers between such activities and active nests would avoid such impacts.			
Policy ER-5.2 Require that development projects incorporate measures to avoid impacts to nesting migratory birds. This shall include requiring pre-construction surver for nesting birds prior to grading permit issuance for projects that disturb treand begin construction during the nesting season (February 1 and August 31 Pre-construction surveys for nesting birds will be conducted by a qualified biologist within onsite trees as well as all trees within 250 feet of the site. The survey will occur within 14 days of the onset of construction. If pre-construction surveys locate active nests within or near construction zones, these nests, and an approved buffer around them (as determined by a qualified biologist), will remain off-limits to construction until the nestling/chicks have fledged and are no longer dependent on the nest.				

#### 4.4.1.2 Existing Conditions

The project site is currently developed with a high school campus consisting of buildings, paved parking and driveway areas, paved walkways and landscaping.

#### **Special Status Species**

Special status species are plants and animals listed under the State and Federal Endangered Species Acts (including candidate species); plants listed on the California Native Plant Society's Inventory of Rare and Endangered Vascular Plants of California (1994); and animals designated as Species of Special Concern by the California Department of Fish and Wildlife. Most special status animal species occurring in the Bay Area use habitats that are not present on the project site. Salt marsh, freshwater marsh, serpentine grassland and riparian habitats are not present on the project site. Since the native vegetation of the area is no longer present on-site, native wildlife species have been supplanted by species that are more compatible with an urbanized area.

#### **Trees**

Trees (both native and non-native) are valuable to the human environment for the benefits they provide including resistance to global climate change (i.e., carbon dioxide absorption), protection from weather, nesting and foraging habitat for raptors and other migratory birds, and as a visual enhancement to the urban environment.

The existing school campus is landscaped with turf grass lawns, groundcovers, shrubs and trees. There are mature trees located throughout the campus and along the edges of the parking areas, including species such as oleander, crape myrtle, London plane, laurel, American sweet gum, Chinese elm, cherry, flowering pear, and English walnut.

#### 4.4.2 <u>Impact Discussion</u>

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Wo	ould 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		
	ould the project:							
4)	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, 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)								
sign fron corr proj	ificant impacts n the project. Ir idor, the Guada	there are currently no sensitive to natural plant communities of addition, there are no wetland lupe River, is approximately 0 dversely affect special status sment.	or special starts or special s	itus or endange the project sit t of the site. Th	red species we. The neare nerefore, the	vould result est riparian proposed		
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. (Less than Significant Impact)						or		
Refe	er to Impact BIO	O-1, above.						
Im	mpact 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. (Less than Significant Impact)							
Refe	er to Impact BIO	D-1, above.						

#### **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. (Less than Significant with Mitigation Incorporated)

#### **Impacts to Nesting Migratory Birds**

While the project site is located within an urban environment, the mature trees on-site could provide nesting and/or foraging habitat for migratory birds adapted to urban environments.

Migratory birds, like nesting raptors, are protected under the Migratory Bird Treaty Act and the California Department of Fish and Game Code Sections 3503, 3503.5, and 2800. Construction activities, including equipment noise and tree removal, may result in the loss of fertile eggs or nestlings, or otherwise lead to nest abandonment. The CDFW defines "taking" as causing abandonment and/or loss of reproductive efforts through disturbance.

In conformance with the California State Fish and Game Code, the provisions of the Migratory Bird Treaty Act, and General Plan Policies ER-5.1 and ER-5.2, the project shall implement the following measure to reduce impacts to nesting birds and raptors to a less than significant level through avoidance or completion of pre-construction/pre-demolition surveys.

#### **MM BIO-4:**

The project applicant shall schedule all construction and ground disturbance activities, such as demolition, grading, construction, and tree removals to avoid the nesting season (February 1st to August 31st, inclusive). If construction activities cannot be scheduled construction between September 1<sup>st</sup> and January 31<sup>st</sup>, inclusive, pre-construction nesting bird surveys shall be completed prior to tree removal or construction activities if removal or construction is proposed to commence during the breeding season. The project applicant shall retain a qualified biologist or ornithologist to conduct the pre-construction surveys. Surveys shall be completed by a qualified biologist or ornithologist no more than 14 days prior to the initiation of construction activities during the early part of the breeding season (February 1st through April 30th, inclusive) and no more than 30 days prior to the initiation of these activities during the late part of the breeding season (May 1<sup>st</sup> through August 31<sup>st</sup>, inclusive). During this survey, the qualified biologist or ornithologist shall inspect all trees and other nesting habitats in and immediately adjacent to the construction areas for nests.

If an active nest is found in an area that will be disturbed by the ground disturbance activities, the qualified biologist or ornithologist shall designate an adequate buffer zone to be established around the nest, in consultation with the California Department of Fish and Wildlife (CDFW). The buffer will ensure that nests shall not be disturbed during project construction.

The project applicant shall submit a report indicating the results of the survey and any designated buffer zones to the satisfaction of the Director of the Department of Planning, Building and Code Enforcement or the Director's designee, prior to the issuance of any grading permit or demolition permit.

With implementation of the identified mitigation measure, the project's impact to nesting birds and raptors would be less than significant.

## 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 with Mitigation Incorporated)

While the project site is within an urban developed area, there are numerous trees on-site that are part of the urban forest. Within the City of San José, the urban forest as a whole is considered an important biological resource because most mature trees provide some nesting, cover, and foraging habitat for a variety of birds (including raptors) and mammals that are tolerant of humans, as well as providing necessary habitat for beneficial insects. Although the urban forest is not the best environment for native wildlife, trees in the urban forest are often the only or best habitat commonly or locally available within urban areas. The exact number of trees to be removed from the site has not been confirmed. Based on the current project plans and a field reconnaissance of the site conducted by David J. Powers and Associates on December 13, 2017, it is estimated that approximately five ordinance-sized trees located within the interior of the site would be removed, including one London plane, three liquidambars, and one flowering pear. Two non-ordinance-sized flowering pear trees located along the edge of the existing parking lot on the south side of the site are also anticipated to be removed with the project.

As a condition of approval, as outlined below, trees removed as a result of the project would be required to be replaced in accordance with all applicable laws, policies, or guidelines, including:

- City of San José Tree Protection Ordinance
- San José Municipal Code Section 13.28
- General Plan Policies MS-21.4, MS-21.5, and MS-21.6

All ordinance size tree removals will require a permit from the Planning Department. The species of trees to be planted on-site would be determined in consultation with the City Arborist and the Department of Planning, Building and Code Enforcement.

#### **Standard Permit Conditions:**

In accordance with City policy, tree replacement would be implemented as shown in Table 4.4-1, below.

Table 4.4-1: City of San José Standard Tree Replacement Ratios						
Circumference of Tree	Type of Tree to be Removed <sup>2</sup>			Minimum Size of Each		
to be Removed <sup>1</sup>	Native <sup>4</sup>	Non-Native	Orchard	Replacement Tree		
38 inches or greater <sup>3</sup>	5:1	4:1	3:1	15-gallon		
19 up to 38 inches	3:1	2:1	none	15-gallon		
Less than 19 inches	1:1	1:1	none	15-gallon		

<sup>&</sup>lt;sup>1</sup> As measured 4.5 feet above ground level

A 38-inch tree equals 12.1 inches in diameter.

The proposed project would be required to meet the minimum tree replacement standard. In the event that the project site does not have sufficient area to accommodate the required tree mitigation on-site, one or more of the following measures would be implemented, in consultation with the City Arborist and to the satisfaction of the Director of Planning, Building and Code Enforcement, at the development permit stage:

- The size of a 15-gallon replacement tree may be increased to 24-inch box and count as two replacement trees to be planted on the project site, at the development permit stage.
- Pay Off-Site Tree Replacement Fee(s) to the City, prior to the issuance of Public Works grading permit(s), in accordance to the City Council approved Fee Resolution. The City will use the off-site tree replacement fee(s) to plant trees at alternative sites.

The proposed project would be required to meet the minimum tree replacement standard through a combination of on-site tree plantings and alternative requirements as noted above. Compliance with the City's tree ordinance would reduce impacts to a less than significant level.

#### **Construction Impacts – On-Site Trees**

If the final design of the project proposes to retain existing trees on-site these mature trees could be damaged during construction of the project. Consistent with City policies, the project shall implement the following mitigation measures to ensure that construction activities during the various phases of implementation of the proposed project would not damage trees to be retained. The following mitigation and avoidance measures will be implemented during pre-construction and construction phases of the project.

MM BIO-5: Prior to the removal of any vegetation and the issuance of any demolition, grading, or tree removal permits, the project applicant shall retain a Certified

 $<sup>^{2}</sup>$  X:X = tree replacement to tree loss ratio

<sup>&</sup>lt;sup>3</sup> Ordinance-sized tree

<sup>&</sup>lt;sup>4</sup> Native trees are those that are naturally inherent to the Santa Clara Valley. These species include, but are not limited to, California Bay Laurel, Aptos Blue Redwood, Valley Oak, California Buckeye, Box Elder, Western Sycamore, and Red Willow.

Arborist to review the project plans for tree-related impacts: site construction, grading, drainage, underground utility, planting, and irrigation.

The Certified Arborist will review all work procedures, access routes, storage areas, and tree protection measures. Based on that information, the Certified Arborist shall prepare a tree protection plan for the project. The tree protection plan shall include:

- The staging area and access routes shall be located outside the tree canopies that shall be retained.
- All existing or unused lines or pipes beneath the canopies of trees to be retained shall be abandoned in place or cut off at existing soil grade.
- Establish a Tree Protection Zone (TPZ) around the trees to remain, based on the outside edge of existing sidewalk cut-out planting space
- Install hay bales around the trunk or erect fencing at the outside edge of the cut-out. Use wooden fencing; orange plastic is not to be permitted.
- Limit spoils and runoff from traveling into root zones. Techniques may include locating silt fence and/or straw rolls along the outer edge of the canopy of each tree in the TPZ.
- Trees to be removed shall be felled so as to fall away from any TPZs; the
  contractor shall take care to avoid the pulling and breaking of roots of
  trees to remain. If roots are entwined, under the direction of a Certified
  Arborist, the major woody root mass shall be severed before extracting
  the trees, or grinding the stump below ground.
- Design irrigation systems so that no trenching will occur within the Tree Protection Zone.
- Route underground services including utilities, sub-drains, water, or sewer around the TPZ. Boxes, meters, or vaults should be installed outside of the trees' canopies. Where encroachment cannot be avoided, special construction techniques such as hand digging or tunneling under roots shall be employed where necessary to minimize root injury.
- Trees to be preserved must be irrigated during the construction period. The irrigation schedule to be determined by a Certified Arborist.
- Any grading, construction, demolition, or other work that would encounter roots of trees to be preserved shall be monitored by a Certified Arborist.
- If injury occurs to any tree during construction, it shall be evaluated as soon as possible by the Certified Arborist so that appropriate treatments can be applied.
- Fences are to remain until all site work has been completed. Fences may
  not be relocated or removed without permission of the project
  superintendent.

The tree protection plan shall be submitted to the Director of the Department of Planning, Building and Code Enforcement or the Director's designee prior to vegetation removals and the issuance of any demolition or grading permits.

For trees that will be retained on-site, the project would incorporate all the identified measures to ensure tree preservation. If construction activities inadvertently damage the trees, the project would be required to implement the City's tree replacement ratios as discussed previously. With implementation of the tree protection measures above, the project would result in a less than significant impact to on-site trees due to construction activities.

## 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. (Less than Significant Impact)

The project site is located within the adopted Habitat Conservation and Natural Community Conservation Plan (SCVHP). The project site is designated as *Urban – Suburban* land cover in the SCVHP and redevelopment of the site is considered a covered activity under the plan and would be subject to all applicable SCVHP fees.

The *Urban – Suburban* land cover type is not identified as important habitat for endangered and threatened species and the site has no sensitive habitats. Pursuant to the SCVHP, no site specific biological surveys are required, and because the proposed project would increase daily traffic it would be required to pay nitrogen deposition fees. Therefore the project would be required to comply with the applicable conditions and fees of the SCVHP at the time of future redevelopment, as outlined in the Standard Permit Condition below.

#### **Standard Permit Conditions:**

The project is subject to applicable Santa Clara Valley Habitat Plan conditions and fees (including the nitrogen deposition fee) prior to issuance of any grading permit. The project applicant shall submit a Santa Clara Valley Habitat Plan Coverage Screening Form to the Director of the Department of Planning, Building and Code Enforcement or the Director's designee for review and will complete subsequent forms, reports, and/or studies as needed.

The project would therefore not conflict with implementation of the SCVHP.

#### 4.5 CULTURAL RESOURCES

The following discussion and analyses are based, in part, on a Historic Report prepared for the project by *Archives & Architecture, LLC*. A copy of the report, dated December 15, 2017, is included in Appendix B of this Initial Study. An archaeological literature review was also prepared for the project site by *Holman & Associates*. A copy of the archaeology report is on file with the City of San José and available for review by qualified professionals.

#### 4.5.1 Environmental Setting

#### 4.5.1.1 Regulatory Framework

#### **National Register of Historic Places**

The National Register of Historic Places (National Register) is the nation's most comprehensive list of historic resources. This list includes historic resources significant in American history, architecture, archeology, engineering and culture, at the local, state, and national level. National Register Bulletin Number 15, *How to Apply the National Register Criteria for Evaluation*, describes the Criteria for Evaluation as being composed of two factors. First, the property must be "associated with an important historic context" and second, the property must retain integrity of those features necessary to convey its significance.

The National Register identifies four possible context types or criteria, at least one of which must be applicable at the national, state, or local level. As listed under Section 8, "Statement of Significance," of the National Register Registration Form, the four criteria include:

- A. Property is associated with events that have made a significant contribution to the broad patterns of our history.
- B. Property is associated with the lives of persons significant in our past.
- C. Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.
- D. Property has yielded, or is likely to yield, information important to prehistory or history.

Second, for a property to qualify under the National Register's Criteria for Evaluation, it must also retain historic integrity of those features necessary to convey its significance. While a property's significance relates to its role within a specific historic context, its integrity refers to a property's physical features and how they relate to its significance. To determine if a property retains the physical characteristics corresponding to its historic context, the National Register has identified seven aspects of integrity:

- 1) Location the place where the historic property was constructed or the place where the historic event occurred:
- 2) Design the combination of elements that create the form, plan, space, structure, and style of a property;
- 3) Setting the physical environment of a historic property;

- 4) Materials the physical elements that were combined or deposited during a particular period of time and in a particular pattern or configuration to form a historic property;
- 5) Workmanship the physical evidence of the crafts of a particular culture or people during any given period in history or prehistory;
- 6) Feeling a property's expression of the aesthetic or historic sense of a particular period of time; and
- 7) Association the direct link between an important historic event or person and a historic property.

There are no National Register listed or eligible resources on or in the vicinity of the project site.

#### California Register of Historic Resources

The California Register of Historic Resources (California Register) establishes a list of properties that are to be protected from substantial adverse change (PRC Section 5024.1). The California Office of Historic Preservation's Technical Assistance Series #6, *California Register and National Register: A Comparison*, outlines the differences between the federal and state processes. The context types to be used when establishing the significance of a property for listing on the CRHR are very similar, with emphasis on local and state significance. The context types include the following:

- 1) It is associated with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States;
- 2) It is associated with the lives of persons important to local, California, or national history;
- 3) It embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values; or
- 4) It has yielded, or is likely to yield, information important to prehistory or history of the local area, California, or the nation.

No California Register listed or eligible resources are present on or in the vicinity of the project site.

#### City of San José Historic Resources Inventory

The Historic Resources Inventory (HRI) is an inventory of San José's historically and architecturally significant buildings. According to the City of San José's Historic Preservation Ordinance (Chapter 13.48 of the Municipal Code), a resource qualifies as a City Landmark if it has "special historical, architectural, cultural, aesthetic or engineering interest or value of an historic nature" and is one of the following resource types:

- 1) An individual structure or portion thereof;
- 2) An integrated group of structures on a single lot;
- 3) A site, or portion thereof; or
- 4) Any combination thereof.

The ordinance defines the term "historical, architectural, cultural, aesthetic, or engineering interest or value of an historic nature" as deriving from, based on, or related to any of the following factors:

- 1) Identification or association with persons, eras or events that have contributed to local, regional, state or national history, heritage or culture in a distinctive, significant or important way;
- 2) Identification as, or association with, a distinctive, significant or important work or vestige:
  - a. Of an architectural style, design or method of construction;
  - b. Of a master architect, builder, artist or craftsman;
  - c. Of high artistic merit;
  - d. The totality of which comprises a distinctive, significant or important work or vestige whose component parts may lack the same attributes;
  - e. That has yielded or is substantially likely to yield information of value about history, architecture, engineering, culture or aesthetics, or that provides for existing and future generations an example of the physical surroundings in which past generations lived or worked; or
  - f. That the construction materials or engineering methods used in the proposed landmark are unusual or significant of uniquely effective.
- 3) The factor of age alone does not necessarily confer a special historical, architectural, cultural, aesthetic, or engineering significance, value or interest upon a structure or site, but it may have such effect if a more distinctive, significant or important example thereof no longer exists (Section 13.48.020 A).

The ordinance also provides a designation of a district: "a geographically definable area of urban or rural character, possessing a significant concentration or continuity of site, building, structures or objects unified by past events or aesthetically by plan or physical development (Section 13.48.020 B).

Although the definitions listed are the most important determinants in evaluating the historic value of San José resources, the City of San José also has a numerical tally system that must be used in identifying potential historic resources. The "Historic Evaluation Sheet" requires resources to be rated according to visual quality/design; history/association; environment/context; integrity; reversibility; interior quality and conditions; and NRHP/CRHR status. A points-based rating system is used to score each building according to the extent to which it meets the criteria listed above. The final tallies are divided into two categories:

- Potential Historic Resource (evaluate for possible status as a City Landmark/California Register resource)
- Non-significant structure

According to the City of San José's *Guide to Historic Reports*, a City Landmark is "a significant historic resource" having the potential for landmark designation as defined in the Historic Preservation Ordinance. The City defines a Structure of Merit as a, "structure determined to be a resource through evaluation by the Historic Landmarks Commission's Historic Evaluation Criteria and which preservation should be a high priority." No Historic Resource Inventory resources are present on the project site. <sup>15</sup>

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<sup>&</sup>lt;sup>15</sup> City of San José. City of San José Historic Resources Inventory. February 8, 2016.

#### Envision San José 2040 General Plan

The General Plan includes policies for the purpose of avoiding or mitigating impacts resulting from planned development within the City. The following policies are specific to cultural resources and are applicable to the proposed project:

General Plan Policies: Cultural Resource Impacts					
Archaeology and Paleontology					
Policy ER-10.1	For proposed development sites that have been identified as archaeologically or paleontologically sensitive, require investigation during the planning process in order to determine whether potentially significant archaeological or paleontological information may be affected by the project and then require, if needed, that appropriate mitigation measures be incorporated into the project design.				
Policy ER-10.2	Recognizing that Native American human remains may be encountered at unexpected locations, impose a requirement on all development permits and tentative subdivision maps that upon their discovery during construction, development activity will cease until professional archaeological examination confirms whether the burial is human. If the remains are determined to be Native American, applicable state laws shall be enforced.				
Policy ER-10.3	Ensure that City, State, and Federal historic preservation laws, regulations, and codes are enforced, including laws related to archaeological and paleontological resources, to ensure the adequate protection of historic and pre-historic resources.				

#### 4.5.2 <u>Impact Discussion</u>

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:					
ĺ	Cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines Section 15064.5?				
	Cause a substantial adverse change in the significance of an archaeological resource as pursuant to CEQA Guidelines Section 15064.5?				
	Disturb any human remains, including those interred outside of dedicated cemeteries?			$\boxtimes$	

### 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)

The proposed project includes the demolition of three of the existing buildings on the Presentation High School campus: (1) main classroom and administration building; (2) Marian Stuckey Center (student center building); and (3) Christian Life Center and Chapel. The main classroom and administration building and the Marian Stuckey Center were constructed in 1962 (56 years old), and the Christian Life Center and Chapel building was constructed in 1994 (24 years old).

A historic report was prepared for the site by *Archives and Architecture, LLC*. All three buildings were reviewed and evaluated for historical significance in the historic report. The buildings proposed for demolition with the project were evaluated for historic significance based on the National, State, and local criteria (i.e., National and California Registers and the City of San José's policies and regulations). The report also included Department of Parks and Recreation Form 523 (DPR523) for the property. The forms provide a technical description of the three buildings proposed for demolition, as well as the architectural context of the rest of the site. The DPR523 for the project also include a summary history of the site, and information on the architect of record for the early phase of development, George J. Steuer of San Leandro. The following discussion is a summary of the evaluation. A copy of the report is contained in Appendix B.

Historic resources include properties eligible for listing on the National Register, the California Register, or a local register of historical resources (as defined at Public Resources Code §5020.1(k)). According to Public Resources Code §15064.5(b), a project would have a significant effect on an historic resource if it would "cause a substantial adverse change in the significance" of that resource. Specifically, "substantial adverse change in the significance of an historical resource means physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired."

The historic report evaluated the potential historic significance of the project site and its related buildings to determine their significance under CEQA and potential qualifications for listing on the National Register of Historic Places and the California Register of Historical Resources, and for eligibility as San José City Landmarks. Based on the City of San José criteria for historical significance, the school was not found to exhibit individual character and interest in a way that reflects the heritage and cultural development of the City in a significant way under CEQA. While the school itself is a long-time parochial secondary educational institution and is associated with the introduction of the work of the Sisters of Presentation into San José during the 1950s, the early buildings on this campus represent this historic development in a secondary way. The design of the early 1962 school buildings on the campus has identifiable architectural character and association with modern architecture, but they are not distinctive to the level that would enable eligibility to the California Register of Historical Resources. Because neither the site, nor any of the buildings proposed for demolition are eligible as San José City Landmarks, nor do they meet the minimum criteria for listing on the National Register of Historic Places or California Register of Historical Resources, the project will not impact any historic resources under the CEQA Guidelines.

According to the evaluation in the historic report, none of the buildings appears to qualify for the National Register, California Register, nor are they eligible for City Landmark designation under the eligibility criteria of the San José Historic Preservation Ordinance.

Because neither the site, nor any of the buildings proposed for demolition are eligible as San José City Landmarks, nor do they meet the minimum criteria for listing on the National or California Register, the project will have a less than significant impact on any historic resources under the CEQA Guidelines.

### 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)

An archaeological literature review was prepared for the project site by *Holman & Associates*. The purpose of the literature review, which was conducted at the Northwest Information Center at Sonoma State University, was to obtain information about recorded prehistoric and/or historic archaeological sites in and around the project area, and any previous archaeological field inspections of the project area or its surroundings. The literature review concluded that there were no recorded sites located in the project area and that there is a low potential for specific historic-era archaeological resources and prehistoric-era deposits. There is always a chance that cultural resources could be discovered during subsurface excavation or grading, however, the probability of encountering such materials on the site is low. The literature review did not recommend any additional archaeological work.

Consistent with Envision San José 2040 General Plan Policies ER-10.2 and ER-10.3, the following Standard Permit Conditions are included in the project to reduce or avoid impacts to subsurface cultural resources (i.e., human remains).

#### **Standard Permit Conditions:**

- If prehistoric or historic resources are encountered during excavation and/or grading of the site, all activity within a 50-foot radius of the find shall be stopped, the Director of Planning, Building and Code Enforcement (PBCE) or the Director's designee and the City's Historic Preservation Officer shall be notified, and a qualified archaeologist shall examine the find. The archaeologist shall 1) evaluate the find(s) to determine if they meet the definition of a historical or archaeological resource; and (2) make appropriate recommendations regarding the disposition of such finds prior to issuance of building permits. Recommendations could include collection, recordation, and analysis of any significant cultural materials. A report of findings documenting any data recovery shall be submitted to Director of PBCE or the Director's designee and the City's Historic Preservation Officer and the Northwest Information Center (if applicable). Project personnel shall not collect or move any cultural materials.
- If any human remains are found during any field investigations, grading, or other construction activities, all provisions of California Health and Safety Code Sections 7054 and 7050.5 and Public Resources Code Sections 5097.9 through 5097.99, as

amended per Assembly Bill 2641, shall be followed. If human remains are discovered during construction, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains. The project applicant shall immediately notify the Director of Planning, Building and Code Enforcement (PBCE) or the Director's designee and the qualified archaeologist, who shall then notify the Santa Clara County Coroner. The Coroner will make a determination as to whether the remains are Native American. If the remains are believed to be Native American, the Coroner will contact the Native American Heritage Commission (NAHC) within 24 hours. The NAHC will then designate a Most Likely Descendant (MLD). The MLD will inspect the remains and make a recommendation on the treatment of the remains and associated artifacts. If one of the following conditions occurs, the landowner or his authorized representative shall work with the Coroner to reinter the Native American human remains and associated grave goods with appropriate dignity in a location not subject to further subsurface disturbance:

- o The NAHC is unable to identify a MLD or the MLD failed to make a recommendation within 48 hours after being given access to the site.
- o The MLD identified fails to make a recommendation; or
- The landowner or his authorized representative rejects the recommendation of the MLD, and mediation by the NAHC fails to provide measures acceptable to the landowner.

The above Standard Permit Conditions would reduce potential impacts to subsurface resources to less than significant levels.

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

The Standard Permit Conditions discussed in CUL-2 detail the appropriate process to be followed by the project in the unlikely event that human remains are encountered during construction activities. This process would ensure that construction is halted if remains are discovered and relevant agencies and/or individuals are contacted to determine the required treatment of any remains prior to commencement of construction. By adhering to these conditions, the proposed project would ensure that human remains are not disturbed.

## 4.6 ENERGY

# 4.6.1 <u>Environmental Setting</u>

# 4.6.1.1 Regulatory Framework

#### **Federal**

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

#### **State**

# Renewables Portfolio Standard Program

In 2002, California established its Renewables Portfolio Standard (RPS) 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 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. Pacific Gas and Electric Company

Pacific Gas and Electric Company (PG&E) is the City of San Jose's energy utility, providing both natural gas and electricity for residential, commercial, industrial, and municipal uses. PG&E generates or buys electricity from hydroelectric, nuclear, renewable, natural gas, and coal facilities. In 2017, natural gas facilities provided 20 percent of PG&E's electricity delivered to retail customers; nuclear plants provided 27 percent; hydroelectric operations provided 18 percent; renewable energy facilities including solar, geothermal, and biomass provided 33 percent; and two percent was unspecified.<sup>16</sup>

# **Building Codes**

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, and the 2016 Title 24 updates went into effect on January 1, 2017.<sup>17</sup> Compliance with Title 24 is mandatory at the time new building permits are issued by city and county governments.<sup>18</sup>

<sup>&</sup>lt;sup>16</sup> Pacific Gas and Electric Company. "Exploring Clean Energy Solutions." Accessed September 18, 2018. https://www.pge.com/en\_US/about-pge/environment/what-we-are-doing/clean-energy-solutions/clean-energy-solutions.page.

<sup>&</sup>lt;sup>17</sup> California Building Standards Commission. "Welcome to the California Building Standards Commission". Accessed February 6, 2018. <a href="http://www.bsc.ca.gov/">http://www.bsc.ca.gov/</a>.

<sup>&</sup>lt;sup>18</sup> California Energy Commission (CEC). "2016 Building Energy Efficiency Standards". Accessed February 6, 2018. http://www.energy.ca.gov/title24/2016standards/index.html.

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. The most recent update to CALGreen went in to effect on January 1, 2017, and covers five categories: planning and design, energy efficiency, water efficiency and conservation, material and resource efficiency, and indoor environmental quality.

#### Local

# City of San José Green Building Standards

At the local level, the City of San José sets green building standards for municipal development. All projects are required to submit a Leadership in Energy and Environmental Design (LEED)<sup>19</sup>, GreenPoint<sup>20</sup>, or Build It Green checklist with the development proposal. Private developments are required to implement green building practices if they meet the Applicable Projects criteria defined by Council Policy 6-32 and shown in Table 4.6-1 below.

Table 4.6-1: Private Sector Green Building Policy Applicable Projects		
Applicable Project*	Minimum Green Building Rating	
Commercial/Industrial – Tier 1 (Less than 25,000 Square Feet)	LEED Applicable New Construction Checklist	
Commercial/Industrial – Tier 2 (25,000 Square Feet or greater)	LEED Silver	
Residential – Tier 1 (Less than 10 units)	GreenPoint or LEED Checklist	
Residential – Tier 2 (10 units or greater)	GreenPoint Rated 50 points or LEED Certified	
High Rise Residential (75 feet or higher)	LEED Certified	

**Notes:** \*For mixed-use projects – only that component of the project triggering compliance with the policy shall be required to achieve the applicable green building standard.

**Source:** City of San José. "Private Sector Green Building." Accessed: February 19, 2019. Available at: <a href="http://www.sanjoseca.gov/index.aspx?NID=3284">http://www.sanjoseca.gov/index.aspx?NID=3284</a>.

#### Envision San José 2040 General Plan and Greenhouse Gas Reduction Strategy

The General Plan includes strategies, policies, and action items that are incorporated into the City's GHG Reduction Strategy to help reduce GHG emissions. Multiple policies and actions in the General Plan have GHG implications, including land use, housing, transportation, water usage, solid waste generation and recycling, and reuse of historic buildings.

<sup>&</sup>lt;sup>19</sup> Created by the non-profit organization United States Green Building Council, LEED is a certification system that assigns points for green building measures based on a 110-point rating scale.

<sup>&</sup>lt;sup>20</sup> Created by the California based non-profit organization Build It Green, GreenPoint is a certification system for residential development that assigns points for green building measures based on a 381-point rating scale for multifamily development and 341-point rating scale for single-family developments.

The City's GHG Reduction Strategy identifies GHG emissions reduction measures to be implemented by development projects as part of three categories: built environment and energy, land use and transportation, and recycling and waste reduction. Some measures are mandatory for all proposed development projects and others are voluntary and could be incorporated as mitigation measures for proposed projects, at the City's discretion. GHG reduction measures serve the dual purpose of reducing GHG emissions and reducing wasteful and inefficient use of energy in new developments.

The General Plan includes the following policies for the purpose of reducing or avoiding impacts related to energy.

	General Plan Policies: Energy Resources
Policy MS-2.2	Encourage maximized use of on-site generation of renewable energy for all new and existing buildings.
Policy MS-2.3	Utilize solar orientation (i.e., building placement), landscaping, design, and construction techniques for new construction to minimize energy consumption.
Policy MS-2.11	Require new development to incorporate green building practices, including those required by the Green Building Ordinance. Specifically target reduced energy use through construction techniques (e.g., design of building envelopes and systems to maximize energy performance), through architectural design (e.g. design to maximize cross ventilation and interior daylight) and through site design techniques (e.g. orienting buildings on sites to maximize the effectiveness of passive solar design).
Policy MS-3.1	Require water-efficient landscaping, which conforms to the State's Model Water Efficient Landscape Ordinance, for all new commercial, institutional, industrial, and developer-installed residential development unless for recreation or other area functions.
Policy MS-5.5	Maximize recycling and composting from all residents, businesses, and institutions in the City.
Policy MS-6.5	Reduce the amount of waste disposed in landfills through waste prevention, reuse, and recycling of materials at venues, facilities, and special events.
Policy MS-6.8	Maximize reuse, recycling, and composting citywide.
Policy MS-14.3	Consistent with the California Public Utilities Commission's California Long Term Energy Efficiency Strategic Plan, as revised and when technological

	General Plan Policies: Energy Resources		
	advances make it feasible, require all new residential and commercial construction to be designed for zero net energy use.		
Policy MS-14.4	Implement the City's Green Building Policies (see Green Building Section) so that new construction and rehabilitation of existing buildings fully implements industry best practices, including the use of optimized energy systems, selection of materials and resources, water efficiency, sustainable site selection, and passive solar building design and planting of trees and other landscape materials to reduce energy consumption.		
Policy MS-14.5	Consistent with State and Federal policies and best practices, require energy efficiency audits and retrofits prior to or at the same time as consideration of solar electric improvements.		

# Climate Smart San José

Climate Smart San José, adopted in February 2018, is a plan to reduce air pollution, save water, and create a healthy community. Climate Smart San José focuses on three pillars and nine key strategies to transform San José into a climate smart city that is substantially decarbonized and meeting requirements of Californian climate change laws. Although most of the strategies described in Climate Smart San José are indirectly related to energy resources, Strategy 1.1 specifically calls for a transition to a renewable energy future. Implementation of Climate Smart San José is guided by "playbooks", which are action, targets or metrics tailored to specific entities, groups or stakeholders.

# 4.6.1.2 Existing Conditions

Total energy usage in California was approximately 7,881 trillion Btu in the year 2017, the most recent year for which this data was available. Out of the 50 states, California is ranked 2<sup>nd</sup> in total energy consumption and 48<sup>th</sup> 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. <sup>21</sup> This energy is primarily supplied in the form of natural gas, petroleum, nuclear electric power, and hydroelectric power.

San José Clean Energy (SJCE) is the electricity provider for residents and businesses in the City of San José. SJCE sources the electricity and the Pacific Gas and Electric Company (PG&E) delivers it to customers over their existing utility lines. SJCE customers are automatically enrolled in the GreenSource program, which provides 80 percent GHG emission-free electricity. Customers can choose to enroll in SJCE's TotalGreen program at any time to receive 100 percent GHG emission-free electricity form entirely renewable sources.

<sup>&</sup>lt;sup>21</sup> United States Energy Information Administration. "State Profile and Energy Estimates, 2017." Accessed August 1, 2019. <a href="https://www.eia.gov/state/?sid=CA#tabs-2">https://www.eia.gov/state/?sid=CA#tabs-2</a>.

As of February 2019, San José Clean Energy provides over 300,000 residential and commercial electricity customers with carbon-free electricity options at competitive prices, from sources like solar, wind, and hydropower.

#### **Natural Gas**

PG&E provides natural gas services within the City of San José. 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. <sup>22</sup> In 2018, residential and commercial customers in California used 34 percent of the state's natural gas, power plants used 35 percent, and 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. <sup>23</sup>

#### **Fuel for Motor Vehicles**

In 2017, 15 billion gallons of gasoline were sold in California.<sup>24</sup> The average fuel economy for light-duty vehicles (autos, pickups, vans, and SUVs) in the United States has steadily increased from about 13.1 miles-per-gallon (mpg) in the mid-1970's to 24.9 mpg in 2018.<sup>25</sup> 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. <sup>26,27</sup>

# **Energy Use of Existing Development**

The 8.8-acre project site is developed with private high school. The existing enrollment at the preschool is 750 students and there are 60 faculty members. The gross floor area on the site is 107,884 square feet. Energy use from existing uses is attributable to electricity generation for the buildings on site, natural gas for building heating and cooling, solid waste disposal, and water use. Table 4.6-2 below shows the estimated annual energy use of existing development on the site.

Presentation High School Master Plan City of San José

 <sup>&</sup>lt;sup>22</sup> California Gas and Electric Utilities. 2017 California Gas Report. Accessed August 27, 2018.
 <a href="https://www.socalgas.com/regulatory/documents/cgr/2017\_California\_Gas\_Report\_Supplement\_63017.pdf">https://www.socalgas.com/regulatory/documents/cgr/2017\_California\_Gas\_Report\_Supplement\_63017.pdf</a>
 <sup>23</sup> California Energy Commission. "Natural Gas Consumption by County." Accessed February 21, 2019.
 <a href="http://ecdms.energy.ca.gov/gasbycounty.aspx">http://ecdms.energy.ca.gov/gasbycounty.aspx</a>.

<sup>&</sup>lt;sup>24</sup> California Department of Tax and Fee Administration. Net Taxable Gasoline Gallons. Accessed February 16, 2018. http://www.cdtfa.ca.gov/taxes-and-fees/MVF 10 Year Report.pdf.

<sup>&</sup>lt;sup>25</sup> United States Environmental Protection Agency. "The 2018 EPA Automotive Trends Report: Greenhouse Gas Emissions, Fuel Economy, and Technology since 1975." March 2019.

<sup>&</sup>lt;sup>26</sup> U.S. Department of Energy. Energy Independence & Security Act of 2007. Accessed February 8, 2018. http://www.afdc.energy.gov/laws/eisa.

<sup>&</sup>lt;sup>27</sup> Public Law 110–140—December 19, 2007. Energy Independence & Security Act of 2007. Accessed February 8, 2018. <a href="http://www.gpo.gov/fdsys/pkg/PLAW-110publ140/pdf/PLAW-110publ140.pdf">http://www.gpo.gov/fdsys/pkg/PLAW-110publ140/pdf/PLAW-110publ140.pdf</a>.

Table 4.6-2: Estimated Annual Energy Use of Existing Development <sup>1</sup>		
Land Use	Electricity Use (kWh)	Natural Gas Use (kBtu)
High School – 750 students	581,495	1,989,380
Notes: <sup>1</sup> Illingworth & Rodkin, Inc. Presentation High School Master Plan Greenhouse Gas Memo. August 24, 2018.		

As shown in the table above, the existing school uses 581,495 kWh of electricity and 1,989,380 kBtu of natural gas per year, which are the project's baseline conditions Based on the greenhouse gas assessment, the existing school generates an estimated annual 3,826,256 vehicle miles traveled (VMT). Using the estimated average fuel economy for light-duty vehicles (24.9 mpg), this equates to 153,665 gallons of gasoline consumed per year.

# 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, or wasteful use of energy resources, during project construction or operation?				
2) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?				
Impact EN-1: The project would not result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy, or wasteful use of energy resources, during project construction or operation. (Less than Significant Impact)				

The project proposes to expand the existing high school from 107,884 to 152,425 gross square feet (an increase of 41.2 %) in four development phases. The project would facilitate an increase in student enrollment, from 750 to 850 students, and an increase in faculty, from 60 to 110 members. Refer to *Section 3.0, Project Description* for a detailed description of the construction occurring in each phase. Table 4.6-3, below, shows the estimated annual energy use of the proposed project, broken down by phase.

Table 4.6-3: Estimated Annual Energy Use of Proposed Development <sup>1</sup>			
Land Use	Electricity Use (kWh)	Natural Gas Use (kBtu)	
Existing High School- 750 students	581,495	1,989,380	
High School – 850 students	771,395	2,639,060	
Difference between Existing & Proposed High	189,900 [33%	649,680 [33 %	
School Capacity	increase]	increase]	
Notes: <sup>1</sup> Illingworth & Rodkin, Inc. Presentation High School Master Plan Greenhouse Gas Memo. August 24, 2018.			

As shown in the table above, the proposed expansion of the existing high school would result in the consumption of approximately 771,395 kWh of electricity and 2,639,060 kBtu of natural gas per year. Based on an annual VMT of 4,336,423, the project would consume 174,153 gallons of gasoline per year.

Relative to the baseline consumption level for existing uses on the site, the proposed school expansion would result in a net annual increase of 189,900 kWh of electricity (33 percent increase), 649,680 kBtu of natural gas (33 percent increase), and 20,488 gallons of gasoline (13 percent increase).

The proposed project would be required to be designed for energy efficiency and conservation, in accordance with the City's Green Building Program, Climate Smart San José, and Greenhouse Gas Reduction Strategy. The project would be subject to the Green Building Ordinance, which requires new development to incorporate energy conservation and efficiency through site design, architectural design, and construction techniques. As a new private sector construction project which adds more than 10,000 square feet of occupied space, the project would be required to be designed and constructed to achieve at a minimum LEED Silver level of certification, per the City's Green Building Policies.<sup>28</sup>

The project will include the following Climate Smart San José measures to improve efficiency of water resources, reduce VMT, and reduce energy consumption:

- Use drought resilient plants in future landscaping;
- Use drip irrigation systems in future landscaping;
- Promote carpooling.

In addition to these measures, the school is currently using a web-based facility and energy management system (enteliWEB) to maximize energy efficiency in the existing buildings on campus. This system will be expanded to include the future buildings as they are developed. While the project would increase energy use at the site, it would not result in wasteful, inefficient, or unnecessary energy consumption upon implementation of General Plan policies and existing regulations. The use of drought-tolerant plants eliminates the need for excessive watering as the plant species are all native to California. Drip irrigation likewise reduces the burden on the water supply, as it is a much more effective means of watering plants because it waters the roots of the plant instead of filtering from the top. Carpooling (ridesharing) is consistent with the Climate Smart San José strategy of densification, which reduces VMT and congestion on the roadways. Carpooling takes regular vehicles off the road, bringing significant economic benefits in avoided costs. It also offers benefits that mass transit infrastructure does not always provide – it removes the need for additional infrastructure as it uses existing roads, and it solves the first-mile, last-mile problems of public transit. Carpooling also alleviates the maintenance of automobiles, which can be a big strain on lower income households' budgets.<sup>29</sup>

<sup>&</sup>lt;sup>28</sup> City of San José. "Green Building". <a href="http://www.sanjoseca.gov/index.aspx?NID=1517">http://www.sanjoseca.gov/index.aspx?NID=1517</a>. Accessed October 17, 2019.

<sup>&</sup>lt;sup>29</sup> City of San José. Climate Smart San José – A People-Centered Plan for a Low-Carbon City.

# 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 required to conform to General Plan policies, other plans such as Climate Smart San José, and regulations which promote the use and expansion of renewable energy resources, including solar voltaic, solar hot water, wind, and biogas or biofuels. By conforming to applicable General Plan policies related to renewable energy and energy efficiency, and the Green Building Ordinance, the project would not preclude the City from meeting local or state renewable energy or energy efficiency goals.

## 4.7 GEOLOGY AND SOILS

# 4.7.1 <u>Environmental Setting</u>

# 4.7.1.1 Regulatory Framework

## Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act regulates development in California near known active faults due to hazards associated with surface fault ruptures. The Alquist-Priolo Earthquake Fault Zones indicate areas with potential surface fault-rupture hazards. Development within Alquist-Priolo Earthquake Fault Zones require special studies to ensure that no structures intended for human occupancy are constructed across an active fault. The project site is not located in an Alquist-Priolo Earthquake Fault Zone.

# California Building Standards Code

The California Building Standards Code prescribes a standard for constructing safer buildings throughout the State of California. The Code contains provisions for earthquake safety based on factors including occupancy type, soil and rock profile, strength of the ground, and distance to seismic sources. The Code is updated every three years; the current version is the 2016 California Building Standards Code.

# **Paleontological Resources**

Several sections of the California Public Resources Code protect paleontological resources. Section 5097.5 prohibits "knowing and willful" excavation, removal, destruction, injury, and defacement of any "vertebrate paleontological site, including fossilized footprints" on public lands, except where the agency with jurisdiction has granted express permission. "As discussed in this section, 'public lands' means lands owned by, or under the jurisdiction of, the state, or any city, county, district, authority, or public corporation, or any agency thereof." California Public Resources Code Section 30244 requires reasonable mitigation for impacts on paleontological resources that occur as a result of development on public lands.

#### City of San José Municipal Code

Title 24 of the San José Municipal Code includes the 2016 California Building, Plumbing, Mechanical, Electrical, Existing Building, and Historical Building Standards Codes. Requirements for building safety and earthquake hazard reduction are also addressed in Chapter 17.40 (Dangerous Building Code) and Chapter 17.10 (Geologic Hazards Regulations) of the Municipal Code. Requirements for grading, excavation, and erosion control are included in Chapter 17.04 (Building Code) Part 6 (Excavation and Grading). In accordance with the Municipal Code, the Director of Public Works must issue a Certificate of Geologic Hazard Clearance prior to the issuance of grading and building permits within defined geologic hazard zones, including State Seismic Hazard Zones for Liquefaction.

# Envision San José 2040 General Plan

The General Plan includes policies for the purpose of avoiding or mitigating impacts resulting from planned development within the City. The following policies are specific to geology and soils and are applicable to the proposed project:

General Plan Policies: Geology, Soils, and Seismic Hazards		
Seismic Hazards		
Policy EC-3.1	Design all new or remodeled habitable structures in accordance with the most recent California Building Code and California Fire Code as amended locally and adopted by the City of San José, including provisions regarding lateral forces.	
Geologic and Soil	Hazards	
Policy EC-4.1	Design and build all new or remodeled habitable structures in accordance with the most recent California Building Code and municipal code requirements as amended and adopted by the City of San José, including provisions for expansive soil, and grading and storm water controls.	
Policy EC-4.2	Approve development in areas subject to soils and geologic hazards, including unengineered fill and weak soils and landslide-prone areas, only when the severity of hazards have been evaluated and if shown to be required, appropriate mitigation measures are provided. New development proposed within areas of geologic hazards shall not be endangered by, nor contribute to, the hazardous conditions on the site or on adjoining properties. The City of San José Geologist will review and approve geotechnical and geological investigation reports for projects within these areas as part of the project approval process.	
Policy EC-4.4	Require all new development to conform to the City of San José's Geologic Hazard Ordinance.	
Policy EC-4.5	Ensure that any development activity that requires grading does not impact adjacent properties, local creeks and storm drainage systems by designing and building the site to drain properly and minimize erosion. An Erosion Control Plan is required for all private development projects that have soil disturbance of one acre or more, are adjacent to a creek/river, and/or are located in hillside areas. Erosion Control Plans are also required for any grading occurring between October 15 and April 15.	
Action EC-4.11	Require the preparation of geotechnical and geological investigation reports for projects within areas subject to soils and geologic hazards, and require review and implementation of mitigation measures as part of the project approval process.	
Action EC-4.12	Require review and approval of grading plans and erosion control plans (if applicable) prior to issuance of a grading permit by the Director of Public Works.	

## 4.7.1.2 Existing Conditions

# Regional Geology and Topography

The City of San José is located within the Santa Clara Valley, which is a broad alluvial plain that lies between the Santa Cruz Mountains to the southwest and west and the Diablo Range to the northeast. The San Andreas Fault system, including the Monte Vista-Shannon Fault, exists within the Santa Cruz Mountains, and the Hayward and Calaveras Fault systems exist within the Diablo Range.

## **Soil Properties and Groundwater**

The 8.8-acre project site is flat. Soils within the area of the project site consist of Urban land-Still complex with zero to two percent slopes, and Urban land-Elder complex with zero to two percent slopes, protected.<sup>30</sup> Soils on the site are moderately expansive with low landslide susceptibility and low erosion potential.<sup>31</sup>

Groundwater in the project area is located approximately 30 to 50 feet below ground surface.<sup>32</sup> Groundwater elevations and direction of flow can be affected by factors including precipitation, stream flow, irrigation practices, and groundwater pumping. The project site is not located in a designated groundwater recharge zone.

#### Seismicity

The project site is located within the seismically-active San Francisco Bay region; however, the site is not located within a designated Alquist-Priolo Earthquake Fault Zone or a Santa Clara County Fault Hazard Zone. As such, active faults are not believed to exist beneath the site. Local ground cracking is possible due to the high seismic activity of the region, and the potential exists for strong ground shaking at the site from a large earthquake.

# Liquefaction

Liquefaction is the result of seismic activity and is characterized as the transformation of loose watersaturated soils from a solid state to a liquid state during ground shaking. Liquefied soils may lose shear strength that may lead to large shear deformations and/or flow failure under moderate to high shear stresses, such as beneath foundations.

The site is not within a state-designated Liquefaction Hazard Zone or a Santa Clara County Liquefaction Hazard Zone.<sup>33</sup>

City of San José

<sup>&</sup>lt;sup>30</sup> United States Department of Agriculture. *Custom Soil Resource Report for Santa Clara Area, California, Western Part.* December 7, 2017.

<sup>&</sup>lt;sup>31</sup> San José, City of. Presentation High School Sports Facilities Project, Draft Initial Study/Negative Declaration. December 2003.

<sup>&</sup>lt;sup>32</sup> Santa Clara Valley Water District. *Groundwater Management Plan.* November 2016.

<sup>&</sup>lt;sup>33</sup> Santa Clara County. *Geologic Hazard Zones Geobrowser*. Accessed December 12, 2017. Available at: <a href="https://sccplanning.maps.arcgis.com/apps/webappviewer/index.html?id=5ef8100336234fbdafc5769494cfe373">https://sccplanning.maps.arcgis.com/apps/webappviewer/index.html?id=5ef8100336234fbdafc5769494cfe373</a>.

# **Lateral Spreading**

Lateral spreading typically occurs as a form of horizontal displacement of relatively flat-lying alluvial material toward an open or "free" face such as an open body of water, channel, or excavated area. There are no creeks, channels, or open bodies of water on or adjacent to the project site. Therefore, the potential for lateral spreading to affect the site is low.

# Landslides

The site is not located within a California Seismic Hazard Zone for landslides or within a Santa Clara County Landslide Hazard Zone. The project area is relatively flat and, therefore, the probability of landslides occurring at the site during a seismic event is low.

# 4.7.2 <u>Impact Discussion</u>

	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:			<b>N</b> ZI	
<ul> <li>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)?</li> </ul>				
<ul> <li>Strong seismic ground shaking?</li> <li>Seismic-related ground failure, including liquefaction?</li> </ul>				
- Landslides?			$\boxtimes$	
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 will 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?				

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
6) Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?				
Impact GEO-1: The project would not deadverse effects, including rupture of a known earth Alquist-Priolo Earthquate Geologist for the area on fault; strong seismic growincluding liquefaction; or	g the risk of lo hquake fault, lke Fault Zoni based on oth und shaking;	oss, injury, or as delineated ing Map issue er substantial seismic-relate	death involve on the most d by the Star evidence of d ground fa	ving recent te a known ilure,

Although the project site is not located on a known, active fault or located in an Alquist-Priolo Earthquake Fault Zone or other fault hazard zone, the project site is located in a seismically-active region. Therefore, the project site would likely be subject to strong shaking during the lifetime of the proposed project.

Due to the flat topography of the site, the project would not be subject to impacts from seismic-related hazards including lateral spreading, slope instability, or landslides. Additionally, the project site is not located within a liquefaction hazard zone. As described below, the proposed project includes the following Standard Permit Conditions to reduce seismic impacts to a less than significant level.

# **Standard Permit Conditions:**

 The proposed project shall be designed and constructed in accordance with the most recent California Building Code, which contains the regulations that govern the construction of structures in California. Adherence to the California Building Code would ensure the proposed improvements resist minor earthquakes without damage and major earthquakes without collapse.

The proposed project, with the implementation of the Standard Permit Conditions listed above and included in the project, would not result in significant seismic hazard impacts or exacerbate hazards on adjacent properties.

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

Although the project site is relatively level, ground disturbance during construction of the proposed project would expose soils, increasing the potential for wind and/or water erosion at the site. As described below, the proposed project includes the following Standard Permit Conditions to reduce this impact to a less than significant level.

#### **Standard Permit Conditions:**

- Standard erosion control and grading best management practices (BMPs) will be implemented during construction to prevent substantial erosion from occurring during site development. The BMPs shall be included on all construction documents.
- Prior to issuance of a Public Works Clearance, the applicant shall obtain a grading permit before commencement of excavation and construction. In accordance with General Plan Policy EC-4.12, the applicant may be required to submit a Grading Plan and/or Erosion Control Plan for review and approval, prior to issuance of a grading permit.

The proposed project, with the implementation of the Standard Permit Conditions listed above and included in the project, would not result in a significant impact to soil erosion.

# 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)

Refer to the discussion in GEO-1 and GEO-4.

<b>Impact GEO-4:</b>	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)

Soil on the project site is moderately expansive. Structural damage, warping and cracking of roads and sidewalks, and rupture of utility lines may occur if expansive soils are not considered during project design and construction. As described below, the proposed project includes the following Standard Permit Conditions to reduce this impact to a less than significant level.

#### **Standard Permit Conditions:**

- The project shall complete a design-level geotechnical investigation to verify compliance with applicable regulations. The geotechnical report shall determine the site-specific soil conditions and identify the appropriate design and construction techniques to minimize risks to people and structures, including but not limited to: foundation, earthwork, utility trenching, and retaining and drainage recommendations. The report shall be submitted to the City of San José Public Works Department for review prior to issuance of any site-specific grading or building permit. In addition, the following shall be included in the geotechnical report:
  - Techniques that may be used to minimize hazards include: replacing problematic soils with properly conditioned/compacted fill and designing structures to withstand the forces exerted during shrink-swell cycles and settlements.

o Foundations, footings, and pavements on expansive soils near trees shall be designed to withstand differential displacement.

The proposed project, with the implementation of the Standard Permit Conditions listed above and included in the project, would not result in significant expansive soil impacts or exacerbate hazards on adjacent properties.

# Impact GEO-5: The project would not have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water. (No Impact)

The proposed new buildings included in the project would connect to the City's existing utilities (e.g., sewer system), and would not require septic tanks or alternative wastewater disposal systems.

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)

Paleontological resources are the fossilized remains of organisms from prehistoric environments found in geologic strata. Most of the City of San José is situated on alluvial fan deposits of Holocene age that have a low potential to contain significant nonrenewable paleontological resources; however, older Pleistocene sediments present at or near the ground surface at some locations have high potential to contain these resources. These older sediments, often found at depths of greater than 10 feet below the ground surface, have yielded the fossil remains of plants and extinct terrestrial Pleistocene vertebrates. The proposed project is limited to grading and excavation to the maximum depth of approximately four feet and does not include excavation lower than approximately four feet that could impact these resources. Less than significant impacts would result from construction of the proposed buildings.

#### 4.7.3 Non-CEQA Issue

Per *California Building Industry Association v. Bay Area Air Quality Management District*, 62 Cal. 4th 369 (*BIA v. BAAQMD*), effects of the environment on the project are not considered CEQA impacts. The following discussion is included for informational purposes only because the City of San José has policies that address existing geology and soils conditions affecting a proposed project.

The policies of the City of San José 2040 General Plan have been adopted for the purpose of avoiding or mitigating environmental effects resulting from planned development within the City. General Plan Policy EC-4.2 states that development is allowed in areas subject to soils and geologic hazards, including un-engineered fill and weak soils and landslide-prone areas, only when the severity of hazards have been evaluated and if shown to be required, appropriate mitigation measures are provided. New development proposed within areas of geologic hazards shall not be endangered by, nor contribute to, the hazardous conditions on the site or on adjoining properties. To ensure this, the policy requires the City of San José Geologist to review and approve geotechnical and geological investigation reports for projects within these areas as part of the project approval process. In addition, Policy EC-4.4 requires all new development to conform to the City of San José's Geologic

Hazard Ordinance. To ensure that proposed development sites are suitable, Action EC-4.11 requires the preparation of geotechnical and geological investigation reports for projects within areas subject to soils and geologic hazards, and require review and implementation of mitigation measures as part of the project approval process. The City Geologist will issue a Geologic Clearance that will approve the geotechnical report.

The soils in the project area are moderately expansive. The project site has a low susceptibility to liquefaction but has the potential for strong ground shaking at the site from a large earthquake.

The proposed school redevelopment project would be built and maintained in accordance with a design specific geotechnical report and applicable regulations including the most recent California Building Code, which contains the regulations that govern the construction of structures in California. The General Plan EIR concluded that adherence to the California Building Code would reduce seismic related issues and ensure new development proposed within areas of geologic hazards would not be endangered by the hazardous conditions on the site.

#### 4.8 GREENHOUSE GAS EMISSIONS

The following discussion and analyses are based, in part, on a Greenhouse Gas Memo and prepared for the project by *Illingworth and Rodkin, Inc.* A copy of the report, dated August 24, 2018, is included in Appendix C of this Initial Study.

# 4.8.1 Environmental Setting

Unlike emissions of criteria and toxic air pollutants, which have local or regional impacts, emissions of greenhouse gases (GHGs) have a broader, global impact. Global warming is a process whereby GHGs accumulating in the atmosphere contribute to an increase in temperature of the earth's atmosphere. The principal GHGs contributing to global warming and associated climate change are carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>0), and fluorinated compounds. Emissions of GHGs contributing to global climate change are attributable in large part to human activities associated with the transportation, industrial/manufacturing, utility, residential, commercial, and agricultural sectors.

# 4.8.1.1 Regulatory Framework

#### State of California

#### California Global Warming Solutions Act

Under the California Global Warming Solution Act, also known as Assembly Bill 32 (AB 32), CARB has established a statewide GHG emissions cap for 2020, adopted mandatory reporting rules for significant sources of GHG, and adopted a comprehensive plan, known as the *Climate Change Scoping Plan*, that identifies how emission reductions will be achieved from significant GHG sources via regulations, market mechanisms and other actions.

On September 8, 2016, Governor Brown signed Senate Bill 32 (SB 32) into law, amending the California Global Warming Solution Act. SB 32 requires the CARB to ensure that statewide greenhouse gas emissions are reduced to 40 percent below the 1990 level by 2030. As a part of this effort, CARB is required to update the *Climate Change Scoping Plan* to express the 2030 target in terms of million metric tons of carbon dioxide equivalent. CARB has initiated the public process to update the state's *Climate Change Scoping Plan*. The updated plan will provide a framework for achieving the 2030 target and is anticipated to be completed and adopted by CARB in 2017.

#### Senate Bill 375 – Redesigning Communities to Reduce Greenhouse Gases

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, as compared to 2005 emission levels. 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.<sup>34</sup>

Per SB 375, metropolitan planning organizations are required to create Sustainable Community Strategies (SCS) to meet the target emissions reductions as part of the Regional Transportation Plan (RTP) for the region under their responsibility. The SCS is a mechanism for more effectively linking a land use pattern and a transportation system together to make travel more efficient and communities more livable.

For the Bay Area, the Metropolitan Transportation Commission (MTC) in partnership with the Association of Bay Area Governments (ABAG), BAAQMD, and Bay Conservation and Development Commission (BCDC), prepared the SCS. The SCS is referred to as *Plan Bay Area*. *Plan Bay Area* was originally adopted in 2013 and establishes a course for reducing per-capita GHG emissions through the promotion of compact, mixed-use residential and commercial neighborhoods near transit, particularly within identified Priority Development Areas (PDAs). Building upon the development strategies outlined in the original *Plan Bay Area*, *Plan Bay Area* 2040 was adopted in July 2017 as a focused update with revised planning assumptions incorporating key economic and demographic trends.

#### **Regional and Local Plans**

# Bay Area Air Quality Management District

BAAQMD is the regional, government agency that regulates sources of air pollution within the nine San Francisco Bay Area counties. Several key activities of BAAQMD related to GHG emissions are described below.

- Regional Clean Air Plans: BAAQMD and other agencies prepare clean air plans as required under the state and federal Clean Air Acts. The Bay Area 2017 Clean Air Plan (2017 CAP) focuses on two closely related BAAQMD goals: protecting public health and protecting the climate. Consistent with the GHG reduction targets adopted by the state of California, the 2017 CAP lays the groundwork for the BAAQMD's long-term effort to reduce Bay Area GHG emissions 40 percent below 1990 levels by 2030 and 80 percent below 1990 levels by 2050. The 2017 CAP includes a wide range of control measures designed to decrease 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.
- BAAQMD 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. As discussed in the CEQA Guidelines, the determination of whether a project may have a significant effect on the environment calls for careful judgment on the part of the lead agency and must be based to the extent possible on scientific and factual data. The City of San José and other jurisdictions in the San Francisco

<sup>&</sup>lt;sup>34</sup> The emission reduction targets are for those associated with land use and transportation strategies, only. Emission reductions due to the California Low Carbon Fuel Standards or Pavley emission control standards are not included in the targets.

Bay Area Air Basin often utilize the thresholds and methodology for greenhouse gas emissions developed by the BAAQMD. The Guidelines include information on legal requirements, BAAQMD rules, plans and procedures, methods of analyzing greenhouse gas emissions, mitigation measures, and background information.

## City of San José Municipal Code

The City's Municipal Code includes the following regulations that would reduce GHG emissions from future development:

- Green Building Regulations for Private Development (Chapter 17.84)
- Water Efficient Landscape Standards for New and Rehabilitated Landscaping (Chapter 15.10)
- Transportation Demand Programs for employers with more than 100 employees (Chapter 11.105)
- Construction and Demolition Diversion Deposit Program (Chapter 9.10)
- Wood Burning Ordinance (Chapter 9.10)

#### Envision San José 2040 General Plan and Greenhouse Gas Reduction Strategy

The Envision San José 2040 General Plan includes a GHG Reduction Strategy that is designed to help the City sustain its natural resources, grow efficiently, and meet California legal requirements for GHG emissions reduction. Multiple policies and actions in the General Plan have GHG implications including those targeting land use, housing, transportation, water usage, solid waste generation and recycling, and reuse of historic buildings. The policies also include a monitoring component that allows for adaptation and adjustment of City programs and initiatives related to sustainability and associated reductions in GHG emissions. The GHG Reduction Strategy is intended to meet the mandates as outlined in the CEQA Guidelines and the recent standards for "qualified plans" as set forth by BAAQMD.

The GHG Reduction Strategy was approved by the City Council in December 2015. The environmental impacts of the GHG Reduction Strategy were analyzed in the General Plan EIR and a 2015 Supplement to the General Plan EIR. The City's projected emissions and the GHG Reduction Strategy are consistent with the measures necessary to meet state-wide 2020 goals established by AB 32 and addressed in the Climate Change Scoping Plan. Measures have not been identified that would ensure GHG emissions would be consistent with state-wide 2050 goals, however, and the City adopted overriding considerations for identified future impacts associated with buildout of the City's General Plan.

Additionally, various policies in the City's General Plan have been adopted for the purpose of reducing or avoiding impacts related to GHG, as listed in the following table:

General Plan Policies: Greenhouse Gas Emissions		
Green Building P	olicy Leadership	
Policy MS-1.1	Demonstrate leadership in the development and implementation of green building policies and practices. Ensure that all projects are consistent with or exceed the City's Green Building Ordinance and City Council Policies as well as State and/or regional policies which require that projects incorporate various green building principles into their design and construction.	
Policy MS-1.2	Continually increase the number and proportion of buildings within San José that make use of green building practices by incorporating those practices into both new construction and retrofit of existing structures.	
Policy MS-1.6	Recognize the interconnected nature of green building systems, and, in the implementation of Green Building Policies, give priority to green building options that provide environmental benefit by reducing water and/or energy use and solid waste.	
Energy Conservat	tion and Renewable Energy Use	
Policy MS-2.3	Utilize solar orientation (i.e., building placement), landscaping, design, and construction techniques for new construction to minimize energy consumption.	
Action MS-2.11	Require new development to incorporate green building practices, including those required by the Green Building Ordinance. Specifically, target reduced energy use through construction techniques (e.g., design of building envelopes and systems to maximize energy performance), through architectural design (e.g., design to maximize cross ventilation and interior daylight) and through site design techniques (e.g., orienting buildings on sites to maximize the effectiveness of passive solar design).	
Reduce Consumption and Increase Efficiency		
Policy MS-14.4	Implement the City's Green Building Policies (see Green Building Section) so that new construction and rehabilitation of existing buildings fully implements industry best practices, including the use of optimized energy systems, selection of materials and resources, water efficiency, sustainable site selection, passive solar building design, and planting of trees and other landscape materials to reduce energy consumption.	
Policy MS-14.5	Consistent with State and Federal policies and best practices, require energy efficiency audits and retrofits prior to or at the same time as consideration of solar electric improvements.	

# Climate Smart San José

Climate Smart San José was developed by the City to reduce air pollution, save water, and create a healthier community. The plan contains nine strategies to reduce carbon emissions consistent with the Paris Climate Agreement. These strategies include use of renewable energy, densification of neighborhoods, electrification and sharing of vehicle fleets, investments in public infrastructure, creating local jobs, and improving building energy-efficiency.

# Reach Building Code

In 2019, the San José City Council approved Ordinance No. 30311 and adopted Reach Code Ordinance (Reach Code) to reduce energy-related GHG emissions consistent with the goals of Climate Smart San José. The Reach Code applies to new construction projects in San Jose. It requires new residential construction to be outfitted with entirely electric fixtures. Mixed-fuel buildings (i.e., use of natural gas) are required to demonstrate increased energy efficiency through a higher Energy Design Ratings and be electrification ready. In addition, the Reach Code requires EV charging infrastructure for all building types (above current CalGreen requirements), and solar readiness for non-residential buildings.

# 4.8.1.2 Existing Conditions

The project site is currently a high school campus. Current operational GHG emissions are generated from vehicles entering, parking, and leaving the site and from heating, cooling and lighting of buildings.

# 4.8.2 <u>Impact Discussion</u>

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

#### **Significance Thresholds**

The BAAQMD's CEQA Air Quality Guidelines recommended a GHG threshold of 1,100 metric tons (MT) per year or 4.6 MT of carbon dioxide equivalent (CO<sub>2</sub>e) per service population. These thresholds were developed based on meeting the 2020 GHG targets set in the scoping plan that addressed AB 32. Development of the project would occur beyond 2020, so a threshold that addresses a future target is appropriate. Although BAAQMD has not published a quantified threshold for 2030 yet, this assessment uses a "Substantial Progress" efficiency metric of 2.6 MT CO<sub>2</sub>e/year/service population and a bright-line threshold of 660 MT CO<sub>2</sub>e/year based on the GHG reduction goals of EO B-30-15, though requirements of an executive order are applicable to state agencies and not local or regional agencies.

The service population metric of 2.6 is calculated for 2030 based on the 1990 inventory and the projected 2030 statewide population and employment levels. The 2030 bright-line threshold is a 40 percent reduction from the 2020 target year's 1,100 MT CO<sub>2</sub>e/year threshold.

#### **GHG Project-Specific Analysis**

GHG emissions associated with development of the proposed 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 with the project building energy and water usage, and solid waste disposal. Emissions for the proposed project are discussed below and were analyzed using the methodology recommended in the BAAQMD's CEQA Air Quality Guidelines (May, 2017). CalEEMod was used to predict GHG emissions from operation of the site assuming full build-out of the project. The project land use types and size and other project-specific information were input to the model.

# **Construction Emissions**

GHG emissions associated with construction were computed to be 320 MT of CO<sub>2</sub>e for the total construction periods, as shown in Table 4.8-1. The construction CalEEMod data from the Presentation High School Master Plan Construction Air Quality Assessment was used in this analysis. The proposed construction schedule has construction occurring in four phases over a 16-year period, beginning in 2020. For this evaluation, construction was assumed to begin in 2020 and occur continuously from phase to phase with no breaks between phases. The operational year used for all four phases was 2026.

Table 4.8-1: Annual Project Construction GHG Emissions (CO <sub>2</sub> e) in Metric Tons				
Source Category	Existing in 2026	Proposed Project in 2026	Proposed Project in 2030	
Phase 1 ~ 2020	-	84		
Phase 2 ~ 2024	-	85		
Phase 3 ~ 2025	-	88		
Phase 4 ~ 2025	-	63		
Total	32	0		

The GHG emissions calculated are from on-site operation of construction equipment, vendor and hauling truck trips, and worker trips. Neither the City nor BAAQMD have an adopted threshold of significance for construction-related GHG emissions, though BAAQMD recommends quantifying emissions and disclosing that GHG emissions would occur during construction. BAAQMD also encourages the incorporation of best management practices to reduce GHG emissions during construction where feasible and applicable. The construction best management practices included in the project would include but not be limited to: 1) use of at least ten percent local building materials; and 2) recycling or reusing at least fifty percent of construction waste or demolition materials.

#### **Operational Emissions**

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. Emissions associated with vehicle travel depend on the year of analysis because emission control technology requirements are phased-in over time. Therefore, the earlier the year analyzed in the model, the higher the emission rates utilized by CalEEMod. It was assumed that the earliest the project could possibly be constructed (full build out) and begin operating would be 2026. Emissions associated with build out later than 2026 would be lower.

A CalEEMoD model run was developed to compute emissions from the use of the existing buildings as if it was operating in 2026. Inputs for this modeling scenario included 107,884 GSF and 750 students entered as "High School" on an 8.80-acre site. These inputs were applied to the modeling in the same manner described for the proposed project.

The project service population that defines the per capita emission rate for land use projects is based on the number of future workers and residents. Note BAAQMD does not typically include students in the service population. However, the lead agency may choose to include students in service population. The projected number of future students is 850 and the future number of faculty is 110. The total project service population would be 960.

In 2030 as shown in Table 4.8-2, annual emissions resulting from operation of the proposed project are predicted to be 1,619 MT of CO<sub>2</sub>e. The annual emissions from operation of the existing buildings in 2026 are computed as 1,492 MT of CO<sub>2</sub>e. The net emissions resulting from the project, which is equal to the difference between the project total of 1,619 MT and the Existing in 2026 total of 1,492 MT, would be 127 MT of CO<sub>2</sub>e/year. The net emission total of 127 MT of CO<sub>2</sub>e/year would not exceed the 2030 "Substantial Progress" threshold of 660 MT CO<sub>2</sub>e/year.

Table 4.8-2: Annual Project Operational GHG Emissions (CO <sub>2</sub> e) in Metric Tons			
Source Category	Existing in 2026	Proposed Project in 2026	Proposed Project in 2030
Area	<1	<1	<1
Energy Consumption	184	260	260
Mobile	1,230	1,394	1,271
Solid Waste Generation	69	78	78
Water Usage	8	9	9
Total	1,492	1,742	1,619
Net New Emissions		250	127
2030 Substantial Progress Threshold			660 MT CO <sub>2</sub> e/yr
Service Population Per Capita Emissions*		1.83	1.70

<sup>\*</sup> Assuming students and faculty make up the service population.

Based on the results of the greenhouse gas analysis which shows that net new emissions from the construction and operations of the project would not exceed the BAAQMD thresholds, the project would not result in significant greenhouse gas emission impacts.

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)

# Consistency with the San José Greenhouse Gas Reduction Strategy

The City of San José General Plan contains goals and policies adopted for the purpose of reducing GHG emissions. The measures center around five strategies: energy, waste, water, transportation, and carbon sequestration. Some measures are mandatory for all proposed development projects, while others are voluntary. Voluntary measures can be incorporated as mitigation measures for proposed projects at the discretion of the City. The proposed project's consistency with these measures is described below.

#### Mandatory Criteria

- 1. Consistency with the Land Use/Transportation Diagram (General Plan Goals/Policies IP-1, LU-10)
- 2. Implementation of Green Building Measures (GP Goals: MS-1, MS-2, MS-14)
  - Solar Site Orientation
  - Site Design
  - Architectural Design
  - Construction Techniques
  - Consistency with City Green Building Ordinance and Policies
  - Consistency with GHGRS Policies: MS-1.1, MS-1.2, MC-2.3, MS-2.11, and MS-14.4
- 3. Pedestrian/Bicycle Site Design Measures
  - Consistency with Zoning Ordinance
  - Consistency with GHGRS Policies: CD-2.1, CD-3.2, CD-3.3, Cd-3.4, CD-3.6, CD-3.8, CD-3.10, CD-5.1, LU-5.4, LU-5.5, LU-9.1, TR-2.8, TR-2.11, TR-2.18, TR-3.3, TR-6.7
- 4. Salvage building materials and architectural elements from historic structures to be demolished to allow re-use (General Plan Policy LU-16.4), if applicable;
- 5. Complete an evaluation of operational energy efficiency and design measures for energy-intensive industries (e.g. data centers) (General Plan Policy MS-2.8), if applicable;
- 6. Preparation and implementation of the Transportation Demand Management (TDM) Program at large employers (General Plan Policy TR-7.1), if applicable; and

7. Limits on drive-through and vehicle serving uses; all new uses that serve the occupants of vehicles (e.g. drive-through windows, car washes, service stations) must not disrupt pedestrian flow. (General Plan Policy LU-3.6), if applicable.

The proposed project is consistent with the General Plan land use designation for the site, in compliance with Mandatory Criterion 1. New structures would be constructed in compliance with the solar site orientation, site design, architectural design and construction techniques measures of the San José Green Building Ordinance (Policy 6-32) and the California Green Building Code (CALGreen), in conformance with Mandatory Criterion 2. The project would comply with Mandatory Criterion 3 by providing bicycle parking, consistent with the San José Zoning Ordinance requirements. The Ordinance would require a total of 381 spaces for the Master Plan project, and the project proposes a total of 388 spaces. Given the proximity to transit and the inclusion of green building measures such as utilization of solar orientation, landscaping, architectural and site design, and construction techniques to minimize energy consumption, the provision of adequate bicycle parking, the project would be consistent with the Mandatory Criteria 1 – 3 as described above.

Criteria 4, 5, and 7 are not applicable to the proposed project because the site does not contain historic structures, the project is not an energy-intensive use, and the project does not propose vehicle-serving uses. Criteria 6 is not applicable because the project is not a large employer. The proposed project is consistent with the mandatory GHG Reduction Strategy goals and policies intended to reduce GHG emissions.

#### 4.9 HAZARDS AND HAZARDOUS MATERIALS

The following discussion is based in part on a Phase I Environmental Site Assessment prepared for the project site by *McCloskey Consultants, Inc.* dated March 26, 2018, and a letter summarizing the soil sampling results, also prepared by *McCloskey Consultants, Inc.* and dated June 6, 2018. Copies of both reports are included as Appendix D and E respectively to this Initial Study.

## 4.9.1 Environmental Setting

#### 4.9.1.1 Regulatory Framework

## **Hazardous Materials Sites (Government Code Section 65962.5)**

Section 65962.5 of the Government Code requires California Environmental Protection Agency (CalEPA) to develop and update (at least annually) a list of hazardous waste and substances sites. This list is used by the State, local agencies, and developers to comply with CEQA requirements. The list includes hazardous substance release sites identified by the Department of Toxic Substances Control (DTSC) and the State Water Resources Control Board (SWRCB).

#### Envision San José 2040 General Plan

Various policies in the City's General Plan have been adopted for the purpose of reducing or avoiding impacts related to hazards and hazardous materials. The following General Plan policies are relevant to the proposed school expansion project.

General Plan Policies: Hazards and Hazardous Materials			
Hazardous Materials			
Policy EC-6.1	Require all users and producers of hazardous materials and wastes to clearly identify and inventory the hazardous materials that they store, use or transport in conformance with local, state and federal laws, regulations and guidelines.		
Policy EC-6.2	Require proper storage and use of hazardous materials and wastes to prevent leakage, potential explosions, fires, or the escape of harmful gases, and to prevent individually innocuous materials from combining to form hazardous substances, especially at the time of disposal by businesses and residences. Require proper disposal of hazardous materials and wastes at licensed facilities.		
Policy EC-6.4	Provide information to the public on the proper disposal of products by house-holds and small businesses with practical pollution prevention options for the use, recycling, and disposal of products containing hazardous substances under City and County of Santa Clara programs for Household Hazardous Waste Disposal.		
Policy EC-6.6	Address through environmental review for all proposals for new residential, park and recreation, school, day care, hospital, church or other uses that would place a sensitive population in close proximity to sites on which hazardous materials are or are likely to be located, the		

General Plan Policies: Hazards and Hazardous Materials				
	likelihood of an accidental release, the risks posed to human health and for sensitive populations, and mitigation measures, if needed, to protect human health.			
Policy EC-6.9	Adopt City guidelines for assessing possible land use compatibility and safety impacts associated with the location of sensitive users near businesses or institutional facilities that use or store substantial quantities of hazardous materials by June 2011. The City will only approve new development with sensitive populations near sites containing hazardous materials such as toxic gases when feasible mitigation is included in the projects.			
<b>Environmental Conta</b>	nmination			
Policy EC-7.1	For development and redevelopment projects, require evaluation of the proposed site's historical and present uses to determine if any potential environmental conditions exist that could adversely impact the community or environment.			
Policy EC-7.2	Identify existing soil, soil vapor, groundwater and indoor air contamination and mitigation for identified human health and environmental hazards to future users and provide as part of the environmental review process for all development and redevelopment projects. Mitigation measures for soil, soil vapor and groundwater contamination shall be designed to avoid adverse human health or environmental risk, in conformance with regional, state and federal laws, regulations, guidelines and standards.			
Policy EC-7.4	On redevelopment sites, determine the presence of hazardous building materials during the environmental review process or prior to project approval. Mitigation and remediation of hazardous building materials, such as lead-paint and asbestos-containing materials, shall be implemented in accordance with state and federal laws and regulations.			
Policy EC-7.5	On development and redevelopment sites, require all sources of imported fill to have adequate documentation that it is clean and free of contamination and/or acceptable for the proposed land use considering appropriate environmental screening levels for contaminants. Disposal of groundwater from excavations on construction sites shall comply with local, regional, and state requirements.			

# 4.9.1.2 Existing Conditions

Hazardous materials encompass a wide range of substances, some of which are naturally-occurring and some of which are man-made. Examples include motor oil and fuel, metals (e.g., lead, mercury, and arsenic), asbestos, pesticides, herbicides, and chemical compounds used in manufacturing and other uses. A substance may be considered hazardous if, due to its chemical and/or physical properties, it poses a substantial hazard when it is improperly treated, stored, transported, disposed, or released into the environment in the event of an accident. Determining if such substances are present on or near project sites is important because exposure to hazardous materials above

regulatory thresholds can result in adverse health effects on humans, as well as harm to plant and wildlife ecology.

#### **Historic and Current Uses**

The project site was cultivated with cherry orchards from as early as the late 1930s through the early 1960s. The original Presentation High School buildings were constructed on the eastern half of the site in 1962, at which time the western half remained cultivated with orchards through the mid- to late-1960s. A small convent was constructed on the northwestern corner of the site in the late-1970s or early 1980s, and was removed in 2003. Expansion of Presentation High School facilities onto the western half of the site began in the mid-1970s, and all of the existing school facilities were present by 2005.

# **On-Site Hazardous Materials Uses**

Reportable quantities of hazardous materials are present at the site, related to a variety of school facilities. Liquid chlorine and sodium hypochlorite for swimming pool maintenance are maintained in above-ground storage tanks (ASTs) located in the pool/cogeneration building. Paints are utilized in the theater tech shop, and a variety of laboratory chemicals are utilized in the chemistry lab and storage room. Evidence of spills and/or releases of these materials was not observed during the site reconnaissance, and the Phase I Environmental Site Assessment determined that the materials were appropriately permitted with the appropriate regulatory agency. Only small quantities of hazardous wastes are generated, and were disposed by Clean Harbors, Inc. Hazardous wastes are not generated at these facilities. Furthermore, the Phase I Environmental Site Assessment records the hazardous materials files and documents related to the presence or absence of environmental conditions and activities on the site from the Santa Clara County Environmental Health Department (SCCEHD) and San José Fire Department (SJFD) records.

The SCCEHD provided a California Environmental Reporting System (CERS) Business Activities Form/HMBP for Presentation High School, dated September 20, 2017, which indicates that 70 cubic feet of liquefied petroleum gas, 500 gallons sodium hypochlorite, 220 gallons hydrochloric acid and 55 gallons latex paint (in 5-gallon or smaller containers) were stored/utilized at the site. No underground storage tanks (USTs) were reported. Hazardous waste reportedly was not generated. A hazardous materials notice of inspection, dated October 2011, also was provided by the SCCEHD. Reportable quantities of hazardous materials included 220 gallons of hydrochloric acid, 500 gallons sodium hypochlorite, 55 gallons of latex paint and 70 gallons of propane. Hazardous materials stored at non-reportable quantities included sodium bicarbonate, chemistry, art glazes, aerosols and photo developer/fix. Inspection notes indicated that chemistry lab acids and bases were neutralized and disposed down the drain and that metal-bearing solutions were evaporated and the concentrate disposed to the trash. A sink in the art lab reportedly had a "clay trap." Paints in the theater/drama area were stored without secondary containment.

The SJFD files had only limited hazardous materials-related documentation. An August 2004 permit for the new construction of the swimming pool and pool "house" indicates a hazardous materials installation permit was required for two corrosive liquid storage tanks and associated piping planned for installation; secondary containment was required to hold the capacity of the container. A March 2005 permit application was for the installation of two ASTs containing sodium hypochlorite and

hydrochloric acid. Documentation regarding construction of the ASTs indicates they were double-walled/dual-containment tanks.

#### **Off-Site Hazards**

Various Federal and State regulations require that government agencies maintain records of environmental permits, records of properties generating, handling or storing hazardous materials, records of properties impacted by regulated compounds, and records of properties under investigation by the government for alleged violations of hazardous material regulations. Environmental Data Resources, Inc. (EDR), a specialized research firm, provided an electronic search of these databases. Listings for off-site facilities in the EDR report, including those identified as "orphan" facilities unable to be plotted due to incorrect or insufficient address information, were reviewed for their potential to impact the project site. No orphan facilities of potential concern were identified. None of the listed off-site facilities appear to be of significant concern to the site.

#### Other Hazards

## **Airports**

The Norman Y. Mineta San José International Airport (Airport) is located approximately 8 miles north of the project site. The project site is not located within the Santa Clara County Airport Land Use Commission's (ALUC) Airport Influence Area for the Airport, nor within the vicinity of a private airstrip.

#### Wildfire Hazards

The project site is located in a residential neighborhood in central San José, surrounded by suburban development. The project site is not located at the urban edge and, therefore, is not located within a Very-High Fire Hazard Severity Zone.<sup>35</sup>

## 4.9.2 Impact Discussion

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Wo	uld 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?				

<sup>&</sup>lt;sup>35</sup> California Department of Forestry and Fire Protection. *Very High Fire Hazard Severity Zones in LRA*. October 8, 2008.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would	the project:				
or wa	nit hazardous emissions or handle hazardous acutely hazardous materials, substances, or aste within one-quarter mile of an existing or oposed school?				
of to a r	e located on a site which is included on a list hazardous materials sites compiled pursuant Government Code Section 65962.5 and, as result, will it create a significant hazard to e public or the environment?				
pla ad or or	or a project located within an airport land use an or, where such a plan has not been opted, within two miles of a public airport public use airport, result in a safety hazard excessive noise for people residing or orking in the project area?				
int	repair implementation of, or physically terfere with, an adopted emergency response an or emergency evacuation plan?				
inc	spose people or structures, either directly or directly, to a significant risk of loss, injury death involving wildland fires?				
Impact HAZ-1: The project would not create a significant hazard to the public or the environment through routine transport, use, or disposal of hazardous materials. (Less than Significant Impact)					

Post-construction operation of the proposed project would not result in hazardous materials being transported, used, or disposed of in quantities that would result in a significant hazard to the public. Operation of the proposed project would include the use and storage on-site of cleaning supplies and maintenance chemicals in small quantities. No other hazardous materials would be used or stored on-site. The small quantities of cleaning supplies and materials would not pose a risk to site users or adjacent land uses.

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 with Mitigation Incorporated)

# **Agricultural Chemicals**

Standard agricultural practices utilized during historical cultivation of the site with cherry orchards may have included the application of persistent agricultural chemicals, including organochlorine and lead-arsenate pesticides. Residual pesticides and related metals, lead and arsenic, could remain in

shallow on-site soils at concentrations exceeding regulatory standards. There is the potential for future development to disturb and/or release residual chemicals during construction activities and impact construction workers, adjacent uses, or the environment.

Several of the structures on the site have been present since the early 1960s. Additionally, historical structures were documented on the northeastern corner of the site in the 1950s and 1960s and at the convent on the northeastern corner of the site in the late 1970s through 2003. Based on the dates of construction, the paint on these structures may have contained lead. Flaking lead-based paint (LBP) may have impacted soil along the building walls with lead. Additionally, application of pesticides and/or herbicides may have occurred around the building perimeters.

# Soil Sampling

As discussed in the letter summarizing the soil sampling results dated June 6, 2018 (Appendix D2), *McCloskey Consultants* collected 15 soil samples from the ground surface to ½-foot deep around the building perimeters where surface soil borders building walls. The samples were analyzed for organochlorine pesticides (OCPs) and arsenic using EPA Test Methods. Three of the samples collected below windows were also analyzed for lead.

Organochlorine pesticide results indicate that various pesticides were detected around some of the building perimeters. Concentrations of 4,4'-DDD, 4,4'-DDE, 4,4'-DDT, chlordane, dieldrin, alpha-BHC, gamma-BHC, heptachlor, heptachlor epoxide, and hexachlorobenzene were detected in at least one of the samples collected. The pesticide concentrations detected were compared to the United States Environmental Protection Agency Regional Screening Levels (USEPA RSL) or California DTSC's Office of Human and Ecological Risk ("HERO") Human Health Risk Assessment (HHRA) HERO Note 3 for sensitive uses. Chlordane is listed on the California HHRA HERO Note 3 compounds and the more conservative screening value was used for this compound. Most of the concentrations detected were several times less than their respective USEPA RSLs. None of the concentrations detected exceeded their respective USEPA RSLs.

Lead concentrations were detected in all three of the samples analyzed around the building perimeter and ranged from 13.2 milligrams per kilogram (mg/kg) to 28.4 mg/kg. Lead was compared to the HHRA HERO Note 3 Screening Level (CHHSL) guidance of 80 mg/kg for sensitive uses. None of the concentrations exceeded this threshold and all appeared consistent with naturally-occurring background concentrations.

#### Arsenic

Arsenic was detected in every soil sample collected from around the building perimeters and ranged from 4.01 mg/kg to 27.9 mg/kg. All of the arsenic concentrations detected exceed the USEPA RSL for sensitive uses; however, naturally-occurring concentrations commonly exceed the RSLs statewide. Arsenic concentrations were compared to the published maximum naturally-occurring concentration of 11.0 mg/kg. The arsenic concentrations of 12.0 mg/kg and 27.9 mg/kg collected at sampling locations BP-1 and BP-4, respectively, exceeded the published maximum naturally-occurring background concentrations but only at those two locations.

Based on these sampling results, elevated arsenic concentrations were only detected in the soil along the eastern side of the existing main office/classroom building that exceeded naturally-occurring background concentrations. Both of the samples (borings BP-1 and BP-4) were collected in small planter areas that were approximately two feet wide and less than 30 feet long. Concrete covered the remaining portion of the building where the elevated arsenic concentrations were detected.

In the June 6, 2018 Summary Letter (Appendix E), *McCloskey Consultants* concludes that due to the small amount of material with elevated arsenic concentrations, and the locations of the soil samples containing these concentrations ( not in areas where students congregate), the impacted material does not appear to pose a significant threat to human health during the current and/or planned redevelopment activities, and therefore no further action was recommended.

Based on the proposed phasing plan for the project, the area of borings containing the elevated arsenic concentrations will be covered with new buildings in future phases of the project. A new classroom building will cover the area of boring BP-4 in Phase 2, and a new administration building will cover the area of boring BP-1 during Phase 3 (refer to Figure 1 in the *McCloskey Consultants*, *Inc.* letter in Appendix E, and Figure 3.0-1 of this Initial Study)

#### **Hazardous Building Materials**

Based on the dates of construction for the main classroom and administrative office building and student union/cafeteria, building materials and coatings may include asbestos-containing materials (ACMs), lead-based paint, and/or PCBs. ACMs also may be present in the gym based on the date of construction.

In conformance with state and local laws and General Plan Policy EC-7.4, a visual inspection/predemolition survey, and possible sampling, will be conducted prior to the demolition of the building to determine the presence of these hazardous materials. Demolition done in conformance with these laws and regulations and the following Standard Permit Conditions, would ensure that, if present, ACMs and lead-based paint are properly handled and disposed so that they are not released into the environment. As a result, the impact would be less than significant.

Based on BAAQMD and California Division of Occupational Safety and Health (Cal/OSHA) rules and regulations, the following conditions are required to limit impacts to construction workers and others from ACMs.

In conformance with state and local laws, a visual inspection/pre-demolition survey, and possible sampling, shall be conducted prior to the demolition of on-site building to determine the presence of asbestos-containing materials and/or lead-based paint. These requirements will be included as Standard Permit Conditions for the project.

# **Standard Permit Conditions:**

• In conformance with State and local laws, a visual inspection/pre-demolition survey, and possible sampling, shall be conducted prior to the demolition of on-site building(s) to determine the presence of asbestos-containing materials (ACMs) and/or lead-based paint (LBP).

- During demolition activities, all building materials containing lead-based paint shall be removed in accordance with Cal/OSHA Lead in Title 8, California Code of Regulations (CCR), Section 1532.1, including employee training, employee air monitoring, and dust control. Any debris or soil containing lead-based paint or coatings shall be disposed of at landfills that meet acceptance criteria for the type of lead being disposed.
- All potentially friable asbestos containing materials (ACMs) shall be removed in accordance
  with National Emission Standards for Air Pollution (NESHAP) guidelines prior to demolition
  or renovation activities that may disturb ACMs. All demolition activities shall be undertaken
  in accordance with Cal/OSHA standards contained in Title 8, CCR, Section 1529, to protect
  workers from asbestos exposure.
- A registered asbestos abatement contractor shall be retained to remove and dispose of ACMs identified in the asbestos survey performed for the site in accordance with the standards stated above.
- Materials containing more than one-percent asbestos are also subject to Bay Area Air Quality Management District (BAAQMD) regulations. Removal of materials containing more than one-percent asbestos shall be completed in accordance with BAAQMD requirements and notifications.
- Based on Cal/OSHA rules and regulations, the following conditions are required to limit impacts to construction workers.
  - Prior to commencement of demolition activities, a building survey, including sampling and testing, shall be completed to identify and quantify building materials containing lead-based paint.
  - During demolition activities, all building materials containing lead-based paint shall be removed in accordance with Cal/OSHA Lead in Construction Standard, Title 8, CCR, Section 1532.1, including employee training, employee air monitoring and dust control.
  - O Any debris or soil containing lead-based paint or coatings shall be disposed of at landfills that meet acceptance criteria for the type of waste being disposed.

Conformance with the state regulations and implementation of remediation to standards in conformance with General Plan policies and federal, state, and local laws would ensure that hazards and hazardous material impacts associated with building materials would be reduced to a less than significant level at the time of future development of the site. (Less Than Significant Impact)

#### **Naturally Occurring Asbestos**

The Phase I ESA noted that due to the presence of ultramafic rock outcrops identified approximately two miles from the site, naturally-occurring asbestos could be present in on-site soil at concentrations that some regulatory agencies could consider to be a long-term health hazard due to inhalation of asbestos fibers. The BAAQMD regulates all construction activities that produce dust potentially containing naturally occurring asbestos under the Asbestos Airborne Toxic Control Measure (ATCM), which it adopted in 2001. The ATCM requires construction and grading operations in areas where naturally occurring asbestos is likely to be found to employ the best available dust mitigation measures.

The following requirement will be included as a Standard Permit Condition for the project.

# **Standard Permit Condition:**

• The project applicant shall comply with the BAAQMD Asbestos Airborne Toxic Control Measure (ATCM), which requires the preparation and BAAQMD Approval of an Asbestos Dust Mitigation Plan. The plan must specify how the operation will Minimize emissions and must address specific emission sources. Prior to the commencement of any ground disturbing activities, a copy of the BAAQMD approved Asbestos Dust Mitigation Plan (ADMP) shall be submitted to the Director of the Department of Planning, Building and Code Enforcement or the Director's designee.

Compliance with the requirements of the ATCM during construction and grading for the project would reduce any potential impacts from naturally-occurring asbestos to less than significant levels.

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)

In addition to the project site itself, the nearest school is St. Christopher Elementary School, which is located adjacent to the northwest side of the site. As previously discussed, any use of hazardous materials associated with future school uses on the site would be limited to common landscaping-related or cleaning chemicals, which would have limited potential for off-site effects.

Demolition and future grading activities at the site could result in the release and/or transport of agricultural chemicals, lead, ACMs, or PCBs (if present). As identified in the Standard Permit Conditions listed previously in the response to Questions a and b, and debris or soil containing lead based paint, and any building materials containing ACMs would be removed in accordance with Cal/OSHA, NESHAP and BAAQMD guidelines and requirements. As a result, impacts to schools would be less than significant.

# 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 is not located on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5.<sup>36</sup> Thus, there would be 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. (No Impact)

<sup>&</sup>lt;sup>36</sup> DTSC's Hazardous Waste and Substances Site List – Site Cleanup (Cortese List). http://www.dtsc.ca.gov/SiteCleanup/Cortese\_List.cfm Accessed June 14, 2018.

The Norman Y. Mineta San José International Airport is located approximately eight miles north of the project site. The project site is not located within an airport land use plan nor is it within five miles of public or private airport or airstrip; therefore, future development of the site would not result in a safety hazard for people related to airport activities.

# Impact HAZ-6: The project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. (Less than Significant Impact)

Implementation of the proposed master plan would not physically interfere with an adopted emergency response or evacuation plan. During construction and operation of the school, roadways would not be permanently blocked such that emergency vehicles would be unable to access the site or surrounding sites. Thus, any impacts would be less than significant.

# 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 in an area that is exposed to wildland fire hazards and there would be no impact.

#### 4.10 HYDROLOGY AND WATER QUALITY

#### 4.10.1 <u>Environmental Setting</u>

#### 4.10.1.1 Regulatory Framework

#### Federal, State, and Regional

#### Water Quality Overview

The federal Clean Water Act and California's Porter-Cologne Water Quality Control Act are the primary laws related to water quality. Regulations set forth by the U.S. EPA and the State Water Resources Control Board (SWRCB) have been developed to fulfill the requirements of this legislation. U.S. 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 water quality control boards. The project site is within the jurisdiction of the San Francisco Bay Regional Water Quality Control Board (RWQCB).

#### Basin Plan

The San Francisco Bay RWQCB regulates water quality in accordance with the Water Quality Control Plan or "Basin Plan". The Basin Plan lists the beneficial uses that the 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 RWQCB implements the Basin Plan by issuing and enforcing waste discharge requirements, including permits for nonpoint sources such as the urban runoff discharged by a City's stormwater drainage system. The Basin Plan also describes watershed management programs and water quality attainment strategies.

#### Statewide Construction General Permit

The SWRCB has implemented a NPDES General Construction Permit for the State of California. For projects disturbing one acre or more of soil, a Notice of Intent and Storm Water Pollution Prevention Plan 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 are to minimize the discharge of pollutants and to protect beneficial uses and receiving waters from the adverse effects of construction-related storm water discharges.

#### Municipal Regional Stormwater NPDES Permit (MRP)/C.3 Requirement

The San Francisco Bay RWQCB has issued a Municipal Regional Stormwater NPDES Permit (Permit Number CAS612008) (MRP) that covers the project area. Under provisions of the NPDES Municipal Permit, redevelopment projects that disturb more than 10,000 square feet are required to design and construct stormwater treatment controls to treat post-construction stormwater runoff. The MRP requires regulated projects to include Low Impact Development (LID) practices, such as pollutant source control measures and stormwater treatment features aimed to maintain or restore the

site's natural hydrologic functions. The MRP also requires that stormwater treatment measures are properly installed, operated and maintained.

In addition to water quality controls, the MRP requires all new 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 beneficial uses of local rivers, streams, and creeks. Projects may be deemed exempt from the permit requirements if they do not meet the size threshold, drain into tidally-influenced areas or directly into the Bay, drain into hardened channels, or are infill projects in subwatersheds or catchments areas that are greater than or equal to 65 percent impervious (per the Santa Clara Valley Permittees Hydromodification Management Applicability Map).

#### National Flood Insurance Program

The Federal Emergency Management Agency (FEMA) established the National Flood Insurance Program (NFIP) in order 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 (FIRM) that identify Special Flood Hazard Areas (SFHA). An SFHA is an area that will be inundated by the one-percent annual chance flood, which is also referred to as the base flood or 100-year flood. The SFHA is the area where the NFIP floodplain management regulations must be enforced and the area where the mandatory purchase of flood insurance applies.

#### Dam Safety

Dam failure is the uncontrolled release of impounded water behind a dam. Flooding, earthquakes, blockages, landslides, lack of maintenance, improper operation, poor construction, vandalism, and terrorism can all cause a dam to fail.<sup>37</sup> Because dam failure that results in downstream flooding may affect life and property, dam safety is regulated at both the federal and state level. Dams under the jurisdiction of the California Division of Safety of Dams are identified in California Water Code Sections 6002, 6003, and 6004 and regulations for dams and reservoirs are included in the California Code of Regulations. In accordance with the state Dam Safety Act, dams are inspected regularly and detailed evacuation procedures have been prepared for each dam.

As part of its comprehensive dam safety program, the Santa Clara Valley Water District (SCVWD) routinely monitors and studies the condition of each of its 10 dams. The SCVWD also has its own Emergency Operations Center and a response team that inspects dams after significant earthquakes. These regulatory inspection programs reduce the potential for dam failure.

#### Santa Clara Valley Water District

The SCVWD 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

<sup>&</sup>lt;sup>37</sup> State of California. 2013. *2013 State Hazards Mitigation Plan*. Accessed: 18August2017. Available at: <a href="http://hazardmitigation.calema.ca.gov/plan/state\_multi-hazard\_mitigation\_plan\_shmp">http://hazardmitigation\_calema.ca.gov/plan/state\_multi-hazard\_mitigation\_plan\_shmp</a>.

construction and destruction work, most exploratory boring for groundwater exploration, and projects within SCVWD property or easements are required under the SCVWD's Water Resources Protection Ordinance and District Well Ordinance.

#### City of San José Post-Construction Urban Runoff Management (Policy 6-29)

City Council Policy 6-29 Post-Construction Urban Runoff Management (Policy 6-29) implements the stormwater treatment requirements of Provision C.3 of the MRP. Policy 6-29 requires all new development and redevelopment projects to implement post-construction Best Management Practices (BMP) and Treatment Control Measures (TCM) to the maximum extent practicable. This policy also establishes specific design standards for post-construction TCM for projects that create, add, or replace 10,000 SF or more of impervious surfaces.

#### City of San José Hydromodification Management (Policy 8-14)

City Council Policy 8-14 Hydromodification Management (Policy 8-14) implements the stormwater treatment requirements of Provision C.3 of the MRP. Policy 8-14 requires all 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 beneficial uses of local rivers, streams, and creeks. The policy requires these projects to be designed to control project-related hydromodification through a Hydromodification Management Plan (HMP).

#### Envision San José 2040 General Plan

The General Plan includes policies for the purpose of avoiding or mitigating impacts resulting from planned development projects with the City. The following policies are specific to hydrology and water quality and are applicable to the proposed project.

General Plan Policies: Hydrology and Water Quality				
Water Recycling				
Policy MS-19.1	Require new development to contribute to the cost-effective expansion of the recycled water system in proportion to the extent that it receives benefit from the development of a fiscally and environmentally sustainable local water supply.			
Stormwater				
Policy ER-8.1	Manage stormwater runoff in compliance with the City's Post-Construction Urban Runoff (6-29) and Hydromodification Management (8-14) Policies.			
Policy ER-8.3	Ensure that private development in San José includes adequate measures to treat stormwater runoff.			
Policy ER-8.4	Assess the potential for surface water and groundwater contamination and require appropriate preventative measures when new development is proposed in areas where storm runoff will be directed into creeks upstream from groundwater recharge facilities.			
Policy ER-8.5	Ensure that all development projects in San José maximize opportunities to filter, infiltrate, store and reuse or evaporate stormwater runoff onsite.			

General Plan Policies: Hydrology and Water Quality					
Water Resources					
Policy ER-9.3	Utilize water resources in a manner that does not deplete the supply of surface or groundwater or cause overdrafting of the underground water basin.				
Flooding Hazard	ds				
Policy EC-5.2	Allow development only when adequate mitigation measures are incorporated into the project design to prevent or minimize siltation of streams, flood protection ponds, and reservoirs.				
Policy EC-5.7	Allow new urban development only when mitigation measures are incorporated into the project design to ensure that new urban runoff does not increase flood risks elsewhere.				
Policy EC-5.11	Where possible, reduce the amount of impervious surfaces as a part of redevelopment and roadway improvements through the selection of materials, site planning, and street design.				
Action EC-5.16	Implement the Post-Construction Urban Runoff Management requirements of the City's Municipal NPDES Permit to reduce urban runoff from project sites.				
Water Supply, S	Sanitary Sewer and Storm Drainage				
Policy IN-3.4	<ul> <li>Maintain and implement the City's Sanitary Sewer Level of Service Policy and Sewer Capacity Impact Analysis (SCIA) Guidelines to:         <ul> <li>Prevent sanitary sewer overflows (SSOs) due to inadequate capacity so as to ensure that the City complies with all applicable requirements of the Federal Clean Water Act and State Water Board's General Waste Discharge Requirements for Sanitary Sewer Systems and National Pollutant Discharge Elimination System permit. SSOs may pollute surface or ground waters, threaten public health, adversely affect aquatic life, and impair the recreational use and aesthetic enjoyment of surface waters.</li> <li>Maintain reasonable excess capacity in order to protect sewers from increased rate of hydrogen sulfide corrosion and minimize odor and potential maintenance problems.</li> <li>Ensure adequate funding and timely completion of the most critically needed sewer capacity projects.</li> <li>Promote clear guidance, consistency and predictability to developers regarding the necessary sewer improvements to support development within the City</li> </ul> </li> </ul>				
Policy IN-3.5	Require mitigation for development which will have the potential to reduce downstream level of service (LOS) to lower than "D", or development which would be served by downstream lines already operating at a LOS lower than "D". Mitigation measures to improve the LOS to "D" or better can be provided by either acting independently or jointly with other developments in the same area or in coordination with the City's Sanitary Sewer Capital Improvement Program.				
Policy IN-3.7	Design new projects to minimize potential damage due to storm waters and flooding to the site and other properties.				
Policy IN-3.9	Require developers to prepare drainage plans for proposed developments that define needed drainage improvements per City standards.				
Policy IN-3.10	Incorporate appropriate stormwater treatment measures in development projects to achieve stormwater quality and quantity standards and objectives in				

General Plan Policies: Hydrology and Water Quality
compliance with the City's National Pollutant Discharge Elimination System (NPDES) permit.

#### 4.10.1.2 Existing Conditions

#### **Flooding**

Based on the Federal Emergency Management Agency's Flood Insurance Rate Maps (FIRM Map No. 06085C0242H), the project site is located within Zone D. Flood Zone D denotes areas of undetermined, but possible, flood hazards. The site is approximately 3,770 feet west of Guadalupe River which is a designated 100-year flood zone.

#### **Storm Drainage System**

Storm drainage lines in the area are provided and maintained by the City of San José. The site is served by a 15-inch line in Plummer Avenue.

#### Groundwater

The project site is not located on or near a managed groundwater recharge facility.<sup>38</sup>

#### **Water Quality**

The water quality of Guadalupe River, located approximately 0.5 mile east of the project site, is directly affected by pollutants contained in stormwater runoff from a variety of urban land uses. Stormwater from urban uses contains metals, pesticides, herbicides, and other contaminants, including oil, grease, asbestos, lead, and animal wastes.

Currently, Guadalupe River is listed on the California 303(d) list and the Total Maximum Daily Load (TMDL) priority schedule. The river is listed because it contains high levels of Diazinon (a synthetic chemical uses in industrial and household insecticides). The Diazinon is the result of urban runoff that flows through the storm drainage system.

#### 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?				

<sup>&</sup>lt;sup>38</sup> Santa Clara Valley Water District, *Groundwater Management Plan*, November 2016.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
W(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:				
	<ul> <li>result in substantial erosion or siltation on- or off-site;</li> </ul>				
	<ul> <li>substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;</li> </ul>				
	<ul> <li>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</li> </ul>				
	- impede or redirect flood flows?			$\boxtimes$	
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?				
Im	pact HYD-1: The project would not viole discharge requirements or	otherwise s	substantially d	legrade surf	

## ground water quality. (Less than Significant Impact)

#### **Construction Impacts**

Construction of the proposed project, including grading and excavation activities, may result in temporary impacts to surface water quality. When disturbance to underlying soils occurs, surface runoff that flows across the site may contain sediments that are ultimately discharged into the storm drainage system. All construction or demolition activity that results in land disturbances equal to or greater than one acre must obtain coverage under the NPDES General Permit for Construction Activities, which is administered by the SWRCB. The project site is 8.8 acres and, therefore, would require coverage under the NPDES General Permit for Construction Activities.

All development projects in San José must comply with the City's Grading Ordinance whether or not the projects are subject to the NPDES General Permit for Construction Activities. The City of San José Grading Ordinance requires the use of erosion and sediment controls to protect water quality while a site is under construction. Prior to issuance of a permit for grading activity occurring during the rainy season (October 1<sup>st</sup> to April 30<sup>th</sup>), the applicant is required to submit an Erosion Control Plan to the Director of Public Works for review and approval. The Plan must detail the Best Management Practices (BMPs) that would be implemented to prevent the discharge of stormwater pollutants. The following Standard Permit Conditions are included in the project to prevent stormwater pollution and minimize potential sedimentation during construction.

#### **Standard Permit Conditions:**

- Utilize on-site sediment control best management practices (BMPs) to retain sediment on the project site;
- Utilize stabilized construction entrances and/or wash racks;
- Implement daily street sweeping;
- Provide temporary cover of disturbed surfaces to help control erosion during construction; and
- Provide permanent cover to stabilize the disturbed surfaces after construction has been completed.

The proposed project, with implementation of the standard permit conditions listed above and included in the project, would not result in significant construction-related water quality impacts.

#### **Post-Construction Impacts**

The proposed project would replace more than 10,000 square feet of existing impervious surface area, therefore, it is considered a regulated project under Provision C.3 of the MRP and must provide on-site runoff treatment in conformance with the Provision C.3 requirements, and in conformance with Policy 6-29. The following Standard Permit Conditions are included in the project to reduce post-construction impacts to water quality.

#### **Standard Permit Conditions:**

• In compliance with the City of San José's Post-Construction Urban Runoff Policy 6-29 and the Municipal Regional Stormwater NPDES Permit (MRP), the project shall design and construct low impact development (LID) stormwater treatment control measures to treat runoff from impervious surfaces. Stormwater from project impervious surfaces will drain into the treatment area prior to entering the storm drainage system. Consistent with the NPDES requirements, the proposed treatment facility will be numerically sized and will have sufficient capacity to treat the runoff generated by the proposed project, prior to entering the storm drainage system. Details of specific site design, pollutant sources control, and stormwater treatment control measures demonstrating compliance with the MRP will be included in the project design to the satisfaction of the Director of Planning, Building, and Code Enforcement prior to issuance of a development permit.

Implementation of the Standard Permit Conditions described above would reduce the rate of stormwater runoff while also removing pollutants. Development of the proposed project would not result in significant impacts to post-construction water quality.

#### **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 project site is not located within a designated groundwater recharge zone.<sup>39</sup> The project site in its existing condition is mostly paved, containing approximately 94 percent impervious surface area (driveways, parking lots, walkways and building roofs). Because the proposed project would not significantly increase the amount of impervious surface area on the site, it would not substantially affect groundwater recharge or impede sustainable management of the groundwater basin.

#### **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)

The existing stormwater system collects untreated stormwater from the site and surrounding area and discharges it directly into Guadalupe River through an existing outfall. Development of the proposed project would not substantially alter the existing drainage pattern of the site. The drainage pattern under the proposed project would be similar to existing conditions, except the runoff generated by the project site would be treated by stormwater treatment control measures, prior to entering the stormwater drainage system and discharging to the Guadalupe River. The proposed stormwater treatment would reduce the rate of stormwater runoff while also removing pollutants. While there would be an incremental increase in the volume of stormwater generated from the site due to a marginal increase in impervious surface area, the project would not change drainage patterns or exceed the capacity of existing stormwater drainage facilities in the project area.

## 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)

The project site is not located within a 100-year floodplain. The site is within the Lexington Dam and Anderson Dam failure inundation zones.<sup>40</sup> The potential for dam failure is reduced by several regulatory inspection programs, and the risk to people and property, if dam failure were to occur, is

<sup>&</sup>lt;sup>39</sup> Santa Clara Valley Water District. *Groundwater Management Plan.* November 2016.

<sup>&</sup>lt;sup>40</sup> Santa Clara Valley Water District. Leroy Anderson Dam Flood Inundation Maps, Lenihan (Lexington) Dam Flood Inundation Maps. April 2016.

reduced by local hazard mitigation planning. Implementation of the proposed project would not risk release of pollutants due to inundation by flooding.

A seiche is an oscillation of the surface of a lake or landlocked sea varying in period from a few minutes to several hours. There are no landlocked bodies of water near the project site that will affect the site in the event of a seiche.

A tsunami or tidal wave is a series of water waves caused by displacing a large volume of a body of water, such as an ocean or a large lake. Due to the immense volumes of water and energy involved, tsunamis can devastate coastal regions. The project site is not located within a tsunami inundation hazard area and the project would not risk release of pollutants due to inundation by tsunami.<sup>41</sup>

# 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)

The SCVWD prepared a Groundwater Management Plan (GMP) for the Santa Clara and Llagas subbasins in 2016, describing its comprehensive groundwater management framework including objectives and strategies, programs and activities to support those objectives, and outcome measures to gauge performance. The GMP is the guiding document for how the SCVWD will ensure groundwater basins within its jurisdiction are managed sustainably. The Santa Clara subbasin has not been identified as a groundwater basin in a state of overdraft.

The project site is not located within, or adjacent to, a SCVWD groundwater recharge pond or facility. <sup>42</sup> Implementation of the proposed project would not interfere with any actions set forth by the SCVWD in its GMP in regards to groundwater recharge, transport of groundwater, and/or groundwater quality. Therefore, the proposed project would not preclude the implementation of the GMP.

<sup>42</sup> SCVWD. 2016 Groundwater Management Plan. Figure 1-3. 2016.

<sup>&</sup>lt;sup>41</sup> California Department of Conservation. "Santa Clara County Tsunami Inundation Quads". Accessed December 5, 2017. Available at: <a href="http://www.conservation.ca.gov/cgs/geologic\_hazards/Tsunami/Inundation\_Maps/SantaClara">http://www.conservation.ca.gov/cgs/geologic\_hazards/Tsunami/Inundation\_Maps/SantaClara</a>

#### 4.11 LAND USE AND PLANNING

#### 4.11.1 <u>Environmental Setting</u>

#### 4.11.1.1 Regulatory Framework

#### Envision San José 2040 General Plan

The General Plan includes policies for the purpose of avoiding or mitigating impacts resulting from planned development within the City. The following policies are specific to land use and are applicable to the proposed project:

General Plan Policies: Land Use				
<b>Attractive City</b>				
Policy CD-1.12	Use building design to reflect both the unique character of a specific site and the context of surrounding development and to support pedestrian movement throughout the building site by providing convenient means of entry from public streets and transit facilities where applicable, and by designing ground level building frontages to create an attractive pedestrian environment along building frontages. Unless it is appropriate to the site and context, franchise-style architecture is strongly discouraged.			
Compatibility				
Policy CD-4.9	For development subject to design review, the design of new or remodeled structures will be consistent or complementary with the surrounding neighborhood fabric (including but not limited to prevalent building scale, building materials, and orientation of structures to the street).			
Community, Health, Safety, and Wellness				
Policy CD-5.8 Comply with applicable Federal Aviation Administration regulations identifying maximum heights for obstructions to promote air safety.				

#### San José Zoning Ordinance

The Zoning Ordinance (Title 20 of the San José Municipal Code) is a set of regulations that promote and protect the public peace, health, and general welfare by:

- Guiding, controlling, and regulating future growth and development in the City in a sound and orderly manner, and promoting the achievement of the goals and purposes of the General Plan:
- Protecting the character and economic and social stability of agricultural, residential, commercial, industrial, and other areas in the City;
- Providing light, air, and privacy to property;
- Preserving and providing open space and preventing overcrowding of the land;
- Appropriately regulating the concentration of population;
- Providing access to property and preventing undue interference with and hazards to traffic on public rights-of-way; and
- Preventing unwarranted deterioration of the environment and promoting a balanced ecology.

The project site is currently zoned *Public/Quasi-Public*.

#### Santa Clara Valley Habitat Plan/Natural Community Conservation Plan

As discussed in Section 4.4, *Biological Resources* of this Initial Study, the Habitat Plan is a conservation program intended to promote the recovery of endangered species and enhance ecological diversity and function, while accommodating planned growth on approximately 500,000 acres of southern Santa Clara County.

The project site is located within the Habitat Plan study area and is designated as *Urban-Suburban* land. *Urban-Suburban* land is comprised of areas where native vegetation has been cleared for residential, commercial, industrial, transportation, or recreational structures, and is defined as areas with one or more structures per 2.5 acres.

#### 4.11.1.2 Existing Conditions

#### **Existing Land Uses**

The 8.8-acre project site is located on Plummer Avenue, generally between Curtner Avenue and Darlene Avenue. The site is developed with a private high school, and is surrounded on the north, east and southwest and west sides by single-family residential uses. There is a health care facility (Herman Health Care Center) located adjacent to the southeast side of the site, and St. Christopher Elementary School is located adjacent to the northwest side of the site. The predominant land use in the area surrounding the site is single-family residential.

#### **General Plan and Zoning**

#### Envision San José 2040 General Plan

The *Envision San José 2040 General Plan* is an adopted statement of goals and policies for the future character and quality of development in the community as a whole. The project site has a General Plan land use designation of *POP – Public/Ouasi-Public*.

The *Public/Quasi-Public* land use designation is used to designate public land uses, including schools, colleges, corporation yards, homeless shelters, libraries, fire stations, water treatment facilities, convention centers and auditoriums, museums, governmental offices, and airports. Joint development projects which include public and private participation – such as a jointly administered public/private research institute or an integrated convention center/hotel/restaurant complex – are allowed. This category is also used to designate lands used by some private entities, including private schools, daycare centers, hospitals, public utilities, and facilities of any organization involved in the provision of public services such as gas, water, electricity, and telecommunications facilities that are consistent in character with established public land uses. Private community gathering facilities, including those used for religious assembly or other comparable assembly activity, are also appropriate on lands with this designation. The appropriate intensity of development can vary considerably depending on potential impacts on surrounding uses and the particular *Public/Quasi-Public* use developed on the site.

St. Christopher School/Church adjacent to the north of the project area has a PQP - Public/Quasi-Public General Plan land use designation is and the neighboring residential uses to the east and south have a  $RN - Residential\ Neighborhood\ General\ Plan\ land\ use\ designation.$ 

#### Zoning Ordinance

The project site is zoned PQP - Public/Quasi-Public, which is intended to provide publicly serving uses. The publicly serving land uses within this district can include schools, research institutions, community gathering, and other similar publicly-oriented land uses. The appropriate intensity of development can vary considerably depending on potential impacts on surrounding uses and the particular Public/Quasi-Public use developed on a site. Post-secondary schools may be allowed in such designated districts, as an independent use, but only upon issuance of and in compliance with a special use permit as set forth in Chapter 20.100 of the City's Municipal Code. 43

#### 4.11.2 <u>Impact Discussion</u>

	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 is located in the Willow Glen area of San José which is primarily developed with single-family residential uses. The project proposes to demolish and redevelop the existing student center and chapel buildings and the main classroom building. The project includes the construction of approximately 106,900 square feet of new building area in four phases. All proposed development would be located on the existing school's premises and maintain the current land use on site. The layout and design of the proposed project does not include any features that would physically divide the surrounding community.

<sup>&</sup>lt;sup>43</sup> San José, City of San José Zoning Ordinance.

#### **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. (Less than Significant Impact)

#### General Plan Land Use Designation

The project site is designated PQP - Public/Quasi-Public. Uses consistent with PQP - Public/Quasi-Public include public land uses, including schools, colleges, corporation yards, homeless shelters, libraries, fire stations, water treatment facilities, convention centers and auditoriums, museums, governmental offices, and airports. Private schools, such as Presentation High School, are an allowable use for lands designated PQP - Public/Quasi-Public. The proposed project, which includes redevelopment on site to expand the current school use, would be consistent with the PQP - Public/Quasi-Public General Plan land use designation.

#### **Zoning Ordinance**

The project site is located in the PQP - Public/Quasi-Public Zoning District. This district allows public serving uses, and can accommodate private schools, daycare centers, and other similar uses as well, if entitled with use permits. The proposed project is consistent with the Zoning designation for the site as private schools are allowed in such designated districts, as an independent use, but only upon issuance of and in compliance with a special use permit.

The project would not result in significant environmental impacts due to inconsistencies with the site's General Plan land use designation or zoning.

#### Santa Clara Valley Habitat Plan/Natural Community Conservation Plan

As discussed in *Section 4.4 Biological Resources* of this Initial Study, the redevelopment at the project site is a covered activity under the SCVHP and would not conflict with the plan. Through implementation of Standard Permit Conditions, the project would be subject to all applicable SCVHP fees, including nitrogen deposition fees to reduce the project's impact to biological resources to a less than significant impact. (**Less Than Significant Impact**)

#### 4.12 MINERAL RESOURCES

#### 4.12.1 <u>Environmental Setting</u>

#### 4.12.1.1 Existing Conditions

The City of San José contains mineral resources including construction aggregate deposits such as sand, gravel, and crushed stone. Communications Hill is the only area in San José that is designated as containing mineral deposits of regional significance by the State Mining and Geology Board under the Surface Mining and Reclamation Act of 1975. The project site is located approximately 2.5 miles west of Communications Hill and, therefore, does not contain known mineral resources.

#### 4.12.2 <u>Impact Discussion</u>

			Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Wo	ould the project:					
1)	mineral resource	s of availability of a known that will be of value to the esidents of the state?				
2)	important miner	s of availability of a locally al resource recovery site local general plan, specific id use plan?				
Im	pact MIN-1:	The project would not resource that would be of (No Impact)			•	
		school expansion project wou Therefore, there would be no		in the loss of a	vailability of	any known
Im	pact MIN-2:	The project would not resimportant mineral resour	ce recovery	site delineated	on a local g	•

The proposed project is located in a suburban area that does not contain any locally-important mineral resource recovery sites. Therefore, there would be no impact.

#### **4.13 NOISE**

The following discussion and analysis is based in part on a noise and vibration assessment prepared for the project by *Illingworth & Rodkin, Inc.*, dated February 9, 2018. A copy of the report is included in Appendix F of this Initial Study.

#### **Fundamentals of Environmental Noise**

Noise may be defined as unwanted sound. Noise is usually objectionable because it is disturbing or annoying. The objectionable nature of sound could be caused by its pitch or its loudness. Pitch is the height or depth of a tone or sound, depending on the relative rapidity (frequency) of the vibrations by which it is produced. Higher pitched signals sound louder to humans than sounds with a lower pitch. Loudness is intensity of sound waves combined with the reception characteristics of the ear. Intensity may be compared with the height of an ocean wave in that it is a measure of the amplitude of the sound wave.

There are several noise measurement scales which are used to describe noise in a particular location. A decibel (dB) is a unit of measurement which indicates the relative amplitude of a sound. The zero on the decibel scale is based on the lowest sound level that the healthy, unimpaired human ear can detect. Sound levels in decibels are calculated on a logarithmic basis. An increase of 10 decibels represents a ten-fold increase in acoustic energy, while 20 decibels is 100 times more intense, 30 decibels is 1,000 times more intense, etc. There is a relationship between the subjective noisiness or loudness of a sound and its intensity. Each 10 decibel increase in sound level is perceived as approximately a doubling of loudness over a fairly wide range of intensities.

There are several methods of characterizing sound. The most common in California is the A-weighted sound level (dBA). This scale gives greater weight to the frequencies of sound to which the human ear is most sensitive. Because sound levels can vary markedly over a short period of time, a method for describing either the average character of the sound or the statistical behavior of the variations must be utilized. Most commonly, environmental sounds are described in terms of an average level that has the same acoustical energy as the summation of all the time-varying events. This energy-equivalent sound/noise descriptor is called Leq. The most common averaging period is hourly, but Leq can describe any series of noise events of arbitrary duration.

Since the sensitivity to noise increases during the evening and at night – because excessive noise interferes with the ability to sleep – 24-hour descriptors have been developed that incorporate artificial noise penalties added to quiet-time noise events. The Community Noise Equivalent Level (CNEL) is a measure of the cumulative noise exposure in a community, with a 5 dB penalty added to evening (7:00 pm - 10:00 pm) and a 10 dB addition to nocturnal (10:00 pm - 7:00 am) noise levels. The Day/Night Average Sound Level (DNL or  $L_{dn}$ ) is essentially the same as CNEL, with the exception that the evening time period is dropped and all occurrences during this three-hour period are grouped into the daytime period.

#### **Fundamentals of Groundborne Vibration**

Ground vibration consists of rapidly fluctuating motions or waves with an average motion of zero. Several different methods are typically used to quantify vibration amplitude. One method is the Peak

Particle Velocity (PPV). The PPV is defined as the maximum instantaneous positive or negative peak of the vibration wave. A PPV descriptor with units of in/sec is used to evaluate construction generated vibration for building damage and human complaints.

Construction activities can cause vibration that varies in intensity depending on several factors. The use of pile driving and vibratory compaction equipment typically generates the highest construction related groundborne vibration levels. Because of the impulsive nature of such activities, the use of the PPV descriptor has been routinely used to measure and assess groundborne vibration and almost exclusively to assess the potential of vibration to induce structural damage and the degree of annoyance for humans.

The two primary concerns with construction-induced vibration, the potential to damage a structure and the potential to interfere with the enjoyment of life, are evaluated against different vibration limits. Human perception to vibration varies with the individual and is a function of physical setting and the type of vibration. Persons exposed to elevated ambient vibration levels, such as people in an urban environment, may tolerate a higher vibration level.

Damage caused by vibration can be classified as cosmetic or structural. Cosmetic damage includes minor cracking of building elements (exterior pavement, room surfaces, etc.). Structural damage includes threatening the integrity of the building. Damage resulting from construction related vibration is typically classified as cosmetic damage. Safe vibration limits that can be applied to assess the potential for damaging a structure vary by researcher and there is no general consensus as to what amount of vibration may pose a threat for structural damage to the building. Construction-induced vibration that can be detrimental to the building is very rare and has only been observed in instances where the structure is at a high state of disrepair and the construction activity occurs immediately adjacent to the structure.

#### 4.13.1 <u>Environmental Setting</u>

#### 4.13.1.1 Regulatory Framework

#### 2016 State Building Code, Title 24, Part 2

The State Building Code, Title 24, Part 2 of the State of California Code of Regulations establishes uniform minimum noise insulation performance standards to protect persons within new buildings which house people, including hotels, motels, dormitories, apartment houses and dwellings other than single-family dwellings. Title 24 mandates that interior noise levels attributable to exterior sources shall not exceed 45 dB day/night noise level (DNL) or community noise equivalent level (CNEL) in any habitable room.

#### 2016 California Building Cal Green Code

The State of California established exterior sound transmission control standards for new non-residential buildings as set forth in the 2016 California Green Building Standards Code (Section 5.507.4.1 and 5.507.4.2). The sections that pertain to this project are as follows:

**5.507.4.1 Exterior noise transmission, prescriptive method.** Wall and roof-ceiling assemblies exposed to the noise source making up the building envelope shall meet a composite 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 building falls within the 65 dBA DNL noise contour of a freeway or expressway, railroad, industrial source or fixed-guideway noise source, as determined by the local general plan noise element.

**5.507.4.2 Performance method.** For buildings located, as defined by Section 5.507.4.1, wall and roof-ceiling assemblies exposed to the noise source making up the building envelope shall be constructed to provide an interior noise environment attributable to exterior sources that does not exceed an hourly equivalent noise level (Leq (1-hr)) of 50 dBA in occupied areas during any hour of operation.

The performance method, which establishes the acceptable interior noise level, is the method typically used when applying these standards.

#### Envision San José 2040 General Plan

The General Plan includes noise compatibility guidelines for various land uses. These guidelines are provided in Table 4.13-1 below.

Table 4.13-1: General P	Table 4.13-1: General Plan Land Use Compatibility Guidelines  Exterior DNL Value in Decibels					
Land Use Category	55	60	65	70	75	80
1. Residential, Hotels and Motels, Hospitals						
and Residential Care <sup>1</sup>						
2. Outdoor Sports and Recreation,						
Neighborhood Parks and Playgrounds						
3. Schools, Libraries, Museums, Meeting						
Halls, and Churches						
4. Office Buildings, Business Commercial,						
and Professional Offices						
5. Sports Arena, Outdoor Spectator						
Sports						
6. Public and Quasi-Public Auditoriums,						
Concert Halls, and Amphitheaters						
Notes: <sup>1</sup> Noise mitigation to reduce interior noise levels	pursuant to Po	licy EC-1.1	l is require	d.		
Normally Acceptable: Specified land use is satisfactory, based upon the assumption that any buildings involved are						
normal conventional construction, without any special noise insulation requirements.						
Conditionally Acceptable: Specified land use may be permitted only after detailed analysis of the noise reduction						
requirements and noise mitigation features inc			ha mada::4:	1ram h.a		
<b>Unacceptable:</b> New construction or develop not feasible to comply with noise element pol						
mitigation is identified that is also compatible				isidered wil	cii icciiiiica	arry reastore

In addition, the General Plan includes policies for the purpose of avoiding or mitigating impacts resulting from planned development projects with the City. The following policies are specific to noise and vibration and are applicable to the proposed project.

General Plan Policies: Noise and Vibration					
Community N	oise Levels and Land Use Compatibility				
Policy EC-1.1	Locate new development in areas where noise levels are appropriate for the proposed uses. Consider federal, state and City noise standards and guidelines as a part of new development review. Applicable standards and guidelines for land uses in San José include:  Interior Noise Levels  • The City's standard for interior noise levels in residences, hotels, motels, residential care facilities, and hospitals is 45 dBA DNL. Include appropriate site and building design, building construction and noise attenuation techniques in new development to meet this standard. For sites with exterior noise levels of 60 dBA DNL or more, an acoustical analysis following protocols in the City-adopted California Building Code is required to demonstrate that development projects can meet this standard. The acoustical analysis shall base required noise attenuation techniques on expected Envision General Plan traffic volumes to ensure land use compatibility and General Plan consistency over the life of this plan.				
	<ul> <li>Exterior Noise Levels</li> <li>The City's acceptable exterior noise level objective is 60 dBA DNL or less for residential and most institutional land uses (refer to Table EC-1 in the General Plan or Table 4.12-2 in this Initial Study). Residential uses are considered "normally acceptable" with exterior noise exposures of up to 60 dBA DNL and "conditionally compatible" where the exterior noise exposure is between 60 and 75 dBA DNL such that the specified land use may be permitted only after detailed analysis of the noise reduction requirements and needed noise insulation features are included in the design.</li> </ul>				
Policy EC-1.2	Minimize the noise impacts of new development on land uses sensitive to increased noise levels (Land Use Categories 1, 2, 3 and 6 in Table EC-1 in the General Plan or Table 4.12-1 in this Initial Study) by limiting noise generation and by requiring use of noise attenuation measures such as acoustical enclosures and sound barriers, where feasible. The City considers significant noise impacts to occur if a project would:  • Cause the DNL at noise sensitive receptors to increase by five dBA DNL or more where the noise levels would remain "Normally Acceptable"; or • Cause the DNL at noise sensitive receptors to increase by three dBA DNL				
Policy EC 12	or more where noise levels would equal or exceed the "Normally Acceptable" level.  Mitigate noise generation of new nonresidential land uses to 55 dBA DNL at the				
Policy EC-1.3	property line when located adjacent to uses through noise standards in the City's Municipal Code.				
Policy EC-1.7	Require construction operations within San José to use best available noise suppression devices and techniques and limit construction hours near residential uses per the City's Municipal Code. The City considers significant construction noise impacts to occur if a project located within 500 feet of residential uses or 200 feet of commercial or office uses would:				

	General Plan Policies: Noise and Vibration
Vibration	<ul> <li>Involve substantial noise generating activities (such as building demolition, grading, excavation, pile driving, use of impact equipment, or building framing) continuing for more than 12 months.</li> <li>For such large or complex projects, a construction noise logistics plan that specifies hours of construction, noise and vibration minimization measures, posting or notification of construction schedules, and designation of a noise disturbance coordinator who would respond to neighborhood complaints will be required to be in place prior to the start of construction and implemented during construction to reduce noise impacts on neighboring residents and other uses.</li> </ul>
Policy EC-2.3	Require new development to minimize vibration impacts to adjacent uses during demolition and construction. For sensitive historic structures, a vibration limit of 0.08 in/sec PPV (peak particle velocity) will be used to minimize the potential for cosmetic damage to a building. A vibration limit of 0.20 in/sec PPV will be used to minimize the potential for cosmetic damage at buildings of normal conventional construction.

#### City of San José Municipal Code

The Municipal Code restricts construction hours within 500 feet of a residential unit to 7:00 AM to 7:00 PM Monday through Friday, unless otherwise expressly allowed in a Development Permit or other planning approval.<sup>44</sup>

The Zoning Ordinance limits noise levels to 55 dBA at any residential property line and 60 dBA at commercial property lines, unless otherwise expressly permitted by a Special Use Permit (refer to Table 4.13-2). The ordinance is not explicit in terms of the acoustical descriptor associated with the noise level limit, however, a reasonable interpretation of this standard, which is based on policy EC-1.3 of the City's General Plan, would identify the ambient base noise level criteria as a day-night average noise level (DNL). The ordinance also limits noise emitted by stand-by/backup and emergency generators to 55 decibels at the property line of residential properties. The testing of generators is limited to 7:00 AM to 7:00 PM, Monday through Friday.

Table 4.13-2: City of San José Zoning Ordinance Noise Standards					
Land Use Types	Maximum Noise Level in Decibels at Property Line				
Residential, open space, industrial or commercial uses adjacent to a property used or zoned for residential purposes	55				
Open space, commercial, or industrial use adjacent to a property used or zoned for commercial purposes or other non-residential uses	60				

<sup>&</sup>lt;sup>44</sup> The Municipal Code does not establish quantitative noise limits for demolition or construction activities occurring in the City.

Industrial use adjacent to a property used or	
zoned for industrial or use other than	70
commercial or residential purposes	

#### 4.13.1.2 Existing Conditions

A noise monitoring survey was performed to quantify and characterize ambient noise levels at the site and in the project vicinity between Tuesday, January 30, 2018 and Friday, February 2, 2018. The monitoring survey included two long-term noise measurements (LT-1 and LT-2) and four short-term measurements (ST-1 through ST-4), as shown in Figure 4.12-1. The existing noise environment at the site and at the nearby land uses in the project vicinity results primarily from school activities and vehicular traffic along Plummer Avenue and Booksin Avenue.

Long-term noise measurement LT-1 was made next to 2266 Plummer Avenue, approximately 25 feet east of the roadway centerline. This location was selected to quantify noise levels due to traffic along Plummer Avenue. Hourly average noise levels at this location ranged from 56 to 65 dBA  $L_{eq}$  during the day and from 45 to 65 dBA  $L_{eq}$  at night. The day-night average noise level from Tuesday, January 30, 2018 through Friday, February 2, 2018 ranged from 62 to 63 dBA DNL.

Long-term noise measurement LT-2 was made along the northern boundary of the project site, approximately 190 feet west of the Plummer Avenue centerline. This location was selected to quantify noise levels near the closest residential receptors. Hourly average noise levels at this location ranged from 47 to 68 dBA L<sub>eq</sub> during the day and from 40 to 56 dBA L<sub>eq</sub> at night.<sup>45</sup> The day-night average noise level from Tuesday, January 30, 2018 through Friday, February 2, 2018 ranged from 55 to 56 dBA DNL.

Short-term noise measurements ST-1 through ST-3 were conducted on Tuesday, January 30, 2018 in ten-minute intervals starting at 12:10 p.m. and concluding at 1:00 p.m. ST-1 was made near the southeast corner of the project site, approximately 55 feet west of the Plummer Avenue centerline. This location was selected to quantify noise levels due to vehicle traffic on the southern side of the project site. The 10-minute average noise level measured at this location was 54 dBA Leq. During the measurement at ST-1, an aircraft passing overhead produced a maximum noise level of 58 dBA Lmax. Short-term noise measurement ST-2 was made near the southeast corner of the school's theater, approximately 415 feet west of the Plummer Avenue centerline. This location was selected to quantify noise levels due to school activities near the closest sensitive receptors. The 10-minute average noise level measured at this location was 44 dBA Leq. Short-term noise measurement ST-3 was made in front of 2262 Plummer Avenue, approximately 25 feet east of the roadway centerline. This location was selected to quantify noise levels due to vehicle traffic on the northern side of the project site, closer to the main roadway. The 10-minute average noise level measured at this location was 58 dBA Leq. During the measurement at ST-3, a heavy-duty truck passing by produced maximum noise levels of 75 dBA Lmax.

<sup>&</sup>lt;sup>45</sup> During the 2:00 p.m. hour on Wednesday, January 31, 2018, there was an instance where the average hourly noise level was 5 to 10 dB higher than the typical mid-day noise levels. This noise level was likely due to an atypical, long-lasting noise source in the area, such as landscape activities. Adjustments were made in the calculation of the DNL to exclude the atypical data and more accurately reflect typical mid-day noise levels.

Short-term noise measurement ST-4 consisted of two consecutive 10-minute measurements between 12:50 p.m. and 1:10 p.m. on Friday, February 2, 2018. ST-4 was made near the center of the playing field on the western section of the project site, approximately 215 feet east of the Booksin Avenue centerline. This location was selected to quantify noise levels due to school activities on the playing field. The 10-minute average noise levels measured at this location were both 55 dBA  $L_{eq}$ . During the measurement at ST-4, school children on the playing field during the lunch period produced maximum noise levels ranging from 68 to 71 dBA  $L_{max}$ . Table 4.13-3 summarizes the results of the short-term measurements.

Table 4.13-3: Summary of Short-Term Noise Measurement Data (dBA)						
Noise Measurement Location	$L_{\text{max}}$	$L_{(1)}$	L <sub>(10)</sub>	$L_{(50)}$	L <sub>(90)</sub>	$L_{eq}$
ST-1: Southeast corner of project site. (1/30/2018, 12:10 p.m 12:20 p.m.)	68	66	58	47	45	54
ST-2: Southeast corner of school's theater. (1/30/2018, 12:30 p.m 12:40 p.m.)	62	51	47	42	40	44
ST-3: In front of 2262 Plummer Ave. (1/30/2018, 12:50 p.m 1:00 p.m.)	75	69	61	47	43	58
ST-4a: Center of playing field. (2/2/2018, 12:50 p.m 1:00 p.m.)	71	65	57	53	50	55
ST-4b: Center of playing field. (2/2/2018, 1:00 p.m 1:10 p.m.)	66	63	57	53	50	55

**Figure 4.13-1: Noise Measurement Locations** 



#### 4.13.2 <u>Impact Discussion</u>

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact	
Wo	ould 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 with Mitigation Incorporated)						

A significant noise impact would occur if traffic or activities generated by the project would substantially increase noise levels at sensitive receptors in the project vicinity. A substantial increase would occur if: a) the noise level increase is five dBA DNL or greater, with a future noise level of less than 60 dBA DNL, or b) the noise level increase is three dBA DNL or greater, with a future noise level of 60 dBA DNL or greater. The ambient noise ranges from 55 to 63 dBA DNL.

#### **Traffic Noise**

The traffic data provided peak hour volumes for the project-generated traffic at local and major roadways in the immediate project vicinity (see Appendix G - Traffic Operations Study). Traffic volume information was reviewed to calculate the permanent noise increase attributable to project-generated traffic. Traffic volumes under the Existing Plus Project, Background, and Background Plus Project scenarios were compared to the Existing scenario to calculate the relative increase in the hourly average traffic noise level (Leq) attributable to the proposed project. The change in the DNL would be the same as the change in the peak hour Leq given that the hourly distribution of traffic and mix of vehicles is expected to be similar to the existing traffic. As shown in Table 4.13-4, the permanent noise level increases due to this project-generated traffic would be less than one dBA DNL at noise-sensitive receptors in the project vicinity. For reference, traffic volumes would have to

double for noise levels to increase by three dBA DNL. Therefore, the proposed project would not cause a substantial permanent traffic noise level increase at the nearby noise-sensitive receptors.

Table 4.13-4: Traffic Noise Level Increases					
Intersection	ion Existing Plus Project Noise Level Increase (dBA DNL) Background Noise Level Increase (dBA DNL)		Background Plus Project Noise Level Increase (dBA DNL)		
Booksin Ave., South of Curtner Ave.	0.0	0.0	0.2		
Plummer Ave., South of Curtner Ave.	0.1	-0.1	0.1		
Curtner Ave., Between Booksin Ave. and Plummer Ave.	0.0	0.2	0.2		

#### **School Activity Noise**

The enrollment at the school would increase from 750 students to 850 students, and the faculty would increase from 60 to 110 members. The schedule of classes, ringing of bells or alarms, outside activity time (lunch or gym class), and before or after school outdoor activities (sport practices) would not change times or durations. Since none of the school noise activities would change as a result of the student and faculty population increase, *Illingworth & Rodkin* used the new school population (960 students and faculty) to compare against the existing population (810 students and faculty) to calculate the relative permanent noise increase. Utilizing the same calculation formula as was used to determine traffic noise increases, *Illingworth & Rodkin* compared the new and existing school populations and determined that the permanent noise level increase due to the increase in students and faculty would be less than 1 dBA DNL at noise-sensitive receptors in the project vicinity. The proposed project therefore would not cause a substantial permanent noise level increase at the nearby noise-sensitive receptors.

The proposed project would include mechanical equipment, such as heating, ventilation, and air conditioning systems. Information regarding the number, type, and size of the mechanical equipment units to be used in the proposed project was not available at the time of this study. The design plan for Phase I indicates mechanical and utility rooms located on the interior of the ground floor of the multi-purpose building and student union as well as a facility building. Although not indicated on the plans, rooftop mechanical equipment is often used in similar buildings. Due to the number of variables inherent in the mechanical equipment needs of the project (number and types of units, size, housing, specs, location, etc.), the impacts of mechanical equipment noise on nearby noise-sensitive uses should be assessed during the final project design stage. Design planning should take into account the noise criteria associated with such equipment and utilize site planning to locate equipment in less noise-sensitive areas. Other controls could include, but not be limited to, fan silencers, enclosures, and screen walls.

The nearest noise-sensitive uses to the project site include the adjacent health care center and residences to the south, the adjacent residences to the north, and the residences to the east opposite Plummer Avenue. Based on General Plan Policy EC-1.3, noise levels produced by the operation of

the mechanical equipment would be limited to 55 dBA DNL at receiving noise-sensitive land uses. Given the close proximity of noise-sensitive uses, including residential and public/quasi-public land uses, to the project site and lack of sufficient details about the mechanical equipment, mechanical enclosures, and rooftop locations, there is the potential for noise from mechanical equipment to exceed 55 dBA DNL at noise-sensitive land uses in the immediate project vicinity. The final design plans shall be reviewed by a qualified acoustical consultant to address any potential conflicts.

#### **MM NOI-1.1:** The project applicant shall implement the following mitigation measures:

Prior to the issuance of any building permits, mechanical equipment shall be selected and designed to reduce noise impacts on surrounding uses to meet the City of San José's General Plan noise policies. A qualified acoustical consultant shall be retained by the project applicant to review mechanical noise as the equipment systems are selected in order to determine specific noise reduction measures necessary to reduce noise to comply with the City's 55 dBA DNL noise limit at the shared property line at the southern boundary of the project site. Noise reduction measures could include, but are not limited to, selection of equipment that emits low noise levels and/installation of noise barriers such as enclosures and parapet walls to block the line of sight between the noise source and the nearest receptors. The mechanical equipment systems selected shall be submitted for review and approval by the Director of Planning or Director's designee of the Department of Planning, Building, and Code Enforcement prior to the issuance of any building permits.

#### **Parking and Circulation Noise**

Intermittent noise from vehicles accessing the parking lots must meet the project generated noise threshold established in the City's General Plan. The surrounding noise-sensitive land uses are currently exposed to the parking lot noise and will continue to be exposed to the parking lot noise with the addition of parking spaces. The existing northern and southern parking lots have current day-night average noise level up to 56 dBA DNL on the school side of the existing noise barrier.

According to the proposed site plan, the parking lot to the north of the proposed classrooms building and the parking lot south of the proposed science/arts building would be expanded to provide additional parking spaces. The northern parking lot would increase from approximately 88 to 110 spaces and the southern parking lot would increase from approximately 20 to 40 spaces. Despite the increase in parking spaces, the use of the parking areas would not change times or durations. Therefore, the total new parking spaces were compared to the existing parking spaces to calculate the relative increase in operational noise levels. Long-term noise measurement LT-2 was made along the northern boundary of the project site, approximately 190 feet west of the Plummer Avenue centerline. This location was selected to quantify noise levels near the closest residential receptors. The resulting noise level ranged from 55 to 56 dBA DNL. The permanent noise level increase due to the project-generated parking space increase at the northern parking lot would be about one dBA at noise-sensitive receptors to the north. According to *Illingworth and Rodkin*, noise levels would be

expected to increase by three dB when doubling the number of noise sources. Therefore, the proposed doubling of parking spaces in the southern parking lot will increase noise levels by approximately three dBA at noise-sensitive receptors to the south, adjacent to the parking lot. The noise increase attributable to additional parking spaces would be offset, however, by a noise reduction resulting from the travel way to the parking lot being moved approximately twice the distance away from the receptors. This is offset is explained by the fact that noise from "point sources" decrease by approximately six dB for every doubling of distance from the source. This would apply to the parking lot as the noise in a parking lot is comprised of individual point sources such as voices, door slams, engines, etc. When doubling the number of noise sources, noise levels would be expected to increase by three dB.<sup>46</sup>

The changes made to the parking lots would not be substantial enough to increase the day-night average noise level given the few hours per day when the parking lot is heavily used. Additionally, noise from the new parking areas would continue to be shielded by the existing six-foot solid wall located between the school and adjacent properties, which is estimated to provide approximately five dBA of acoustical shielding. Therefore, parking lot noise levels with the project would not substantially increase with the project and would remain below the 55 dBA DNL threshold on the residential side of the noise barrier.

#### Construction

Noise impacts resulting from construction depend 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. This analysis assumes the proposed project construction, with its four building phases, would occur for more than a year.

Policy EC-1.7 of the City's General Plan states that all construction operations within the City use best available noise suppression devices and techniques and to limit construction hours near residential uses per the Municipal Code allowable hours, which are between the hours of 7:00 a.m. and 7:00 p.m. Monday through Friday and none on weekends when construction occurs within 500 feet of a residential land use. Further, the City considers significant construction noise impacts to occur if a project located within 500 feet of residential uses or 200 feet of commercial or office uses would involve substantial noise-generating activities (such as building demolition, grading, excavation, pile driving, use of impact equipment, or building framing) continuing for more than 12 months.

While noise thresholds for temporary construction are not provided in the City's General Plan or Municipal Code, the threshold for speech interference indoors is about 45 dBA. Assuming a 15 dBA exterior-to-interior reduction for standard residential construction, this would correlate to an exterior threshold of 60 dBA L<sub>eq</sub> at residential land uses. Additionally, temporary construction would be annoying to surrounding land uses if the ambient noise environment increased by at least five dBA L<sub>eq</sub> for an extended period of time. Therefore, the temporary construction noise impact would be

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<sup>&</sup>lt;sup>46</sup> Personal communication with Michael Thill, Illingworth & Rodkin, Inc., March 24, 2020.

considered significant if project construction activities exceeded 60 dBA L<sub>eq</sub> at nearby residences and exceeded the ambient noise environment by five dBA L<sub>eq</sub> or more for a period longer than one year.

The noise-sensitive receptors (residences) to the east of the project site would have existing daytime ambient noise levels similar to the noise levels recorded at LT-1. Based on these data, the average hourly noise level during construction hours would range from 56 to 65 dBA L<sub>eq</sub>. The noise-sensitive receptors to the north and south of the project site would have existing daytime ambient noise levels similar to the data collected at LT-2. Average hourly noise levels during construction hours range from 47 to 68 dBA L<sub>eq</sub> at commercial receptors in the project vicinity.

Construction activities generate considerable amounts of noise, especially during earth-moving activities and during the construction of the building's foundation when heavy equipment is used. Typical hourly average construction-generated noise levels for school buildings are about 75 to 89 dBA L<sub>eq</sub> measured at a distance of 50 feet from the center of the site during busy construction periods (e.g., earth moving equipment, impact tools, etc.). The typical range of maximum instantaneous noise levels for construction equipment would be 70 to 90 dBA L<sub>max</sub> at a distance of 50 feet.

Complete buildout of the proposed master plan is estimated to occur over a period of approximately 16 years. Construction activities would include demolition, site preparation, excavation, grading, trenching, building construction, paving, and architectural coating. During each stage of construction, there would be a different mix of equipment operating, and noise levels would vary by stage and vary within stages, based on the amount of equipment in operation and the location at which the equipment is operating. The hauling of excavated materials and construction materials would generate truck trips on local roadways as well.

The typical hourly average construction-generated noise levels for school buildings were used to estimate the range of construction noise levels expected at the nearby existing land uses. The estimates were calculated by measuring from the nearby receptors to the center of the closest proposed building.

Hourly average noise levels due to construction activities during busy construction periods outdoors would range from about 75 to 89 dBA L<sub>eq</sub> at a distance of 50 feet. Construction-generated noise levels drop off at a rate of about 6 dBA per doubling of the distance between the source and receptor. The nearest noise-sensitive land uses are approximately 80 feet and 150 feet from the center of the closest project building. At these distances, hourly average noise levels during busy construction periods would range from 71 to 85 dBA L<sub>eq</sub> at the adjacent health care center and residences to the south, from 67 to 81 dBA L<sub>eq</sub> at the residences to the east opposite Plummer Avenue, and from 65 to 79 dBA L<sub>eq</sub> at the adjacent residences to the north. Construction noise levels at these noise-sensitive receptors would be expected to exceed 60 dBA L<sub>eq</sub> and exceed the ambient noise environment by at least five dBA L<sub>eq</sub> at noise-sensitive residential uses in the project vicinity for a period exceeding one year.

Construction noise levels from the project site would be expected to exceed thresholds at nearby noise-sensitive receptors. In addition, assuming project construction would last for a period of more than one year and considering that the project site is within 500 feet of existing residences, Policy

EC-1.7 of the City's General Plan would consider this temporary construction impact to be potentially significant.

#### **MM NOI-1.2:**

In accordance with the provisions of the City's General Plan and the Municipal Code, temporary construction work within 500 feet of residential land uses shall be limited to between the hours of 7:00 a.m. and 7:00 p.m. Monday through Friday and is prohibited on weekends. These limitations shall be included on construction plans and specifications.

#### **MM NOI-1.3:**

The project applicant shall retain a qualified professional to prepare a construction noise control plan. The construction noise control plan shall specify hours of construction, noise and vibration minimization measures, posting or notification of construction schedules, and designation of a noise disturbance coordinator who would respond to neighborhood. Measures from this plan shall be included on construction plans and specifications. Measures to be included in the plan shall include, but not be limited to:

- In accordance with Policy EC-1.7 of the City's General Plan, utilize
  the best available noise suppression devices and techniques during
  construction activities.
- Construct temporary noise barriers, where feasible, to screen stationary noise-generating equipment.
- Equip all internal combustion engine-driven equipment with intake and exhaust mufflers that are in good condition and appropriate for the equipment.
- Unnecessary idling of internal combustion engines should be strictly prohibited.
- Locate stationary noise-generating equipment, such as air compressors or portable power generators, as far as possible from sensitive receptors as feasible. If the stationary noise generation equipment must be located near receptors, adequate muffling (with enclosures where feasible and appropriate) shall be used to reduce noise levels to below the City's residential, school and/or commercial decibel level thresholds at the property lines of the adjacent sensitive receptors. Any enclosure openings or venting shall face away from sensitive receptors.
- Utilize "quiet" air compressors and other stationary noise sources where technology exists.
- 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.
- Erect a temporary noise control blanket barrier, if necessary, along building facades facing construction sites. This mitigation would only be necessary if conflicts occurred which were irresolvable by proper

- scheduling. Noise control blanket barriers can be rented and quickly erected.
- 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 residential property boundaries.
- The contractor shall prepare a detailed construction plan identifying the schedule for major noise-generating construction activities and notify in writing all adjacent business, residences, and other noise-sensitive land uses of the construction schedule. 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 shall determine the cause of the noise complaint (e.g., bad muffler, etc.) and will ensure that reasonable measures be implemented to correct the problem. A telephone number for the disturbance coordinator shall be conspicuously posted at the construction site and shall also be included in the notice sent to neighbors regarding the construction schedule.

The construction crew shall adhere to the construction noise control plan to reduce construction noise levels emanating from the site to within the applicable thresholds and minimize disruption and annoyance at existing noise-sensitive receptors in the project vicinity. The construction noise control plan shall be reviewed and approved by the Director of the Department of Planning, Building and Code Enforcement or the Director's designee prior to issuance of any grading permit and/or building permits.

Implementation of the above measures would reduce construction noise levels emanating from the site, limit construction hours, and minimize disruption and annoyance. With the implementation of these measures, and recognizing that noise generated by construction activities would occur over short-term periods, the construction-related increase in ambient noise levels would be less-than-significant.

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

The construction of the project may generate perceptible vibration when heavy equipment or impact tools (e.g. jackhammers, hoe rams) are used. Construction activities would include demolition, site preparation work, grading and excavation, trenching, paving, and new building framing and finishing. This analysis assumes the proposed project would not pile drive, which can cause excessive vibration.

According to Policy EC-2.3 of the City of San José General Plan, a vibration limit of 0.08 in/sec PPV shall be used to minimize the potential for cosmetic damage to sensitive structures, such as some historic structures, and a vibration limit of 0.2 in/sec PPV shall be used to minimize damage at buildings of normal conventional construction. With no known historical buildings in the vicinity of the project site, a significant impact would occur if nearby conventionally constructed buildings were exposed to vibration levels in excess of 0.2 in/sec PPV.

Table 4.13-5 presents typical vibration levels that could be expected from construction equipment at a distance of 25 feet. Project construction activities, such as drilling, the use of jackhammers, rock drills and other high-power or vibratory tools, and rolling stock equipment (tracked vehicles, compactors, etc.), may generate substantial vibration in the immediate vicinity. Jackhammers typically generate vibration levels of 0.035 in/sec PPV, and drilling typically generates vibration levels of 0.09 in/sec PPV at a distance of 25 feet. Vibration levels would vary depending on soil conditions, construction methods, and equipment used.

Table 4.13-5: Vibration Source Levels for Construction Equipment				
Equipment		PPV at 25 ft. (in/sec)		
Pile Driver (Impact)	upper range	1.158		
	typical	0.644		
Pile Driver (Sonic)	upper range	0.734		
	typical	0.170		
Clam shovel drop		0.202		
Hydromill (slurry wall)	in soil	0.008		
	in rock	0.017		
Vibratory Roller		0.210		
Hoe Ram		0.089		
Large bulldozer		0.089		
Caisson drilling		0.089		
Loaded trucks		0.076		
Jackhammer		0.035		
Small bulldozer		0.003		

Source: Transit Noise and Vibration Impact Assessment, United States Department of Transportation, Office of Planning and Environment, Federal Transit Administration, May 2006.

The nearest sensitive receptors would be the adjacent health care center located approximately 20 feet to the south of the project construction area. At this distance, vibration levels due to construction activities would be up to 0.27 in/sec PPV, which would be above the 0.2 in/sec PPV threshold. Other sensitive receptors near the project construction area include the adjacent residences located approximately 50 feet north and the residences opposite Plummer Avenue approximately 70 feet east. At these distances, vibration levels due to construction activities would be up to 0.1 in/sec PPV, which would be below the 0.2 in/sec PPV threshold. The adjacent school land uses would be located approximately 140 feet to the north of the project construction area. At this distance, vibration levels due to construction activities would be up to 0.03 in/sec PPV, which would be below the 0.2 in/sec PPV threshold. Although construction vibration levels would be below the threshold for most of the sensitive receptors and school land uses, construction vibration levels would be above the threshold at the nearest sensitive receptors of the health care center to the south.

#### MM NOI-2:

Prior to issuance of any grading permits, the project applicant shall prepare a vibration plan to reduce vibration impacts from construction activities to below the 0.2 in/sec PPV threshold. Measures from this plan shall be included on construction plans and specifications. Measures to be included in the plan shall include, but not be limited to:

- Prohibit the use of heavy vibration-generating construction equipment, such as vibratory rollers or excavation using clam shell or chisel drops, within 30 feet of any adjacent building.
- 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.

The vibration plan shall be submitted to the Director of the Department of Planning, Building and Code Enforcement or the Director's designee prior to issuance of any grading permit.

The implementation of these mitigation measures would reduce the impact to a less-than- significant level.

#### **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. (No Impact)

The project site is not located within an airport land use plan area or within the vicinity of a private air strip.

#### 4.13.3 Non-CEQA Effects

Per *California Building Industry Association v. Bay Area Air Quality Management District*, 62 Cal. 4th 369 (*BIA v. BAAQMD*), effects of the environment on the project are not considered CEQA impacts. The following discussion is included for informational purposes only because the City of San José has policies that address existing noise conditions affecting a proposed project.

#### **Future Exterior Noise Environment**

The ambient noise environment at the project site ranges from 55 to 63 dBA DNL and the predominant noise source is vehicular traffic on local roads. The future noise environment at the project site would continue to result primarily from vehicular traffic along Plummer Avenue and Booksin Avenue. Traffic data was gathered for the proposed project in the Traffic Operations Study (Appendix F). According to this traffic data, the future background plus project conditions are expected to increase traffic noise levels along the surrounding roadways by less than 1 dBA DNL. To estimate the future noise environment at the project site, this increase in noise levels due to increased traffic volumes is applied to the results of the existing measurements described above. Therefore, at 25 feet from the centerline of Plummer Avenue, the future unmitigated noise level

would be up to 64 dBA DNL (LT-1) and at 190 feet from the centerline of Plummer Avenue, the future unmitigated noise level would be up to 57 dBA DNL (LT-2).

New outdoor use areas for the proposed project would include a ground floor courtyard between the classrooms, administration, science/arts, and chapel buildings (eastern courtyard), a ground floor courtyard between the student union, classrooms, chapel, and facilities buildings (middle courtyard), a ground floor courtyard between the multi-purpose and student union buildings (western courtyard), a 2<sup>nd</sup> floor outdoor deck on the east side of the student union building, and a 2<sup>nd</sup> floor outdoor deck between the multi-purpose and student union buildings. Typically, the exterior noise standards established by the City are evaluated at the center of each space.

The center of the ground floor eastern courtyard would be approximately 195 feet from the centerline of Plummer Avenue. The future exterior noise level at this courtyard would be up to 57 dBA DNL assuming no intervening shielding. The center of the ground floor middle courtyard would be approximately 350 feet from the centerline of Plummer Avenue. The future exterior noise levels at this courtyard would be up to 52 dBA DNL assuming no intervening shielding. The center of the 2<sup>nd</sup> floor outdoor deck on the east side of the student union building would be approximately 410 feet from the centerline of Plummer Avenue. The future exterior noise levels at this deck would be up to 50 dBA DNL assuming no intervening shielding. The ground floor western courtyard and 2<sup>nd</sup> floor outdoor deck between the multi-purpose and student union buildings would be approximately 525 feet from the centerline of Plummer Avenue. The future exterior noise levels at this courtyard and deck would be up to 48 dBA DNL assuming no intervening shielding. The ground floor courtyards and outdoor decks would be mostly shielded from transportation related noise sources by the proposed school buildings or perimeter. When accounting for the acoustical shielding, future exterior noise levels at the courtyards and 2<sup>nd</sup> floor decks proposed by the project would be well below the 60 dBA DNL compatibility guideline. Exterior noise levels at the acoustically shielded outdoor use areas would be considered compatible with the proposed land use.

#### **Future Interior Noise Environment**

The City's General Plan Policy EC-1.1 encourages the location of new development in areas where noise levels are appropriate for the proposed uses, and urges the consideration of federal, state and City noise standards and guidelines as a part of new development review. The City's standard for interior noise levels in residences, hotels, motels, residential care facilities, and hospitals is 45 dBA DNL. The new development project involves a high school, however, it will include appropriate site and building design, building construction and noise attenuation techniques, consistent with the policy.

The State of California requires interior noise levels to be maintained at 50 dBA L<sub>eq(1-hr)</sub> or less during hours of operation at the proposed school land use. School buildings would be approximately 60 feet west of the Plummer Avenue centerline. At this distance, school uses along the eastern façades of the proposed administration and science/art buildings would be exposed to future exterior noise levels ranging from 48 to 61 dBA L<sub>eq(1-hr)</sub> during daytime hours.

Interior noise levels would vary depending on the final design of the buildings (relative window area to wall area) and construction materials and methods. Standard construction materials for a school building, with sound-rated performance windows/doors, and the incorporation of an adequate forced

air mechanical ventilation system, typically provide 25 to 30 dBA of noise reduction from exterior facades to interior spaces with windows closed. Assuming standard school construction methods with the windows and doors closed, interior noise levels are calculated to range from 23 to 36 dBA Leq(1-hr) during daytime hours, which would be below the Cal Green Code standard of 50 dBA Leq(1-hr).

Policy EQ3.0. P1 of the 2009 California Collaborative for High-Performance Schools Best Practices Manual states that unoccupied public school classrooms must have a maximum background noise level of no more than 45 dBA L<sub>eq</sub>. However, it strongly encourages districts and designers to move beyond these prerequisites and achieve background noise levels of 35 dBA L<sub>eq</sub> for all classrooms.

Although not required, this analysis recommends the attainment of the noise level thresholds contained in the 2009 California Collaborative for High-Performance Schools Best Practices Manual. To achieve the interior noise level thresholds, exterior noise levels would need to be reduced by at least 16 dBA to reach the 45 dBA Leq interior classroom standard and reduced by at least 26 dBA to reach the encouraged 35 dBA Leq interior classroom goal. Standard construction materials, sound-rated performance windows/doors, and the incorporation of an adequate forced air mechanical ventilation system would reduce levels to the 45 dBA Leq interior classroom standard. Sound-insulating wall construction, high performance sound-rated windows/doors, and the incorporation of an adequate forced air mechanical ventilation system would reduce levels to the 35 dBA Leq interior classroom goal. The following Standard Permit Conditions could be considered during final design to reduce interior noise levels to acceptable levels per the High-Performance Schools Best Practices Manual:

#### **Standard Permit Conditions:**

- The buildings throughout the site shall provide a suitable form of forced-air mechanical ventilation, as determined by the local building official, so that windows can be kept closed to control interior noise and achieve acceptable or desired interior noise levels.
- Confirm the final specifications for noise insulation during the design of the project. In addition to sound-rated windows and doors, other treatments may include, but are not limited to; sound rated exterior wall construction methods, acoustical caulking, insulation, acoustical vents, etc.

#### 4.14 POPULATION AND HOUSING

#### 4.14.1 <u>Environmental Setting</u>

#### 4.14.1.1 Regulatory Framework

#### Envision San José 2040 General Plan

To meet the current and projected housing needs in the City, the General Plan identifies areas for mixed-use and residential development to accommodate approximately 120,000 new dwelling units by 2035. Through policies and actions that address orderly growth within the City, buildout of the General Plan is projected to help balance the ratio of local jobs with available housing within the City.

#### 4.14.1.2 Existing Conditions

The City of San José population was estimated to be approximately 1,043,058 with a total of 335,887 housing units in January 2019. The average number of persons per household in San José was estimated at 3.2.<sup>47</sup> According to the City's General Plan, the projected population in 2035 will be 1.3 million persons occupying 429,350 households.

The jobs/housing balance is the relationship between the number of housing units required as a result of local jobs and the number of residential units available in the City. This relationship is quantified by the jobs/employed resident ratio. The jobs/employed resident ratio is determined by dividing the number of local jobs by the number of employed residents that can be housed in local housing. When the ratio reaches 1.0, a balance is struck between the supply of local housing and local jobs. San José currently has a higher number of employed residents than total number of jobs (approximately 0.8 jobs per employed resident) but this trend is projected to reverse with full build-out under the current General Plan.

#### 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?				

<sup>&</sup>lt;sup>47</sup> California Department of Finance. *E-5 Population and Housing Estimates for Cities, Counties, and the State, 2011-2017 with 2010 Benchmark.* Accessed December 12, 2017. Available at: <a href="http://www.dof.ca.gov/Forecasting/Demographics/Estimates/E-5/">http://www.dof.ca.gov/Forecasting/Demographics/Estimates/E-5/</a>.

# 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). (Less than Significant Impact)

A project can induce substantial population growth by: 1) proposing new housing beyond projected or planned development levels; 2) generating demand for housing as a result of new businesses; 3) extending roads or other infrastructure to previously undeveloped areas; or 4) removing obstacles to population growth (i.e., expanding capacity of a wastewater treatment plant beyond that necessary to serve planned growth).

The multi-phase school redevelopment project proposes to demolish an existing student center and chapel buildings and a portion of the existing main classroom building, and construct a new two-level multi-purpose building and a new two-level student union building. Subsequent phases would include the demolition of the remainder of the existing main classroom building and construction of a new facilities building, a new science/arts building, a new chapel, a new classroom building, and a new administration/classroom building. As buildings are constructed, parking areas would be reconfigured and expanded, and a new plaza, courtyard areas, and landscaping would be installed.

The proposed project would not propose new housing, extend roads or other infrastructure to undeveloped areas, or remove obstacles to population growth. After project build out, enrollment at the school would increase from 750 students to 850 students, and the number of faculty and staff is expected to increase from 60 to 110. For these reasons, the project would not induce substantial population growth, either directly or indirectly, and would not result in a significant population or housing 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 proposed project would not displace any people or housing as there is no housing on the project site. The proposed project is the demolition of an existing student center, chapel buildings, and portion of the main classroom building and construction of new multi-purpose, student union, facilities, science/arts, chapel, and administration and classroom buildings. Thus, there would be no impact.

#### 4.15 PUBLIC SERVICES

#### 4.15.1 <u>Environmental Setting</u>

#### 4.15.1.1 Regulatory Framework

#### California Government Code Section 65996

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 issuance of a building permit. The legislation states that the payment of school impact fees "are hereby deemed to provide full and complete school facilities mitigation" under CEQA [§65996(b)]. The school district is responsible for implementing the specific methods for mitigating school impacts under the Government Code. The CEQA documents must identify that school impact fees and the school districts' methods of implementing measures specified by Government Code 65996 would adequately mitigate project-related increases in student enrollment.

#### **Quimby Act-California Code Sections 66475-66478**

The Quimby Act (California Government Code Sections 66475-66478) was approved by the California legislature to preserve open space and parkland in the State. The Quimby Act authorizes local governments to establish ordinances requiring developers of new subdivisions to dedicate parks, pay an in-lieu fee, or perform a combination of the two. As described below, the City has adopted a Parkland Dedication Ordinance and a Park Impact Ordinance, consistent with the Quimby Act.

#### Parkland Dedication Ordinance and the Park Impact Ordinance

The City of San José has adopted the Parkland Dedication Ordinance (PDO, Municipal Code Chapter 19.38) and Park Impact Ordinance (PIO, Municipal Code Chapter 14.25) requiring new residential development to either dedicate sufficient land to serve new residents, or pay fees to offset the increased costs of providing new park facilities for new development. Under the PDO and PIO, a project can satisfy half of its total parkland obligation by providing private recreational facilities onsite. For projects over 50 units, it is the City's decision whether the project will dedicate land for a new public park site or accept a fee in-lieu of land dedication. Affordable housing including low, very-low, and extremely-low income units are subject to the PDO and PIO at a rate of 50 percent of applicable parkland obligation. The acreage of parkland required is based on the minimum acreage dedication formula outlined in the PDO.

#### Envision San José 2040 General Plan

The General Plan includes policies for the purpose of avoiding or mitigating impacts resulting from planned development projects with the City. The following policies are specific to public services and are applicable to the proposed project.

General Plan Policies: Public Services					
Community Health, Safety, and Wellness					
Policy CD-5.5	Include design elements during the development review process that address security, aesthetics and safety. Safety issues include, but are not limited to, minimum clearances around buildings, fire protection measures such as peak load water requirements, construction techniques, and minimum standards for vehicular and pedestrian facilities and other standards set forth in local, state, and federal regulations.				
Law Enforceme	nt and Fire Protection				
Policy ES-3.1	<ol> <li>Provide rapid and timely Level of Service response time to all emergencies:</li> <li>For police protection, use as a goal a response time of six minutes or less for 60 percent of all Priority 1 calls, and of eleven minutes or less for 60 percent of all Priority 2 calls.</li> <li>For fire protection, use as a goal a total response time (reflex) of eight minutes and a total travel time of four minutes for 80 percent of</li> </ol>				
	<ul> <li>emergency incidents.</li> <li>Enhance service delivery through the adoption and effective use of innovative, emerging techniques, technologies and operating models.</li> <li>Measure service delivery to identify the degree to which services are meeting the needs of San José's community.</li> <li>Ensure that development of police and fire service facilities and delivery of services keeps pace with development and growth in the city.</li> </ul>				
Policy ES-3.9	Implement urban design techniques that promote public and property safety in new development through safe, durable construction and publicly-visible and accessible spaces.				
Policy ES-3.10	Incorporate universal design measures in new construction, and retrofit existing development to include design measures and equipment that support public safety for people with diverse abilities and needs. Work in partnership with appropriate agencies to incorporate technology in public private development to increase public and personal safety.				
Policy ES-3.11	Ensure that adequate water supplies are available for fire-suppression throughout the City. Require development to construct and include all fire suppression infrastructure and equipment needed for their projects.				
Policy ES-3.12	Facilitate the safe movement of pedestrians, bicyclists and vehicles throughout the City and require appropriate safety measures for activities such as cultural and sporting events where large numbers of community members and visitors gather.				
High Quality Fa	cilities and Programs				
Policy PR-1.6	Where appropriate and feasible, develop parks and recreational facilities that are flexible and can adapt to the changing needs of their surrounding community.				
Policy PR-1.8	Enhance existing parks and recreation facilities in built-out areas through new amenities and other improvements to ensure that residents' needs are being met.				

#### 4.15.1.2 Existing Conditions

#### **Fire Protection Services**

Fire protection services for the project site are provided by the San José Fire Department (SJFD). The SJFD responds to all fires, hazardous materials spills, and medical emergencies (including injury

accidents) in the City. The closest station to the project site is San José Fire Department located at 1386 Cherry Avenue, approximately 1.25 miles north of the project site.

For fire protection services, the General Plan identifies a total response time goal of eight minutes and a total travel time of four minutes for 80 percent of emergency incidents.

#### **Police Protection Services**

Police protection services for the project site are provided by the San José Police Department (SJPD), which is headquartered at 201 West Mission Street; approximately 4.58 miles north of the project site. SJPD is divided into four geographic divisions: Central, Western, Foothill, and Southern. The project site is directly served by the SJPD Central Division, which includes five patrol officers and two crime prevention specialists. In 2016, the City had 11,463 reported property crimes, 1,919 reported violent crimes, and 19 reported hate crimes.<sup>48</sup>

For police protection services, the General Plan identifies a service goal of six minutes or less for 60 percent of all Priority 1 (emergency) calls and 11 minutes or less for 60 percent of all Priority 2 (non-emergency) calls.

#### **Schools**

Presentation High School is located on the project site. Redevelopment and expansion of the school campus would increase student enrollment from 750 existing students to 850 students. The faculty will increase from 60 to 100.

#### **Parks**

The City of San José currently operates 184 neighborhood parks (including skate parks), 13 community centers, nine regional parks, and over 55 miles of trails. The nearest public park is the 10.25-acre Wallenberg Park and Community Garden, a general-purpose park located adjacent to the southern end of Willow Glen High School, on Curtner Avenue between Cherry Avenue and Cottle Avenue. Wallenberg Park is approximately 1/3-mile northeast of the project site and includes BBQ/picnic sites, eight lighted tennis courts, a youth playground, restrooms, large grass areas, and a community garden at the eastern end of the park.

#### Libraries

The City of San José is served by the San José Public Library System. The San José Public Library System consists of one main library (Dr. Martin Luther King Jr.) and 22 branch libraries. The nearest public library is Willow Glen Branch Library, approximately 1.35 miles north of the project site.

<sup>&</sup>lt;sup>48</sup> City of San José Police Department. *Official Crime Statistics*. January to December 2013. <a href="http://www.sipd.org/CrimeStats/crimestats.html">http://www.sipd.org/CrimeStats/crimestats.html</a> Accessed January 5, 2018.

#### 4.15.2 Impact Discussion

	Potentially Significant Impact	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,				
the need for new or physically altered				
governmental facilities, the construction of which				
could cause significant environmental impacts, in				
order to maintain acceptable service ratios,				
response times or other performance objectives for				
any of the public services:				
1) Fire Protection?			$\boxtimes$	
2) Police Protection?			$\boxtimes$	
3) Schools?	$\sqcup$	$\sqcup$	$\boxtimes$	
4) Parks?	$\sqcup$	$\sqcup$	$\boxtimes$	
5) Other Public Facilities?			$\boxtimes$	

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#### 4.14.2.1 Thresholds of Significance

Unlike utility services, public services are provided to the community as a whole, usually from a central location or from a defined set of nodes. The resources base for delivery of the services, including the physical service delivery mechanisms, is financed on a community-wide basis, usually from a unified or integrated financial system. The service delivery can be provided by a city, county, service, or other special district. Usually, a new development will create an incremental increase in the demand for these services. The amount of demand will vary widely, depending on both the nature of the development (residential versus industrial, for instance) and the type of services, as well as on the specific characteristics of the development (such as senior housing versus family housing).

The impact of a particular project on public services and facilities is generally a fiscal impact. By increasing the demand for a type of service, a project could cause an eventual increase in the cost of providing the service (more personnel hours to patrol an area, additional fire equipment needed to service a tall building, etc.). CEQA requires analysis of fiscal impacts to the extent that increased demand triggers the need for a new facility (such as a school or fire station), since the new facility would have physical effects on the environment.

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

Impact)

The project proposes a multi-phase redevelopment project at an existing private high school campus – demolishing the existing student center and chapel buildings and a portion of the existing main

classroom building, and construct a new two-level multi-purpose building, two-level student union building, facilities building, science/arts building, chapel, classroom building, and administration/classroom building. As buildings are constructed, parking areas would be reconfigured and expanded, and a new plaza, courtyard areas, and landscaping would be installed. The enrollment at the school would increase from 750 students to 850 students, and the faculty would increase from 60 to 110. The increase in students and faculty would incrementally increase the demand for fire protection services compared to existing conditions. The project site, however, is currently served by the SJFD and the project, by itself, would not preclude the SJFD from meeting their service goals and would not require the construction of new or expanded fire facilities.

The proposed project would be constructed in accordance with current building codes and would be required to be maintained in accordance with applicable City policies to promote public and property safety. For these reasons, the proposed project would have a less than significant impact on fire protection services.

#### **Impact PS-2:**

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

As discussed above, the project would increase the student enrollment and number of staff at Presentation High School. This would incrementally increase the demand for police protection services compared to existing conditions. The project site, however, is currently served by the SJPD and the project, by itself, would not preclude the SJPD from meeting their service goals, nor would it require the construction of new or expanded police facilities.

#### **Impact PS-3:**

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

The proposed development is a private school redevelopment project. The provision of new school facilities onsite and the expansion of the student enrollment would decrease the demand for construction of new governmental school facilities, thereby minimizing service ratios in public schools. As such, the project would not have a significant impact to public schools and available capacity.

#### **Impact PS-4:**

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

The additional facilities proposed on the project site would increase student and faculty from 750 to 850 and 60 to 110, respectively. Although the population of students and faculty would increase in the project area, onsite recreational facilities would be available to students and faculty thereby minimizing demand on local parks. Therefore, the project would not result in adverse impacts to local park conditions or capacity.

#### **Impact PS-5:**

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

The students and faculty at the project may incrementally increase the demand on neighborhood libraries, such as Willow Glen Branch Library, approximately 1.35 miles north of the project site. Students and faculty at the project would, however, likely stay on the project site and any increase in library use would likely be minimal. Additionally, residents are the primary users of local libraries and since Presentation High School is not a residential project, there would not be a significant impact to local library conditions or capacity.

#### 4.16 RECREATION

#### 4.16.1 <u>Environmental Setting</u>

#### 4.16.1.1 Regulatory Framework

#### **Quimby Act-California Code Sections 66475-66478**

The Quimby Act (California Government Code Sections 66475-66478) was approved by the California legislature to preserve open space and parkland in the State. The Quimby Act authorizes local governments to establish ordinances requiring developers of new subdivisions to dedicate parks, pay an in-lieu fee, or perform a combination of the two. As described below, the City has adopted a Parkland Dedication Ordinance and a Park Impact Ordinance, consistent with the Quimby Act.

#### Envision San José 2040 General Plan

Various policies in the City's General Plan have been adopted for the purpose of reducing or avoiding impacts associated with public facilities and services, as listed in the following table.

General Plan Policies: Parkland and Recreational Facilities					
Parks, Trails, Op	Parks, Trails, Open Space, and Recreation				
Policy PR-1.1	Provide 3.5 acres per 1,000 population of neighborhood/community serving				
	parkland through a combination of 1.5 acres of public park and 2.0 acres of				
	recreational school grounds open to the public per 1,000 San José residents.				
Policy PR-1.2	Provide 7.5 acres per 1,000 population of citywide/regional park and open				
	space lands through a combination of facilities provided by the City of San				
	José and other public land agencies.				
Policy PR-1.9	As Village and Corridor areas redevelop, incorporate urban open space and				
	parkland recreation areas through a combination of high-quality, publicly				
	accessible outdoor spaces provided as part of new development projects;				
	privately, or in limited instances publicly, owned and maintained pocket parks;				
	neighborhood parks where possible; as well as through access to trails and				
	other park and recreation amenities.				
Action PR-1.12	Regularly update and utilize San José's Parkland Dedication				
	Ordinance/Parkland Impact Ordinance (PDO/PIO) to implement quality				
	facilities.				
Policy PR-2.4	To ensure that residents of a new project and existing residents in the area				
	benefit from new amenities, spend Park Dedication Ordinance (PDO) and Park				
	Impact Ordinance (PIO) fees for neighborhood serving elements (such as				
	playgrounds/ tot-lots, basketball courts, etc.) within a three-quarter mile radius				
	of the project site that generates the funds.				

#### 4.16.1.2 Existing Conditions

The City of San José owns and maintains approximately 3,435 acres of parkland, including neighborhood parks, community parks, and regional parks.<sup>49</sup> The City also manages approximately community centers, 18 community gardens, and five pool facilities. Other recreational facilities include six public skate parks and over 54 miles of interconnected trails.

#### 4.16.2 <u>Impact Discussion</u>

		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 will 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?					
Im	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)					

The multi-phase school redevelopment project proposes to demolish an existing student center and chapel buildings and a portion of the existing main classroom building, and construct a new two-level multi-purpose building and a new two-level student union building. Subsequent phases would include the demolition of the remainder of the existing main classroom building and construction of a new facilities building, a new science/arts building, a new chapel, a new classroom building, and a new administration/classroom building. As buildings are constructed, parking areas would be reconfigured and expanded, and a new plaza, courtyard areas, and landscaping would be installed.

The additional facilities proposed on the project site would increase student and faculty from 750 to 850, and from 60 to 110, respectively. Although the population of students and faculty would increase in the project area, students and faculty would generally utilize on-site facilities during the day, and would not substantially increase the use of existing recreational facilities in the project area. The project would not increase demand such that it would result in physical deterioration of any existing facilities or require the construction or expansion of existing facilities.

<sup>&</sup>lt;sup>49</sup> City of San José. "Parks, Recreation, & Neighborhood Services". Accessed September 29, 2015. Available at: <a href="https://www.sanjoseca.gov/index.aspx?NID=204">https://www.sanjoseca.gov/index.aspx?NID=204</a>

## Impact REC-2: The project would 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 proposed project does not include recreational facilities. As mentioned above, the project would not require the construction of new facilities or the expansion of existing facilities. Therefore, the impact would be less than significant.

#### 4.17 TRANSPORTATION

The following discussion is based in part upon a traffic operations study prepared by *Hexagon Transportation Consultants, Inc.* The transportation study was prepared for the purpose of identifying potential traffic impacts related to the project. The potential impacts of the project were evaluated in accordance with the standards and methodologies set forth by the City of San José. The study was conducted in conformance with the provisions of City Policy 5-3, which was the City's Transportation Analysis Policy in effect at the time the study was prepared. The project applicant's Special Use Permit application pre-dates the adoption of the City's new Transportation Analysis Policy (Policy 5-1).

An analysis in accordance with the Santa Clara Valley Transportation Authority (VTA) Congestion Management Program (CMP) requirements was not prepared because the project would generate fewer than 100 net peak-hour vehicle trips. The traffic study includes an analysis of the weekday AM peak-hour, PM school peak-hour, and PM commute peak-hour traffic conditions for two signalized intersections and one unsignalized intersection in the vicinity of the project site. The study also includes a signal warrant analysis for the unsignalized study intersection, neighborhood street traffic analysis, site access and on-site circulation analysis, and a parking intrusion study. A copy of the report, dated May 9, 2019 is provided in Appendix G.

#### 4.17.1 <u>Environmental Setting</u>

#### 4.17.1.1 Roadway Network

Local access to the project site is provided by Curtner Avenue, Booksin Avenue, Plummer Avenue and Cherry Avenue. These roadways are described below.

<u>Curtner Avenue</u> is an east-west city connector street that extends from Camden Avenue northeastward to Monterey Street where it becomes Tully Road. In the project vicinity, it is a four-lane street with left-turn pockets provided at signalized intersections and a bike lane present in each direction. Access to the project site from Curtner Avenue is provided via Plummer Avenue.

<u>Booksin Avenue</u> is a north-south local residential street that extends from Peregrino Way southward to Foxworthy Avenue, where it becomes Jarvis Avenue. It is a two-lane street with parking on both sides of the street. Access to the project site from Booksin Avenue is provided via Curtner Avenue, or various east-west residential streets that connect to Plummer Avenue.

<u>Plummer Avenue</u> is a north-south local residential street that extends from Curtner Avenue southward to Hillsdale Avenue. It is a two-lane street with parking on both sides of the street. Plummer Avenue provides direct access to the project site. A pedestrian crosswalk is present on Plummer Avenue at the school entrance on the north leg of the Plummer Avenue/Jenvey Avenue intersection.

<u>Cherry Avenue</u> is a north-south local connector street that extends from Dry Creek Road southward to Almaden Expressway. In the project vicinity, it is a two-lane street with left-turn pockets provided at signalized intersections and street parking and bike lanes on both sides of the street. Access to the project site from Cherry Avenue is provided via Curtner Avenue, or various east-west residential streets that connect to Plummer Avenue.

#### 4.17.1.2 Transit, Pedestrian and Bicycle Facilities

There is only one Santa Clara Valley Transportation Authority (VTA) local bus route (Route 26) serving the study area, and it operates on Curtner Avenue. Route 26 provides service between the Sunnyvale/Lockheed Martin Transit Center and the Eastridge Transit Center via Curtner Avenue in the project vicinity. On weekdays, Route 26 runs between 5:15 AM and 11:50 PM with 30-minute headways during the AM peak hour, PM school peak hour, and PM commute peak hour. The eastbound-westbound bus stops closest to the project site are located at the Plummer Avenue/Curtner Avenue intersection (about 700 feet north of the project site).

A complete network of sidewalks is present along the streets in the vicinity of the project site, including Curtner Avenue, Booksin Avenue, Plummer Avenue, Cherry Avenue, and various neighborhood streets adjacent to the project site. The signalized intersections in the vicinity of the project site all have crosswalks with pedestrian signal heads and push buttons. A crosswalk with pedestrian flashing beacons is also present on the east leg of the Plummer Avenue/Curtner Avenue intersection.

There are bike lanes on Curtner Avenue and Cherry Avenue in the study area. Bike lanes are lanes on roadways designated for use by bicycles with special lane markings, pavement legends, and signage. Curtner Avenue has standard bike lanes. Cherry Avenue has standard bike lanes north of Curtner Avenue and buffered bike lanes south of Curtner Avenue. Local residential streets surrounding the school site, such as Booksin Avenue and Plummer Avenue, are not marked as bike lanes or bike routes, but they carry low traffic volumes and are conducive to bicycle travel.

#### 4.17.1.3 Regulatory Framework

#### **Metropolitan Transportation Commission**

The Metropolitan Transportation Commission (MTC) is the transportation planning, coordinating, and financing agency for the nine-county San Francisco Bay Area, including Santa Clara County. The 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. In July 2013, the MTC and ABAG adopted the final *Plan Bay Area*, which includes the region's Sustainable Communities Strategy and the 2040 Regional Transportation Plan.

#### **Congestion Management Program**

The Santa Clara Valley Transportation Authority (VTA) oversees the Santa Clara Congestion Management Program (CMP). The relevant state legislation requires that all urbanized counties in California prepare a CMP in order to obtain each county's share of the increased gasoline tax revenues. The legislation requires that each CMP contain the following five mandatory elements: 1) a system definition and traffic level of service standard element, 2) a transit service and standards element, 3) a trip reduction and transportation demand management element, 4) a land use impact analysis program element, and 5) a capital improvement element. The Santa Clara County CMP includes the five mandated elements and three additional elements, including a county-wide transportation model and database element, an annual monitoring and conformance element, and a deficiency plan element.

#### San José Bicycle Master Plan

The Bicycle Master Plan, also known as the San José Bike Plan 2020, defines the City's vision to make bicycling an integral part of daily life in San José. The plan recommends policies, projects, and programs to realize this vision and create a San José community where bicycling is convenient, safe, and commonplace. The plan defines a 500-mile network of bikeways that focuses on connecting off-street bikeways with on-street bikeways.

#### City Council Policy 5-3

As established in the City Council Policy 5-3 "Transportation Impact Policy" (2005), the City of San José uses the same Level of Service (LOS) methodology as the Congestion Management Plan (CMP), although the City's standard is LOS D rather than LOS E (the CMP standard). According to this policy and General Plan Policy TR-5.3 (see below), an intersection impact would be satisfactorily mitigated if the mitigation measure restores level of service to the condition that would exist without the proposed project, unless the mitigation measures would have an unacceptable impact on the neighborhood or on other transportation facilities (i.e., pedestrian, bicycle, or transit). The City's Transportation Impact Policy (also referred to as the Level of Service Policy) protects pedestrian and bicycle facilities from undue encroachment by automobiles.

#### Envision San José 2040 General Plan

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

General Plan Policies: Transportation/Traffic; Community Design			
<b>Balanced Trans</b>	portation System		
Policy TR-1.1	Accommodate and encourage use of non-automobile transportation modes to achieve San José's mobility goals and reduce vehicle trip generation and vehicle		
	miles traveled (VMT).		
Policy TR-1.2	Consider impacts on overall mobility and all travel modes when evaluating		
	transportation impacts of new developments or infrastructure projects.		
Walking and Bi	cycling		
Policy TR-2.8	Require new development where feasible to provide on-site facilities such as bicycle storage and showers, provide connections to existing and planned facilities, dedicate land to expand existing facilities or provide new facilities such as sidewalks and/or bicycle lanes/paths, or share in the cost of improvements.		
Connections			
Policy CD-3.3	Within new development, create a pedestrian friendly environment by connecting the internal components with safe, convenient, accessible, and		

<sup>&</sup>lt;sup>50</sup> Examples of unacceptable impacts include reducing the width of a sidewalk or bicycle lane below the city standard or creating unsafe pedestrian operating conditions. Exceptions to the standard are made for small, infill projects, the Downtown Core, and for impacts to Protected Intersections within Special Strategy Areas, including Transit Oriented Development Corridors and Transit Station Areas.

	pleasant pedestrian facilities and by requiring pedestrian connections between building entrances, other site features, and adjacent public streets.
Vehicular Circu	
Policy TR-5.3	The minimum overall roadway performance during peak travel periods should be level of service "D" except for designated areas and specified exceptions identified in the General Plan including the Downtown Core Area. Mitigation measures for vehicular traffic should not compromise or minimize community livability by removing mature street trees, significantly reducing front or side yards, or creating other adverse neighborhood impacts.
Policy TR-5.7	Implement the City's Neighborhood Traffic Management Program that formalizes comprehensive strategies to enhance safety and livability along local and collector streets.
Parking Strateg	ies
Policy TR-8.4	Discourage, as part of the entitlement process, the provision of parking spaces significantly above the number of spaces required by code for a given use.
Policy TR-8.9	Consider adjacent on-street and City-owned off-street parking spaces in assessing need for additional parking required for a given land use or new development.

#### 4.17.2 <u>Impact Discussion</u>

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact	
Would the project:					
<ol> <li>Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadways, bicycle lanes and pedestrian facilities?</li> </ol>					
2) For a land use project, 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 land 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					

The traffic impact analysis prepared by *Hexagon* was intended to identify any potential traffic-related issues that could occur as a result of the proposed Master Plan for Presentation High School. At the time the traffic counts were collected for the study (2016- 2017 school year), attendance at the school was 826 students. The traffic study analyzed the weekday AM peak-hour, PM school peak-hour, and PM street peak-hour traffic conditions for the following three intersections in the vicinity of the project site:

lanes and pedestrian facilities. (Less than Significant Impact)

- 1. Booksin Avenue and Curtner Avenue (signalized)
- 2. Plummer Avenue and Curtner Avenue (unsignalized)
- 3. Cherry Avenue and Curtner Avenue (signalized)

The weekday AM peak hour of commute traffic on the surrounding streets, which typically occurs between 7:00-9:00 AM, coincides with the AM peak hour of school traffic. On the other hand, the PM peak hour of traffic for most schools (typically between 2:00-4:00 PM) occurs prior to the PM peak hour of commute traffic on the surrounding roadway network (between 4:00-6:00 PM). New traffic counts were conducted on a typical school weekday in May 2017 at these intersections during the AM, PM school, and PM peak periods. Additionally, the traffic study evaluated the following seven roadway segments:

- 1. Plummer Avenue, between Curtner Avenue and Jenvey Avenue
- 2. Plummer Avenue, between Jenvey Avenue and Darlene Avenue
- 3. Minardi Avenue, between Plummer Avenue and Cherry Avenue
- 4. Jenvey Avenue, between Plummer Avenue and Minardi Avenue
- 5. Maxine Avenue, between Plummer Avenue and Cherry Avenue
- 6. Darlene Avenue, between Booksin Avenue and Plummer Avenue
- 7. Darlene Avenue, between Plummer Avenue and Cherry Avenue

Average Daily Traffic (ADT) volumes and vehicle speed data were collected along these roadway segments over a 3-day period (i.e., three typical school weekdays) in May 2017. The City of San José has not established policies or thresholds regarding traffic on neighborhood streets. Thus, the street segment evaluation contained in the study is presented for informational purposes only.

#### **Observed Traffic Conditions**

Traffic conditions at the study intersections were observed during the AM peak hour, PM school peak hour, and PM commute peak hour to identify existing operational deficiencies. Based on the observations, all three intersections operate adequately during the peak traffic periods, and no issues associated with vehicle queuing or delay were identified. At the Plummer Avenue/Curtner Avenue intersection, most northbound vehicles make right turns at the intersection and are able to get by the northbound left-turn queue to make the right turns. Site observations indicated that there was no difficulty for the northbound traffic on Plummer Avenue to make left turns or for the westbound left-turn traffic to make turns on to Plummer Avenue.

The observed northbound left-turn maximum vehicle queue at the Plummer Avenue/Curtner Avenue intersection was two vehicles in length during the student drop-off and pick-up periods at the school. During the AM peak drop-off period, the southbound drop-off queue on Plummer Avenue backs up from the school site to Curtner Avenue for a brief period, which prevents the westbound left-turn vehicles on Curtner Avenue from turning on to Plummer Avenue. When this occurs, the westbound left-turn vehicles are delayed only momentarily. The maximum observed westbound left-turn vehicle queue was four vehicles during the peak drop-off period at the school. There are no Traffic Demand Management requirements or shuttle operations currently in effect at the school. There is no school bus service, but the school encourages student carpooling to help reduce traffic and demand

for on-site parking, and partners with ZUM, a student carpooling company, to coordinate student carpooling.

#### **Trip Generation**

Trip generation for the project was estimated using the trip rates published in the Institute of Transportation Engineers (ITE) Trip Generation Manual, 10th Edition (2017) for private K-12 schools (ITE Land Use 536). The proposed enrollment of 850 students would result in an increase of 24 students over the 2016-2017 school year enrollment of 826 students. Therefore, under existing plus project conditions, the project would generate 19 new trips (12 inbound and 7 outbound) during the AM peak hour, 14 new trips (6 inbound and 8 outbound) during the PM school peak hour, and 4 new trips (2 inbound and 2 outbound) during the PM commute peak hour.

The proposed enrollment of 850 students would result in an increase of 100 students over the current permitted enrollment of 750 students. Therefore, under background plus project conditions, the project would generate 81 new trips (49 inbound and 32 outbound) during the AM peak hour, 58 new trips (24 inbound and 34 outbound) during the PM school peak hour, and 17 new trips (7 inbound and 10 outbound) during the PM commute peak hour.

#### **Trip Distribution**

The trip distribution pattern for the increase in students was estimated based on existing travel patterns on the surrounding roadway system and the locations of complementary land uses. Because of the small study area, the new project trips were distributed evenly to and from both directions along Curtner Avenue. In addition, the same trip distribution pattern was applied to both working parents and non-working parents, since the distribution patterns for each do not differ once the trips are near the school (within approximately ¼ mile of the school). Within the study area, inbound trips on Curtner Avenue would use Plummer Avenue and Cherry Avenue to access the project site; while the outbound trips would use Booksin Avenue, Plummer Avenue and Cherry Avenue to access Curtner Avenue. The new project trips were assigned to the roadway system in accordance with the project trip distribution pattern.

#### **Traffic Volumes**

Project trips resulting from 24 new students over the existing (2016-2017) enrollment were added to existing traffic volumes to obtain existing plus project traffic volumes. Existing AM peak-hour, PM school peak hour, and PM commute peak-hour traffic volumes were obtained from new turning-movement counts and are presented in Appendix A of the traffic study.

Project trips resulting from 100 new students over the permitted enrollment were added to background traffic volumes to obtain background plus project traffic volumes. Background traffic volumes were estimated by subtracting trips associated with the 76 students over the current permitted enrollment (826 - 750 = 76 students), and adding the approved project trips from the City's Approved Trips Inventory.

#### **Signalized Intersection Levels of Service**

The signalized intersections in this traffic study are subject to the City of San José's Transportation Level of Service Policy (Council Policy 5-3). The City of San José level of service methodology for signalized intersection is the 2000 Highway Capacity Manual (HCM) method. This method is applied using the TRAFFIX software. The 2000 HCM operations method evaluates signalized intersection operations on the basis of average control delay time for all vehicles at the intersection. The City of San José level of service standard for signalized intersection is LOS D or better.

Significance criteria are used to establish what constitutes an impact. For this analysis, the criteria used to determine significant impacts on signalized intersections are based on City of San José Level of Service standards. The project is said to create a significant adverse impact on traffic conditions at a signalized intersection in the City of San José if for either the AM or PM commute peak hour:

- 1. The level of service at the intersection degrades form an acceptable LOS D or better under background conditions to an unacceptable LOS E or F under background plus project conditions, or;
- 2. The level of service at the intersection is an unacceptable LOS E or F under background conditions and the addition of project trips cause both the critical-movement delay at the intersection to increase by four (4) or more seconds and the volume-to-capacity ratio (V/C) to increase by one percent (.01) or more.

An exception to rule #2 above applies when the addition of project trips reduces the amount of average delay for critical movements (i.e., the change in average delay for critical movements is negative). In this case, the threshold of significance is an increase in the critical V/C value by .01 or more. A significant impact by City of San José standards is said to be satisfactorily mitigated when measures are implemented that would restore intersection level of service to background conditions or better.

The results of the intersection level of service analysis indicate that both signalized study intersections would operate at an acceptable level of service under all study scenarios during the AM peak hour, PM school peak hour, and PM commute peak hour, as shown on Table 4.17-1. The analysis shows that at both signalized intersections, the average vehicle delay during the PM school peak hour is greater than the PM commute peak hour, although the total intersection volumes during the PM school peak hour are lower than the PM commute peak hour. This is because there are several other schools in the study area (Booksin Elementary School and St. Christopher School on Booksin Avenue, and Willow Glen High School on Cherry Avenue) that add traffic to the minor street approaches at these intersections during the school pick-up period. Since the minor street approaches have a higher vehicle delay than the major street approaches, and the average intersection delay is a weighted average, the result is a higher average delay for the intersection when more traffic is added to the minor street approaches than the major street approaches.

Table 4.17-1: Intersection Levels of Service										
		Exist	ting	Exist +Pro	0	Backgi	round	Backgro Proj		
Signalized Intersection	Count Date	Peak Hour	Avg. Delay (sec)	LOS	Avg. Delay (sec)	LOS	Avg. Delay (sec)	LOS	Avg. Delay (sec)	LOS
Booksin Ave. & Curtner Ave.	5/11/17	AM	14.0	В	14.1	В	14.0	В	14.4	В
		PM School	13.4	В	13.5	В	13.3	В	13.3	В
		PM	11.7	В	11.7	В	11.6	В	11.7	В
Cherry Ave. & Curtner Ave.	5/11/17	AM	15.9	В	15.9	В	16.0	В	16.0	В
		PM School	13.6	В	13.6	В	13.4	В	13.5	В
	12.8	В	12.8	В	12.8	В	12.9	В		

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

Because the project was filed prior to the adoption of the City's VMT policy (City Council Policy 5-1) the project is subject to the requirements of City Council Policy 5-3.

Council Policy 5-3, described above, utilizes Level of Service [LOS] thresholds as the parameter for determining the significance of traffic impacts under CEQA. The level of service analysis prepared for the project is presented in the previous discussion under Impact TRN-1.

## 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 expansion would add new buildings to the school site, make small changes to the existing parking layout, add parking spaces, and add a student drop-off zone. The project would not change the driveway locations. Additional parking would be added along the north side of the new Classroom building near the northern project driveway, and along the south side of the Science and Arts building near the southern project driveway. On-site circulation would be modified slightly to allow drivers to circulate counterclockwise through the new northern parking area, access the student drop-off zone, and exit back out onto Plummer Avenue. The proposed on-site vehicle circulation would be adequate to serve the school, and pedestrian access and on-site circulation would continue to be adequate. The project does not propose any new uses on-site, and the current use of the site as a school is consistent with surrounding land uses. The project, therefore, would not substantially increase hazards on-site due to a design feature or incompatible use.

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

Emergency vehicle access to the school is from Plummer Avenue, with a two-way driveway at the northeast corner of the site, and an exit-only driveway located at the southeast corner of the site. The two-way driveway provides access to an internal loop drive aisle. A one-way lane with diagonal

parking stalls runs along the southern edge of the site and leads to the exit driveway on Plummer Avenue at the southeast corner of the site. There is no vehicular access to the campus from Booksin Avenue. Emergency vehicles would have adequate access to the site and throughout the site from the driveway at the northeast corner of the site. In addition, the final site design would be reviewed for consistency with applicable fire department standards. Therefore, the proposed project would not result in inadequate emergency access.

#### 4.17.3 Operational Transportation Issues [Not Required Under CEQA]

The following information is not required under CEQA but is provided here to help the decision makers in their consideration of the project.

#### 4.17.3.1 Vehicle Parking

The following discussion provides an analysis of the school's conformance with the City's policies and regulations concerning on-site parking for informational purposes only.

According to the San José Municipal Code, a high school is required to provide one parking space per staff member plus one parking space per five students. The school currently has 837 students and 110 staff members (2017-2018 year). It is expected that the number of staff would remain the same with the proposed enrollment of 850 students. Therefore, under the current enrollment, the school is required to provide 277 parking spaces; and with the proposed future enrollment, the school is required to provide 280 parking spaces (110 spaces for staff and 170 spaces for students). The high school has 216 parking spaces on the school campus and currently leases 50 additional parking spaces at the adjacent St. Christopher Church for staff parking. With the 50 off-site parking spaces, the school currently provides a total of 266 parking spaces, which is slightly lower than the City's parking requirement of 277 parking spaces. This results in some students utilizing available street parking within the neighborhood surrounding the school.

With the proposed Master Plan improvements, the school would increase the on-campus parking spaces to 259. The school has indicated that it would continue to lease 50 parking spaces at St. Christopher Church. With the 50 off-site parking spaces, the school would provide a total of 309 parking spaces, which complies with the City's parking requirement of 280 parking spaces.

In May 2013, a parking study was conducted for Presentation High School to identify the number of students parking on the surrounding neighborhood streets (see Table 4.17-2). At that time, the school provided a total of 216 on-site parking spaces. The 2013 counts showed that 82 vehicles belonging to students were parked on the residential streets. Subsequently, in response to the neighborhood's concern regarding parking intrusion from the school, Presentation High School entered into a lease agreement with St. Christopher Church for 50 surface parking spaces to be used by school staff. A second round of street parking counts was conducted in September 2017. Based on the recent parking counts, the number of student vehicles parked on the streets have been reduced from 82 to 15 vehicles (see Table 4.17-2). The reduction of 67 parked vehicles is primarily the result of the additional 50 off-site parking spaces. The remaining 17-vehicle difference is likely due to daily attendance/parking fluctuations. It can be concluded that the additional 50 off-site parking spaces for use by school staff has significantly reduced the parking intrusion within the neighborhood. The

proposed Master Plan will increase on-site parking supply to further reduce the number of students parking on the streets within the neighborhood.

Table 4.17-2: Street Parking Associated with Presentation High School						
	Number of Student Vehicles Parked on the Street					
	May 2013 Count	September 2017 Count				
School Enrollment:	817 (2012-2013 year)	837 (2017-2018 year)				
Plummer Ave. – Curtner Ave. to Jenner Ave.	18	1				
Plummer Ave. – Jenvey Ave. to Darlene Ave.	14	7				
Minardi Ave. – Plummer Ave. to Cherry Ave.	21	0				
Jenvey Ave. – Plummer Ave. to Minardi Ave.	26	3				
Maxine Ave. – Plummer Ave. to Cherry Ave.	2	3				
Darlene Ave. – Booksin Ave. to Cherry Ave.	1	1				
Total # of Student Vehicles Parked:	Total # of Student Vehicles Parked: 82 15					
School Provided Parking Spaces 216 266						

#### 4.17.3.2 Unsignalized Intersection Analysis

For the unsignalized intersection of Plummer Avenue and Curtner Avenue, an assessment was made to determine whether the Peak-Hour Volume Signal Warrant, as described in the California Manual on Uniform Traffic Control Devices (MUTCD), would be met. This method makes no evaluation of intersection level of service, but simply provides an indication whether peak-hour traffic volumes are, or would be, sufficient to justify installation of a traffic signal. Additional analysis may include unsignalized level of service analysis and/or operational analysis such as evaluating vehicle queuing and delay. Other types of traffic control devices, signage, or geometric changes may be preferable based on existing field conditions.

The need for signalization at the Plummer Avenue/Curtner Avenue intersection was evaluated according to the Peak Hour Warrant (Warrant 3 – Part B) in the MUTCD. The results of the peak-hour signal warrant checks indicate that the AM peak-hour and PM school peak-hour volumes at the intersection meet the peak hour signal warrant under all scenarios, both with and without the project traffic. The PM commute peak-hour volumes at the intersection do not meet the signal warrant under any of the scenarios, since the PM commute peak-hour trips originating from Plummer Avenue (minor street approach) are below the 100-trip threshold.

The majority of trips originating from Plummer Avenue currently turn right onto eastbound Curtner Avenue. Based on field observations during the student drop-off and pick-up periods at the school, the northbound left-turn queue on Plummer Avenue did not block the northbound right turns. As illustrated by the short vehicle queues, the northbound left-turn movement onto westbound Curtner Avenue experiences very little delay during the peak traffic periods. The northbound stop-controlled movement at the intersection has a calculated average delay equivalent to LOS D operation, which is an acceptable level of delay.

During the AM peak drop-off period, the southbound drop-off queue on Plummer Avenue backs up to Curtner Avenue for a brief period. This temporarily prevents westbound vehicles on Curtner Avenue from turning left on to Plummer Avenue. When this occurs, the westbound left-turn vehicles are delayed momentarily. The maximum observed westbound left-turn vehicle queue was four vehicles during the peak drop-off period at the school. Based on field observations, the westbound left-turn movement onto southbound Plummer Avenue experiences very little delay during the peak traffic periods.

#### 4.17.3.3 Neighborhood Street Traffic

The study evaluated seven street segments that would potentially be affected by project-generated traffic. Average daily traffic (ADT) volumes and vehicle speed data were collected over a 3-day period from May 9th to May 11th, 2017. It is important to note that the definition of an acceptable amount of traffic on a local residential street is subjective and depends on many factors such as street width, presence of on-street parking, building setback, number of driveways, and whether the local residential street provides access to major roadways. In addition, the City of San José has not established thresholds or guidelines that can be applied to determine the level of increase that should be deemed a significant increase, or the level of increase that would have a negative effect on the livability or quality of life for residents.

A typical ADT volume for a local street with a posted speed limit of 25 mph in the City of San José ranges from 1,000 to 3,000 vehicles per day. The ADT volume for Plummer Avenue (approximately 3,200 vehicles per day) is slightly higher than a typical local street. This is because Plummer Avenue provides access for many connecting east-west residential streets located between Curtner Avenue and Foxworthy Avenue (two major streets), as well as provides direct access to Presentation High School. All the other study segments have ADT volumes well below 1,000 vehicles per day. The increases in traffic volumes on all the study street segments as a result of the project would be very small and, thus, are not likely to be noticeable.

Speed surveys conducted along the study street segments revealed that average bidirectional 85th percentile vehicle speeds are ranging between 23 mph and 29.5 mph. Plummer Avenue has a posted speed limit of 25 mph, and all the other residential streets that were studied also were presumed to have a standard 25 mph speed limit. Based on the speed data collected, the 85th percentile speeds (average of both directions) along all the study segments are within 5 mph of the posted speed limit. An average bidirectional 85th percentile speed of 32 mph or less on 25 mph posted local streets is generally considered acceptable in the City of San José. Therefore, based on the speed data and the City of San José's definition of an acceptable speed for local streets, the existing 85th percentile vehicle speeds on the study street segments are within the acceptable limit and would not be considered for a Traffic Calming Project.

#### 4.17.3.4 Site Access and Circulation

The proposed expansion would add new buildings to the school site, make small changes to the existing parking layout, add parking spaces, and add a student loading zone. The project would not change the driveway locations. Additional parking would be added along the north side of the

proposed new building near the north project driveway, and along the south side of the proposed new Science and Arts building near the southern project driveway. On-site circulation would be modified slightly to allow drivers to circulate counterclockwise through the new northern parking area, access the student loading zone, and exit back out onto Plummer Avenue via the north driveway.

#### School Drop-Off and Pick-Up Operations

The traffic study evaluated the proposed student drop-off/pick-up operations and vehicle queuing with the proposed increase in the number of students and planned improvements (i.e., Master Plan) based on observations of the existing student drop-off and pick-up operations conducted on a typical Tuesday in April 2019. The observations reflect a current enrollment (2018-2019 school year) of 814 students.

#### **Observed School Drop-Off and Pick-Up Operations**

There is a 270-foot student loading zone along the school frontage on Plummer Avenue. During the morning drop-off period, additional student loading occurs within the school parking lot at the rear of the school. Approximately 80 feet of queuing space within the drive aisle of the rear parking lot is currently utilized for on-site student loading activities.

During both the morning drop-off and afternoon pick-up periods, staff members are stationed at the north driveway to control the inbound and outbound flow of school traffic. Staff members are also stationed at the loading zone on Plummer Avenue to facilitate the loading/unloading process (to make vehicles move forward and load/unload efficiently) and at the crosswalk on Plummer Avenue at Jenvey Avenue to ensure safe crossing for students. During the morning drop-off period, a staff member is also present at the rear on-site loading zone to facilitate the unloading process. The staff members arrive at their designated stations approximately 20 minutes before school begins and immediately after school ends. Start time at Presentation High School is 7:45 AM and dismissal is at 2:45 PM.

During the morning drop-off period, the maximum observed vehicle queue in the loading zone on Plummer Avenue was 11 vehicles. Because there are staff members to facilitate the student loading operations, vehicles move efficiently through the loading zone and do not block the school driveways or southbound travel lane. A staff member controls the flow of inbound and outbound vehicles at the north driveway, resulting in a "platooning" effect at the rear drop-off area. The maximum observed vehicle queue at the rear on-site loading area was 4 vehicles in length, which fits within the drive aisle of the parking lot and was not observed to block the drive aisle. When the staff member at the north driveway stops the southbound flow of traffic on Plummer Avenue to let the northbound left-turn vehicles enter the site, a vehicle queue of six to eight vehicles forms briefly in the southbound lane. The southbound queue does not extend to Curtner Avenue and clears quickly afterward.

In addition to the designated loading zones, it was observed that some students were dropped off at the curb along the east side of Plummer Avenue between Jenvey Avenue and Minardi Avenue, because no vehicles were parked along this section, as well as on Jenvey Avenue just east of Plummer Avenue. No vehicles were blocked on Plummer Avenue or Jenvey Avenue as a result of the drop-offs. The students that are dropped off on northbound Plummer Avenue and on Jenvey Avenue cross Plummer Avenue at the crosswalk with staff stopping traffic on Plummer Avenue. A vehicle

queue of four to six vehicles forms briefly in the northbound lane on Plummer Avenue when students cross the street, but the queue clears quickly afterward.

During the afternoon pick-up period, many parents arrive 15 - 20 minutes before the school dismissal. Vehicles either line up in the designated street loading zone, park along Plummer Avenue and Jenvey Avenue, or park in the empty spaces in the school parking lot. The maximum observed vehicle queue in the street loading zone was 14 vehicles (loading zone was full) right before the school dismissal. Two of these vehicles were parked along the red curb next to the driveways, but they did not block the driveways. Soon after the dismissal, the vehicles exited the loading zone and were not observed to block the school driveways or the travel lanes on Plummer Avenue. The student pick-up process lasts about 30 minutes after school dismissal with typical vehicle queues ranging between eight and 13 vehicles. No vehicle queuing issues were identified in the rear parking lot and most of the vehicles that utilize the on-site lot clear within 10 minutes after the dismissal.

#### School Drop-Off and Pick-Up Operations with Master Plan

Upon final implementation of the Master Plan, the school intends to remove the existing student loading zone along Plummer Avenue (convert it to standard curb parking) and discontinue student loading activities within the rear on-site parking area. Ultimately, all student loading activities would occur within the new on-site loading zone that would be added as part of the Master Plan. The proposed on-site loading zone would include approximately 260 feet of vehicle storage in front of the classroom building, which would accommodate about 13 vehicles (assuming 20 feet of stacking space per vehicle). The school would instruct all parents to use the designated on-site loading zone during the peak morning drop-off and afternoon pick-up periods of the school day.

Based on the observations, the morning drop-off vehicle queue is calculated at 0.0184 vehicles per student (11 vehicles + four vehicles) / 814 students) and the afternoon pick-up vehicle queue is calculated at 0.0172 vehicles per student (14 vehicles / 814 students). Accordingly, the proposed enrollment of 850 students would generate a maximum vehicle queue of approximately 16 vehicles during the morning drop-off period and about 15 vehicles during the afternoon pick-up period. The calculated maximum queue of 16 vehicles would equal the vehicle capacity of the new loading zone plus three vehicles extending out of the loading area and onto the main on-site drive aisle. The drive aisle would provide an additional 340 feet of vehicle storage space between the loading zone entrance and the north driveway on Plummer Avenue. Thus, the brief maximum vehicle queue during the AM drop-off period would not adversely affect on-site circulation or traffic operations along Plummer Avenue. The school should continue to station staff members at the loading zone to ensure efficient loading and unloading of students.

#### Traffic Operations at Driveways

Access to the project site would continue to be provided via two existing driveways on Plummer Avenue. The north driveway is a full-access driveway, allowing both right turns and left turns in and out of the driveway. The south driveway allows outbound right turns only.

As previously stated, during the AM drop-off and PM pick-up periods a staff member is present at the north driveway to control the inbound and outbound school traffic. In the peak AM drop-off period (20 minutes before school starts), the staff frequently stops southbound traffic on Plummer

Avenue to allow northbound left-turn vehicles to enter the school parking lot. The maximum northbound left-turn vehicle queue observed was 4 vehicles long and never extended to Jenvey Avenue. A vehicle queue of six to eight vehicles forms briefly in the southbound lane when this occurs, but the queue clears quickly afterward. The outbound left-turn volume at the north driveway is very low with a maximum outbound vehicle queue of just one vehicle observed. The maximum outbound vehicle queue observed at the south driveway was four vehicles long during the AM drop-off period. During the peak PM pick-up period (5 minutes after the school dismissal), the staff frequently stops traffic on Plummer Avenue so that vehicles can enter and exit the north driveway. A vehicle queue of 6 vehicles forms briefly in the southbound lane when this occurs, but the queue clears quickly. During the PM pick-up period, the maximum outbound vehicle queues observed at the north and south school driveways were four vehicles and seven vehicles, respectively.

Site observations indicate that the existing driveways operate adequately without queuing issues onstreet or on-site. With the current site layout (i.e., majority of student loading occurring on Plummer
Avenue), the proposed increase in student enrollment would not cause a noticeable increase in
vehicle queuing at the driveways. With implementation of the Master Plan improvements, however,
all student loading activities would occur on-site within the new loading zone, resulting in a much
higher volume of traffic at the north driveway. Due to the substantially higher number of vehicle trips
entering and exiting the north driveway, school staff would need to stop traffic on Plummer Avenue
more frequently to create gaps in traffic, particularly to serve the outbound left-turn movement at the
driveway and avoid on-site queuing issues. However, stopping traffic more frequently could create
new queuing issues along Plummer Avenue. To avoid this potential unintended consequence,
outbound traffic at the north driveway should be restricted to right turns only during the peak dropoff and pick-up periods. With this recommended turn restriction, site access and on-site vehicle
circulation would continue to be adequate.

#### 4.18 TRIBAL CULTURAL RESOURCES

#### 4.18.1 <u>Environmental Setting</u>

#### 4.18.1.1 Regulatory Framework

#### State

Assembly Bill (AB) 52, effective July of 2015, established a new category of resources for consideration by public agencies when approving discretionary projects under CEQA, 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 when it is concluded that mutual agreement cannot be reached.

Under AB 52, a 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<sup>51</sup>
  - O 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.

While consultation is not required for Addendums, the tribal representatives will be notified of the project as interested stakeholders.

#### Local

The City of San José sets forth the following policies pertaining to tribal cultural resources in its General Plan.

#### Envision San José 2040 Tribal Cultural Resources Policies

Policy	Description
Policy ER-10.1	For proposed development sites that have been identified as archaeologically or paleontologically sensitive, require investigation during the planning process in order to determine whether potentially significant archaeological or paleontological information may be affected by the project and then

<sup>&</sup>lt;sup>51</sup> See Public Resources Code section 5024.1. The State Historical Resources Commission oversees the administration of the CRHR and is a nine-member state review board that is appointed by the Governor, with responsibilities for the identification, registration, and preservation of California's cultural heritage. The CRHR "shall include historical resources determined by the commission, according adopted procedures, to be significant and to meet the criteria in subdivision (c) (Public Resources Code, Section 5024.1 (a)(b)).

	require, if needed, that appropriate mitigation measures be incorporated into the project design.
Policy ER-10.2	Recognizing that Native American human remains may be encountered at unexpected locations, impose a requirement on all development permits and tentative subdivision maps that upon their discovery during construction, development activity will cease until professional archaeological examination confirms whether the burial is human. If the remains are determined to be Native American, applicable state laws shall be enforced.
Policy ER-10.3	Ensure that City, State, and Federal historic preservation laws, regulations, and codes are enforced, including laws related to archaeological and paleontological resources, to ensure the adequate protection of historic and pre-historic resources.

#### 4.18.1.2 Existing Conditions

An archaeological literature review was prepared for the project site by *Holman & Associates*. The literature review concluded that there were no recorded sites located in the project area and that there is a low potential for specific historic-era archaeological resources and prehistoric-era deposits. There is always a chance that cultural resources could be discovered during subsurface excavation or grading, however, the probability of encountering such materials on the site is low. A majority of identified Native American sites in San José have been buried under alluvium or recent layers, indicative of the correlation between Native American site locations and waterways throughout the City. The project site is located approximately 0.9 mile from the nearest waterway, the Guadalupe River.

#### 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			$\boxtimes$	
Register of Historical Resources, or in a local register of historical resources as defined in		_	_	
Public Resources Code Section 5020.1(k)?				

its discretion are vidence, to be set forth in sub-Code Section 5 set forth in sub-Code Section 5 consider the signal set forth in sub-Code Section 5 consider the signal set forth in sub-Code Section 5 consider the signal set forth in sub-Code Section 5 consider the signal set forth in sub-Code Section 5 consider the signal set forth in sub-Code Section 5 consider the signal set forth in sub-Code Section 5 consider the signal set forth in sub-Code Section 5 consider the signal set forth in sub-Code Section 5 consider the signal set forth in sub-Code Section 5 consider the signal set forth in sub-Code Section 5 consider the signal set forth in sub-Code Section 5 consider the signal set forth in sub-Code Section 5 consider the signal set forth in sub-Code Section 5 consider the signal set forth in sub-Code Section 5 consider the signal set forth in sub-Code Section 5 consider the signal set forth in sub-Code Section 5 consider the signal set forth in sub-Code Section 5 consider the signal set forth in sub-Code Section 5 consider the signal set forth in sub-Code Section 5 consider the signal set forth in sub-Code Section 5 consider the signal set forth in sub-Code Section 5 consider the signal set forth in sub-Code Section 5 consider the signal set forth in sub-Code Section 5 consider the signal set forth in sub-Code Section 5 consider the signal set forth in sub-Code Section 5 consider the signal set forth in sub-Code Section 5 consider the signal set forth in sub-Code Section 5 consider the signal set forth in sub-Code Section 5 consider the signal set forth in sub-Code Section 5 consider the signal set forth in sub-Code Section 5 consider the signal set forth in sub-Code Section 5 consider the signal set forth in sub-Code Section 5 consider the signal set forth in sub-Code Section 5 consider the signal set forth in sub-Code Section 5 consider the signal set forth in sub-Code Section 5 consider the signal set forth in sub-Code Section 5 consider the signal set forth in sub-Code Section 5 consider the signal set	ermined by the lead agency, in and supported by substantial significant pursuant to criteria division (c) of Public Resources 024.1? In applying the criteria division (c) of Public Resources 024.1, the lead agency shall gnificance of the resource to a ve 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 Californi 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)				California resources

While it is not anticipated that subsurface tribal cultural resources would be uncovered during project construction, there is still the possibility that sensitive resources, including human remains, are encountered during excavation and grading at the site. The standard permit conditions discussed in *Section 4.5, Cultural Resources*, under CUL-2, prescribe an appropriate process to be followed should potentially significant cultural resources be unearthed during project construction. Adherence to these conditions would ensure that any cultural resources that are discovered, including tribal resources, are studied, documented, and recorded, and relevant agencies are consulted, before construction of the project is allowed to continue. Thus, the impact would be less than significant.

# 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)

Adherence to the standard permit conditions discussed in *Section 4.5, Cultural Resources* would allow for identification and documentation of any tribal cultural resources on the site, should they be discovered. The procedure outlined in these conditions would allow the City to determine the significance of any tribal cultural resources that are uncovered and avoid any impacts to these resources. Thus, the impact would be less than significant.

#### 4.19 UTILITIES AND SERVICE SYSTEMS

#### 4.19.1 <u>Environmental Setting</u>

#### 4.19.1.1 Regulatory Framework

#### **Assembly Bill 939**

Assembly Bill 939 (AB 939) established the California Integrated Waste Management Board (now CalRecycle) and required all California counties to prepare integrated waste management plans. AB 939 requires all municipalities to divert 50 percent of the waste stream by the year 2000.

#### California Green Building Standards Code

In January 2017, the State of California adopted the California Green Building Standards Code that establishes 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 resource efficiency, and indoor environmental quality. These standards include a mandatory set of guidelines, as well as more rigorous voluntary measures, 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 occupant.

#### San José Zero Waste Strategic Plan/Green Vision

The Green Vision provides a comprehensive approach to achieve sustainability through new technology and innovation. The Zero Waste Strategic Plan outlines policies to help the City of San José foster a healthier community and achieve its Green Vision goals, including 75 percent diversion by 2013 and zero waste by 2022. The Green Vision also includes ambitious goals for economic growth, environmental sustainability and an enhanced quality of life for San José residents and businesses.

#### **Private Sector Green Building Policy**

The City of San José's <u>Green Building Policy for private sector new construction</u> encourages building owners, architects, developers, and contractors to incorporate meaningful sustainable building goals early in building design process. This policy establishes baseline green building standards for private sector new construction and provides a framework for the implementation of these standards. It is also intended to enhance the public health, safety and welfare of San José residents, workers, and visitors by fostering practices in the design, construction, and maintenance of buildings that will minimize the use and waste of energy, water and other resources in the City of San José.

#### Envision San José 2040 General Plan

The General Plan includes policies for the purpose of avoiding or mitigating impacts resulting from planned development projects with the City. The following policies are specific to utilities and service systems and are applicable to the proposed project.

General Plan Policies: Utilities and Service Systems					
Policy MS-3.1	Require water-efficient landscaping, which conforms to the State's Model Water Efficient Landscape Ordinance, for all new commercial, institutional, industrial, and developer-installed residential development unless for recreation needs or other area functions.				
Policy MS-3.2	Promote use of green building technology or techniques that can help to reduce the depletion of the City's potable water supply as building codes permit.				
Policy MS-3.3	Promote the use of drought tolerant plants and landscaping materials for nonresidential and residential uses.				
Policy IN-3.3	Meet the water supply, sanitary sewer and storm drainage level of service objectives through an orderly process of ensuring that, before development occurs, there is adequate capacity. Coordinate with water and sewer providers to prioritize service needs for approved affordable housing projects.				
Policy IN-3.5	Require development which will have the potential to reduce downstream LOS to lower than "D", or development which would be served by downstream lines already operating at a LOS lower than "D", to provide mitigation measures to improve the LOS to "D" or better, either acting independently or jointly with other developments in the same area or in coordination with the City's Sanitary Sewer Capital Improvement Program.				
Policy IN-3.7	Design new projects to minimize potential damage due to stormwater and flooding to the site and other properties.				
Policy IN-3.9	Require developers to prepare drainage plans that define needed drainage improvements for proposed developments per City standards.				
Policy IN-3.10	Incorporate appropriate stormwater treatment measures in development projects to achieve stormwater quality and quantity standards and objectives in compliance with the City's National Pollutant Discharge Elimination System (NPDES) permit.				

#### 4.19.1.2 Existing Conditions

#### Water Supply

The project site is currently occupied by a private high school. The private high school generates a water supply demand of approximately 11,799,000 gallons of water per year. Currently, there are no

recycled water lines in the project area. The nearest recycled water line is at Little Orchard Road, approximately 2.22 miles northeast of the project site.<sup>52</sup>

#### Wastewater

Sanitary sewer lines in the area are owned and maintained by the City of San José. According to the City's block maps, there is a six-inch sanitary main that runs north and south in Plummer Avenue and an eight-inch sanitary main that runs north in Booksin Avenue. There is an existing manhole in Plummer Avenue that splits the flow into the north and south direction. The General Plan EIR states that average wastewater flow rates are approximately 70 to 80 percent of domestic water use and 85 to 95 percent of business use (assuming no internal recycling or reuse programs).

Based on the General Plan EIR, the City's average dry weather flow of wastewater is approximately 69.8 million gallons per day (mgd). The City's capacity allocation at the San José Santa Clara Regional Wastewater Facility (RWF) is approximately 108.6 mgd, leaving the City with approximately 38.8 mgd of excess treatment capacity.

#### **Storm Drainage**

The City of San José owns and maintains the municipal storm drainage system, which serves the project site. There is an existing 15-inch storm drain line located in Plummer Avenue that serves the site. Stormwater runoff from the site flows through this pipe and a network of other pipes before eventually discharging to the Guadalupe River, approximately 1.5 miles east of the site. The Guadalupe River 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.

Currently, the project site (excluding the sports fields) is highly impervious, containing approximately 94 percent impervious surface area.

#### **Solid Waste**

Santa Clara County's Integrated Waste Management Plan (IWMP) was approved by the California Integrated Waste Management Board in 1996 and was reviewed in 2004 and 2007. Each jurisdiction in the County has a landfill diversion requirement of 50 percent per year. In 2008, the City of San José diverted approximately 60 percent of the waste generated in the City. According to the IWMP, the County has adequate disposal capacity beyond 2022. In October 2007, the San José City Council adopted a Zero Waste Resolution, which set a goal of 75 percent waste diversion by 2013 and zero waste by 2022. The City landfills approximately 700,000 tons per year of solid waste including 578,000 tons per year at landfill facilities in San José. The total permitted landfill capacity of the five operating landfills in the City is approximately 5.3 million tons per year.

San José granted Republic Services a 15-year exclusive franchise to collect most standard garbage, recycling, and organics from businesses that went into effect on July of 2012. Pursuant the City's solid waste ordinances and Republic's agreement for providing solid waste services in the City of

<sup>&</sup>lt;sup>52</sup> South Bay Water Recycling. Recycled Water Pipeline System. Map. July 28, 2011.

San José, Republic has the exclusive right and duty to collect, transport, and dispose of all commercial solid waste in the City of San José.

#### 4.19.2 <u>Impact Discussion</u>

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Wo 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, and 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)				cilities, the	

The proposed project would utilize existing water infrastructure, dispose of wastewater at the San José – Santa Clara Regional Wastewater Facility (RWF), convey stormwater via the City's existing drainage system, and connect to existing utility lines in the vicinity of the site for electricity, natural gas, and telecommunication services.

#### Wastewater/Sanitary Sewer System Impacts

The treatment capacity of the RWF is 167 mgd. The RWF, however, is currently operating under a 120 mgd (dry weather) flow requirement. This requirement is based upon the SWRCB and the San Francisco Bay RWQCB concerns over the effects of additional freshwater discharges from the RWF on saltwater marsh habitat and pollutant loading to the Bay from the RWF. The RWF currently treats an average of 110 mgd.

The project site currently has an approximate water demand of 0.032 mgd. The proposed project is projected to have a water demand of 0.037 mgd, an increase in demand of approximately 0.005 mgd. Assuming a wastewater flow rate of 85 to 95 percent of the water usage rate (per the previously stated wastewater flow rates for businesses), the school would be expected to generate approximately 0.031 to 0.035 mgd, representing an increase of 0.004 to 0.0048 mgd from the current demand under future project conditions. This increase in demand would not exceed the treatment requirements of the SWRCB or the San Francisco Bay RWQCB. As such, the project would not require the construction or expansion of wastewater treatment facilities.

#### Water Facilities

The project site is served by San José Water Company (SJWC). SJWC will meet future demand through increased groundwater pumping, increased treated water delivery, increased recycled water use, and conservation. SJWC does not anticipate additional storage capacity will be required to meet projected demand from the General Plan. Additionally, this project would not require isolated infrastructure improvement to SJWC facilities. Therefore, the project would not result in significant impacts due to the expansion or construction of water facilities.

#### **Storm Drainage**

Implementation of the project would result in a slight increase in stormwater runoff that would be generated by an increase in impervious surface area on the site. Currently, the existing storm drainage system has sufficient capacity to support the project site, and it is anticipated that the project will not impact the existing 15-inch RCP City storm drain main.<sup>53</sup>

The project must comply with applicable General Plan policies, which would require implementation of stormwater best management practice and will be required to comply with the NPDES Municipal Regional Permit and all applicable plans, polices, and regulations (including RWQCB permits) for the treatment of stormwater. Therefore, implementation of the proposed project would not have a significant impact on the City's storm drainage system, and would not require the construction or expansion of storm drain facilities.

#### Electric Power, Natural Gas, and Telecommunications

The project site is currently served by existing electric power, natural gas, and telecommunications utilities in the area. The demand for these utilities created by the proposed project would not warrant the construction or expansion of any facilities. Lateral connections to these utility lines would occur

<sup>&</sup>lt;sup>53</sup> BKF Engineers. Appendix K: Civil Engineers Due Diligence Report. May 2017.

during grading of the project site and would not result in significant environmental impacts. Therefore, the project would not result in an impact due to the construction or expansion of electric power, natural gas, or telecommunication facilities.

#### **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)

The project site currently has an approximate water demand of 11,799,000 gallons a year or approximately 0.032 mgd. The proposed project is projected to have a water demand of 13,372,200 gallons a year or 0.037 mgd, which is an increase in demand of approximately 0.005 mgd.

As discussed above, the project site is served by SJWC. Future demand is expected to be met by increased groundwater pumping, treated water delivery, recycled water use, and conservation. There would be sufficient water sources to meet the minor increase in water demand created by the proposed project.

#### **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 City of San José generates approximately 69.8 mgd of dry weather sewage flow. The City's share of the RWF treatment capacity is 108.6 mgd, which leaves the City with approximately 38.8 mgd of excess treatment capacity.<sup>54</sup> The .01 mgd increase in wastewater generated by the proposed project would not cause the RWF to exceed its capacity or discharge limit, and would be within San José's treatment allocation.

#### **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)**

The proposed project would increase enrollment from 750 students to 850 students, and the faculty would increase from 60 to 110.

Per CalEEMod solid waste 2016 generation rates, the existing site generates approximately 135 tons of solid waste a year. The proposed project would generate approximately 153 tons of solid waste a year. As such, the proposed project would add an additional 18 tons of solid waste a year to be served by local landfills.

According to the General Plan EIR, planned growth under the 2040 General Plan could increase the amount of solid waste sent to landfills by approximately 571,500 tons per year through 2035, using

<sup>&</sup>lt;sup>54</sup> San José, City of. Envision San José General Plan Integrated Final Program EIR. November 2011.

current generation rates. The estimate represents the upper limit of potential landfilling needs, given that disposal rates will likely continue to decrease over time. Based on the upper limit, the existing landfills in San José would have sufficient permitted capacity of 5.3 million tons per year to receive the additional waste generated by new development in the City. Without additional waste reduction, however, local landfills could reach actual capacity by 2025.

The City intends to extend the lifespan of existing landfills through implementation of the Zero Waste Strategic Plan, which supports the City's goal of 100 percent diversion by 2022. Under the Zero Waste Strategic Plan, the City will utilize techniques such as a source reduction, reuse, and composting. Compliance with the CALGreen Code and California Air Resources Board's Mandatory Commercial Recycling Measure would complement local efforts and further reduce demand for landfill facilities. As redevelopment proceeds and diversion rates increase over time, the City will ensure adequate landfill capacity through monitoring the availability of collection, transfer, recycling, disposal, and waste processing services, periodically assessing infrastructure needs, and working with Material Recovery Facilities (MRF) and landfill operators to expand capacity as needed (Envision San José 2040 General Plan Policies IN-5.1, IN-5.4, and IN-5.15).

Future development in San José, including the proposed project, will be required to comply with existing local and State programs and regulations. For example, in accordance with the current CALGreen Code, specific projects are required to provide on-site recycling facilities, develop a construction waste management plan, salvage at least 50 percent of nonhazardous construction/demolition debris (by weight), and implement other waste reduction measure.

With implementation of the existing programs, State regulations, Envision San José 2040 General Plan polices, and the City's Zero Waste Strategic Plan, solid waste generated by the project would not exceed the permitted or actual capacity of existing landfills. Additionally, the project would comply with federal, state, and local statutes and regulations related to solid waste.

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

Refer to the above discussion under UTL-4.

#### 4.20 WILDFIRE

#### 4.20.1 Environmental Setting

#### 4.20.1.1 Existing Conditions

The proposed project is located in a suburban area of San José which has not been designated as a very high fire hazard severity zone on CalFire maps. <sup>55</sup>

#### 4.20.2 <u>Impact Discussion</u>

	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:				$\square$
<ol> <li>Substantially impair an adopted emergency response plan or emergency evacuation plan?</li> </ol>				
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**)

<sup>&</sup>lt;sup>55</sup> CalFire. "California Fire Hazard Severity Zone Map Update Project". Accessed April 26, 2019. http://www.fire.ca.gov/fire\_prevention/fire\_prevention\_wildland\_statewide

#### 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?				
Im	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 individual sections, the proposed project would not degrade the quality of the environment with the implementation of identified standard permit conditions and mitigation measures. As discussed in *Section 4.4 Biological Resources*, the project would not significantly impact sensitive habitat or species, with mitigation measures incorporated. While the existing on-site buildings are not historically significant, there is a potential for buried archaeological and paleontological resources to occur on-site. Implementation of the identified Standard Permit Conditions in *Section 4.5 Cultural Resources*, would avoid or reduce impacts to cultural resources to a less than significant level.

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

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."

Because criteria air pollutant and GHG emissions would contribute to regional and global emissions of such pollutants, the identified thresholds developed by BAAQMD and used by the City of San José were developed such that a project-level impact would also be a cumulatively considerable impact. The project would not result in significant emissions of criteria air pollutants or GHG emissions and, therefore, would not make a substantial contribution to cumulative air quality or GHG emissions impacts.

With the implementation of General Plan policies and Standard Permit Conditions, the proposed project would not result in significant geology and soils, hydrology and water quality, noise, or utility impacts and would not contribute to cumulative impacts to these resources. Also, the project would not impact agricultural and forest resources or mineral resources and, therefore, the project would not contribute to a significant cumulative impact on these resources.

The project is located in an urban area and given its limited size would not contribute to a cumulative impact on aesthetics, population and housing, public services, recreation, and transportation with the implementation of General Plan policies and Municipal Code requirements.

## 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)

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. Under 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, hazardous materials and noise. However, implementation of standard permit conditions and General Plan policies would reduce these impacts to a less than significant level. No other direct or indirect adverse effects on human beings have been identified.

#### **SECTION 5.0 REFERENCES**

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#### SECTION 6.0 LEAD AGENCY AND CONSULTANTS

#### 6.1 LEAD AGENCY

#### City of San José

Department of Planning, Building, and Code Enforcement Rosalynn Hughey, Director David Keyon, Principal Planner Meenaxi Raval, Supervising Environmental Planner Krinjal Mathur, Planner II

#### 6.2 CONSULTANTS

#### David J. Powers & Associates, Inc.

Environmental Consultants and Planners
Demetri Loukas, Principal Project Manager
Mike Campbell, Project Manager
Danny DeBrito, Assistant Project Manager
Daniel Chang, Researcher
Zach Dill, Graphic Artist

#### **Archives & Architecture**

Cultural Resources Consulting
Franklin Maggi, Architectural Historian

#### **Hexagon Transportation Consultants, Inc.**

Transportation Consultants Brian Jackson Kai-Ling Kuo

#### Illingworth & Rodkin, Inc.

Acoustics, Air Quality
James Reyff, Principal
Casey T. Devine, Consultant
Michael S. Thill, Consultant

#### **McCloskey Consultants**

Environmental and Geologic Assessments Tom McCloskey, Consultant