San Jose State University

Interdisciplinary Science Building Project

Draft

Initial Study - Mitigated Negative Declaration

November 2017

rincon

Environmental Scientists Planners Engineers

DRAFT
INITIAL STUDY –
MITIGATED NEGATIVE DECLARATOIN

SAN JOSE STATE UNIVERSITY
INTERDISCIPLINARY SCIENCE BUILDING PROJECT

Prepared by:

The Trustees of the California State University
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Prepared with the assistance of:

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November 2017

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1.0 INTRODUCTION

This Initial Study and Mitigated Negative Declaration (IS-MND) analyzes the potential environmental effects of constructing an Interdisciplinary Science Building (ISB) located on the SJSU Campus on a site north of Duncan Hall facing Paseo de San Carlos between 4th Street and 7th Street. The site currently contains the Associated Students House and parking lots 11 and 13. The project would include development of a 215,000 gross square feet (GSF) science building that is up to ten stories high with a basement. The new building would house laboratories, faculty offices, and interdisciplinary spaces. The project includes the relocation of the Associated Students House. The project would also remove and replace an existing botanic garden.

1.1 PURPOSE AND LEGAL AUTHORITY

This document has been prepared to satisfy the requirements of the California Environmental Quality Act (CEQA) (Pub. Res. Code Section 21000 et seq.) and the State CEQA Guidelines (14 California Code of Regulations [CCR] 15000 et seq.). CEQA requires that all state and local government agencies consider the environmental consequences of projects for which they have discretionary authority before they approve or implement such projects.

The Initial Study (IS) is a public document used by the decision-making lead agency to determine whether a project may have a significant effect on the environment. In the case of the proposed project, the Board of Trustees of the California State University are the lead agency and would use the IS to determine whether the project has a significant effect on the environment. If the lead agency finds substantial evidence that any aspect of the project, either alone or in combination with other projects, may have a significant effect on the environment, that agency is required to prepare an Environmental Impact Report (EIR), a supplement to a previously prepared EIR, or a subsequent EIR to analyze the project. If the lead agency finds no substantial evidence that the project or any of its aspects may cause a significant impact on the environment, a Negative Declaration shall be prepared. If, over the course of the analysis, the project is found to have a significant impact on the environment that, with specific mitigation measures, can be reduced to a less-than-significant level, a Mitigated Negative Declaration (MND) shall be prepared.

1.2 INITIAL STUDY FORMAT AND CONTENTS

In addition to Section 1.0 - Introduction, this IS-MND is organized into the following sections:

- **Section 2.0 - Project Description:** Includes a detailed description of the proposed project.

- **Section 3.0 - Environmental Checklist:** Contains the Environmental Checklist Form together with an impact discussion for each of the checklist questions. The Checklist Form is used to determine the following for the proposed project:

    1) *"Potentially Significant Impacts" that may not be mitigated even with the inclusion of mitigation measures;*

2) *"Potentially Significant Impacts Unless Mitigated" which could be mitigated with incorporation of mitigation measures; and,*

3) *"Less Than Significant Impacts" which would be less than significant and do not require the implementation of mitigation measures.*

Section 3.0 addresses the following environmental issues:

1. *Aesthetics*
2. *Agriculture and Forestry Resources*
3. *Air Quality*
4. *Biological Resources*
5. *Cultural and Historic Resources*
6. *Greenhouse Gas Emissions*
7. *Geology and Soils*
8. *Hazards and Hazardous Materials*
9. *Hydrology and Water Quality*
10. *Land Use and Planning*
11. *Mineral Resources*
12. *Noise*
13. *Population and Housing*
14. *Public Services*
15. *Recreation*
16. *Transportation/Traffic*
17. *Utilities and Service Systems*

- **Section 4.0 - References:** Identifies the printed and on-line references.

1.3 DETERMINATION

On the basis of this initial evaluation:

I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.	
I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because the mitigation measures described in the attached Initial Study have been added to the project. A MITIGATED NEGATIVE DECLARATION will be prepared.	**X**
I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.	
I find that the proposed project MAY have a significant effect(s) on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets, if the effect is a "Potentially Significant Impact" or "Potentially Significant Unless Mitigated." An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.	
I find that although the proposed project could have a significant effect on the environment, there WILL NOT be a significant effect in this case because all potentially significant effects (1) have been analyzed in an earlier EIR pursuant to applicable standards and (2) have been avoided or mitigated pursuant to that earlier EIR, including revisions or mitigation measures that are imposed upon the proposed project.	

San Jose State University *Date*
Ashraf Fouad
Senior Director, Planning Design and Construction

Pursuant to section 21082.1 of the California Environmental Quality Act, the Board of Trustees of the California State University (CSU Board) has independently reviewed and analyzed the Initial Study and Mitigated Negative Declaration for the proposed project and finds that these documents reflect the independent judgment of the CSU Board. The CSU Board, as the lead agency, also confirms that the project mitigation measures detailed in these documents are feasible and will be implemented as stated in the Mitigated Negative Declaration.

Prepared by:
Rincon Consultants, Inc.
Richard Daulton
Principal in Charge

Prepared for:
San Jose State University
Daniel No
Associate Director, Planning

2.0 PROJECT DESCRIPTION

2.1 PROJECT TITLE

Interdisciplinary Science Building (ISB) Project

2.2 LEAD AGENCY AND LOCAL REPRESENTATIVE

The Trustees of the California State University
400 Golden Shore
Long Beach, California 90802-4275

Locally represented by:

Ashraf Fouad, Senior Director
San Jose State University, Facilities Development and Operations
Planning Design and Construction
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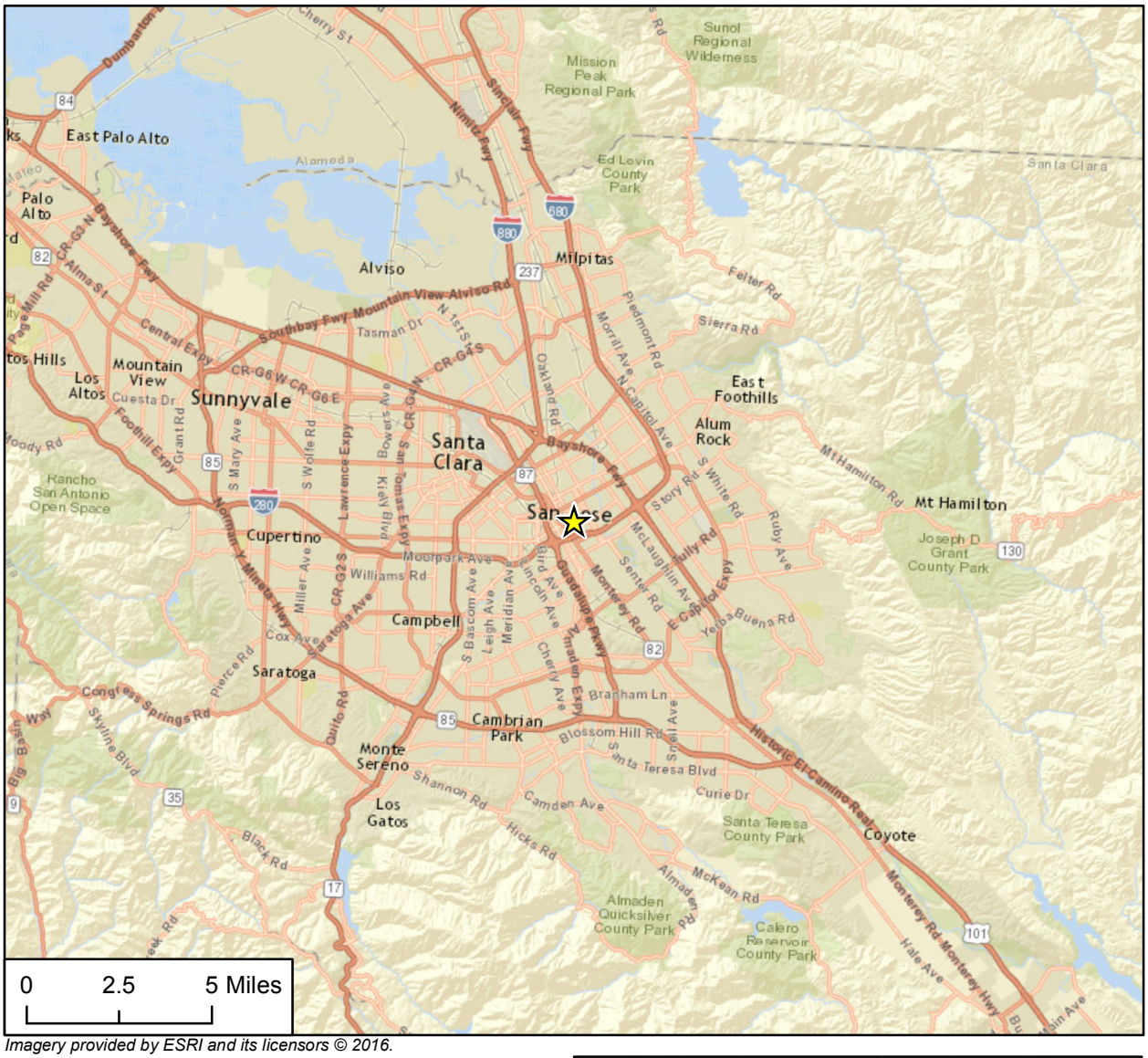
2.3 PROJECT LOCATION

The project site is located entirely within the main campus of San Jose State University (SJSU) in the center of the City of San Jose, California (Figure 1). The SJSU campus is located to the east of the Guadalupe Freeway and to the north of Interstate 280/Junipero Serra Freeway. The Main Campus occupies a square-shaped property of 88.5 acres bordered by San Fernando Street on the north, San Salvador Street on the south, 10th Street on the east, and 4th Street on the west. The proposed ISB would be located north of Duncan Hall facing Paseo de San Carlos between 4th Street and 7th Street, in the southwest quadrant of campus, adjacent to MacQuarrie Hall (Figure 2). The ISB project site is the current location of the Associated Students House, parking lots 11 and 13, and a small botanic garden.

2.4 SURROUNDING LAND USES AND SETTING

Buildings cover approximately 42% of the SJSU Campus land area. The remaining 58% is composed of open space, service zones, and surface parking. The neighborhoods that immediately surround the campus are mixed residential and commercial. North of the campus along San Fernando Street, land use is largely residential, including student housing, multi-story retirement residences, and the campus-owned North Parking Facility. West of the campus, along 4th Street, land uses include medium-density residential, which includes condominiums and rental apartments. Low-density single-family residential currently borders the south side of the campus. Land use on the eastern side of the campus is composed of medium-density residential apartments and low-density single-family residential, including sorority and fraternity houses, apartments, and rooming houses.



Imagery provided by ESRI and its licensors © 2016.

Project Location

N

Regional Location

Figure 1

Imagery provided by Google and its licensors © 2016.

Project Site Location

Figure 2

Existing campus uses surrounding the project site include Duncan Hall to the south and MacQuarrie Hall to the east. To the north of the proposed project site, across Paseo de San Carlos, which is open to pedestrians only, is the Yoshihiro Uchida Hall and Spartan Complex Central. West of the site is the West Parking Garage, adjacent to 4th Street, between San Salvador Street and Paseo de San Carlos. Duncan and MacQuarrie Halls currently house the College of Sciences (COS). By co-locating the proposed ISB near the existing buildings occupied by the COS, this project aims to consolidate the COS departments into a Science "neighborhood" on the SJSU main campus.

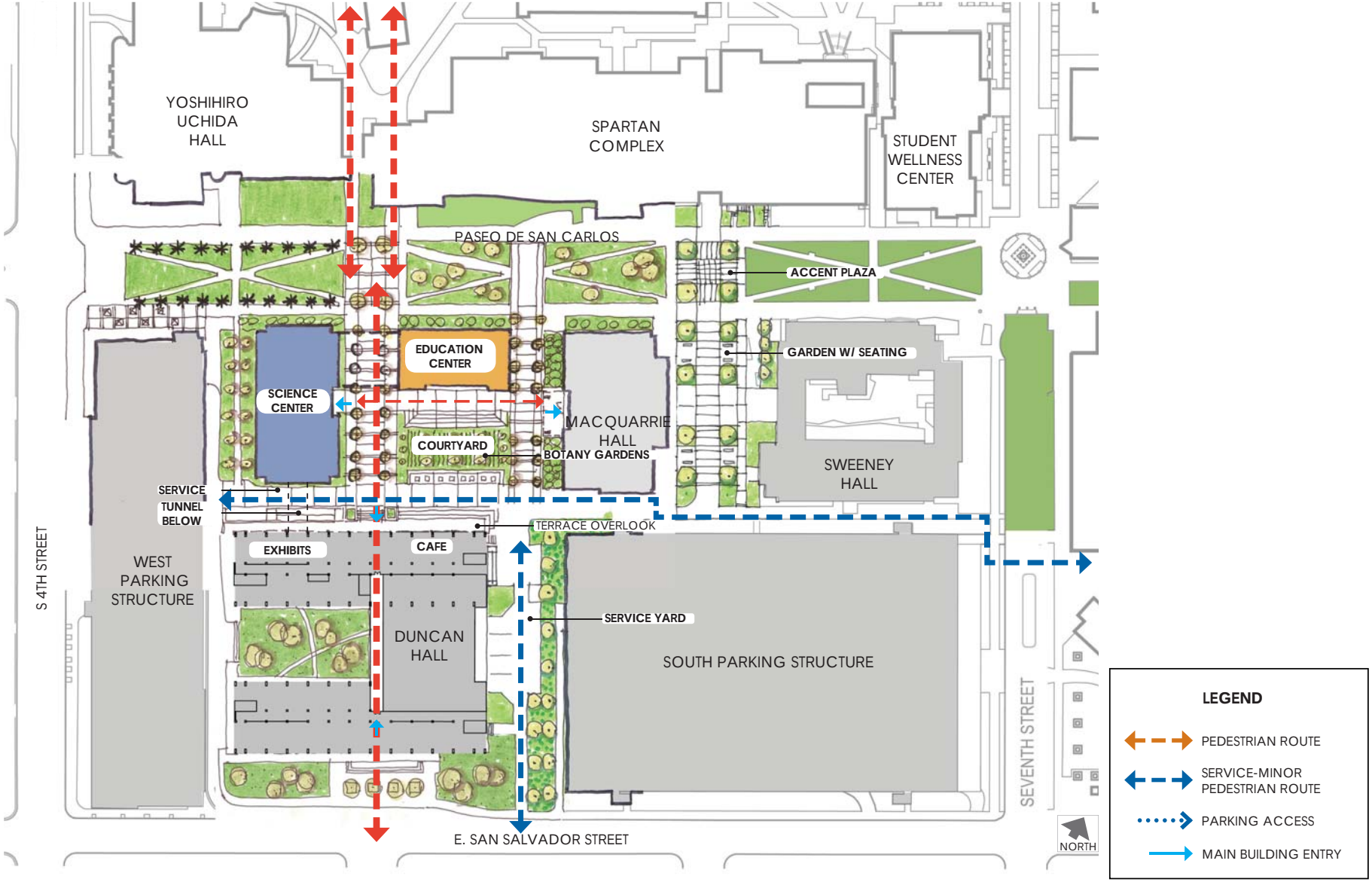
The ISB project site is approximately 1.9 acres and is currently developed with the Associated Students House, parking lots 11 and 13, and a small botanic garden. Vegetation is limited to the existing botanic garden and approximately 29 trees surrounding disbursed throughout the site. Removed trees would be replaced elsewhere on the SJSU campus at a rate of two native trees planted for every one mature tree removed.

2.5 PROJECT CHARACTERISTICS

The project would include development of an interdisciplinary science building (ISB) that is approximately eight to ten stories high with a basement. The new building would house laboratories, faculty offices, and interdisciplinary spaces. The project is divided into two components: the ISB Base Program and the ISB Aspirational Program. The ISB Base Program consists of spaces for teaching, research, other instruction and their respective support areas. The ISB Aspirational Program, which would be constructed if non-state external funding is secured, consists of specialty spaces to foster collaboration and innovation within the COS and the University.

The ISB Base Program would be comprised of approximately 161,000 GSF with spaces for teaching, research laboratories, and lab support areas that would be primarily for the Biology and Chemistry departments. This component of the project would also include administrative and other instructional areas, informal faculty-student collaboration areas, shared amenities, such as conference rooms, and space for high performance computing. The ISB Aspirational Program would comprise of approximately 54,000 GSF and would include an innovation design center/makerspace, a science museum, a visualization theatre for large-scale illustration and display of scientific research, specialty labs and offices, a cybersecurity work spaces, a large tiered classroom for formal lectures, and a student success and advising center. Both components would be designed with an emphasis on daylight, collaborative areas, private offices for faculty, flexible learning spaces, and technology-enabled smart laboratories and classrooms that support multiple devices/learning modes. The project would also include a 10-foot wide and approximately 185-foot long underground utility corridor between Duncan Hall and the proposed ISB. A conceptual site plan is shown in Figure 3. As shown therein, a future education center with rooftop garden is contemplated adjacent to the proposed project. The education center is conceptual at this point and not part of the current project analyzed in this IS-MND.

The entire project would total up to 215,000 GSF. The basement and ground floor would include a lobby/atrium and components of the ISB Aspirational Program, including a science museum, visualization theater, tiered classroom, and innovation design center/makerspace. Floors two



Source: SJSU, 2017.

Conceptual Site Plan

Figure 3

through ten would include components of the ISB Base Program, including classrooms and offices. The top two floors would house additional specialty programs for the ISB Aspirational Program.

With both project components, the total building height would be approximately 148 feet, which is 28 feet taller than the adjacent Duncan Hall (as measured from the top of the observatory railing). This IS-MND evaluates the total project with both the Base and Aspirational components. The conceptual building height sections are shown in Figure 4 and an aerial view showing building massing is in Figure 5.

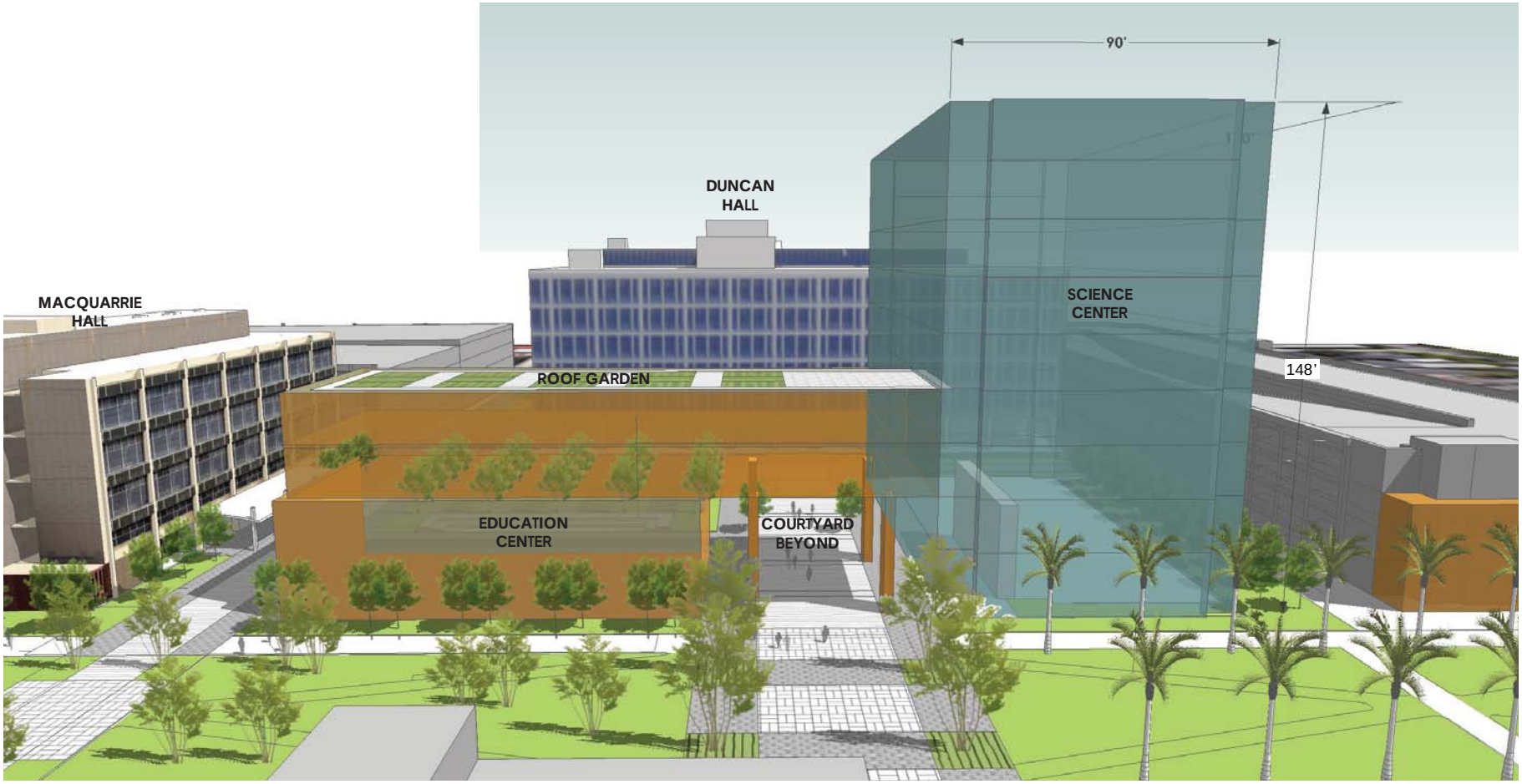
The ISB project is scheduled to start construction in June 2019 and estimated to be complete by December 2021 for the Base Program. If the Aspirational Program is included, the project completion would be extended by approximately six months. Construction would include the relocation of the Associated Students House, vegetation removal (including the existing botanic garden), removal of existing surface parking lots, trenching for the proposed utility corridor, and construction of the proposed building. Existing meteorology observation equipment in Duncan Hall and the Observatory would also relocate to the ISB.

Consistent with SJSU Campus Sustainability Standards, the ISB project would aim to achieve a minimum Leadership in Energy and Environmental Design (LEED) Silver certification from the United States Green Building Council (USGBC) or equivalent.

2.6 REQUIRED APPROVALS

The Trustees of the California State University Approvals

- *Schematic Plan Approval*



Source: SJSU, 2017.

Conceptual Building Height

Figure 4

Source: SJSU, 2017.

Conceptual Aerial View with Building Massing

Figure 5

3.0 ENVIRONMENTAL CHECKLIST

The following checklist was developed as a tool to screen potential environmental impacts and is consistent with that contained in the *State CEQA Guidelines*. A discussion, including an environmental impact analysis and a requirement for mitigation measures, is included after each issue area.

Aesthetics - Would the project:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?				X
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				X
c) Substantially degrade the existing visual character or quality of the site and its surroundings?			X	
d) Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?			X	

a, b. Development of the proposed project would occur within the SJSU campus. The main campus is not designated as a scenic vista, nor is the project site visible from a designated scenic highway. Therefore, **no impacts** to scenic vistas or highways would occur as a result of this project.

c. The character of buildings on the SJSU campus is varied, and the proposed ISB would be compatible with surrounding buildings The ISB would have a distinct character and identity, appropriate for its use, but would blend with the visual character of the campus.

Additionally, the Campus Master Plan 2001 proposes a campus interior that remains roughly the same in terms of height and mass, to that of surrounding structures, and a more densely developed campus perimeter. The proposed structure would be up to 148 feet tall, with ten stories, and would be visible from several viewpoints on and off campus; however, the scale and height of the proposed facility are compatible with buildings on campus, which include other structures up to 12 stories in height. The buildings surrounding the proposed facility range from five to seven stories.

The Campus Master Plan 2001 also discusses building up rather than out to conserve open space with a minimum ground coverage area of 42% for the campus. The project would be located within site 2C, as described in the *Guidelines for Campus Change* section of the Master Plan. This section has allowable building floor area of 95,000 square feet. The proposed ISB would have an approximate 71,200 square feet building footprint. This would use 75% of the allowable building floor area of the section; allowing for more open space area. Moreover, the campus has a total of approximately 26 acres of open space. The addition of the ISB would convert approximately 0.5 acre from open space to developed area, leaving 25.5 acres of open space for the campus.

The proposed ISB would be visually compatible with the surrounding development, and would not result in a significant impact to the visual character of the campus. The project would be located within an existing developed area adjacent to other campus structures, including the West Parking Facility to the west of the site and Duncan Hall to the east. The project site is currently occupied by the Associated Students House, parking lots 11 and 13, and a botanic garden.

The site is within the southwest quadrant of campus, or Science District, that has a collection of trees and plans considered Botanical/Arboretum within the SJSU's 2013 Landscape Master Plan. Within this area there is a botanical garden that would be removed. It is anticipated that the botanical garden would be replaced elsewhere on the project site, and that the new botanical garden would be similar in size if not larger than the current garden. The project area also currently has large open lawn areas that would be removed by the project. However, the project proposal includes open space areas that incorporate shaded seating, large open lawns, botanical gardens, and water features. Given these improvements, the project would not substantially degrade the existing visual character or quality of the site.

Construction associated with the underground utility infrastructure would occur along walkways and right-of-ways in the vicinity of the ISB. The re-routing, rehabilitating and reinforcing of the underground utility infrastructure would only have a visual component during construction, as the utilities would be located underground. During construction activities for all portions of the project, views of staging and construction areas would include equipment, construction materials, and debris. However, staging areas would be screened to the extent possible, and such adverse aesthetic effects during the construction period would be temporary and minor.

Overall, impacts on visual character and quality would be **less than significant.**

d. Existing lighting on the project site includes pole-mounted, downcast lighting in the two parking lots and at each of the four corners of the grass area, as well as four pole-mounted bulb light structures in front of Duncan Hall. Adjacent structures also have night lighting. The overall existing lighting in the project area is appropriate to a college campus within an urban area.

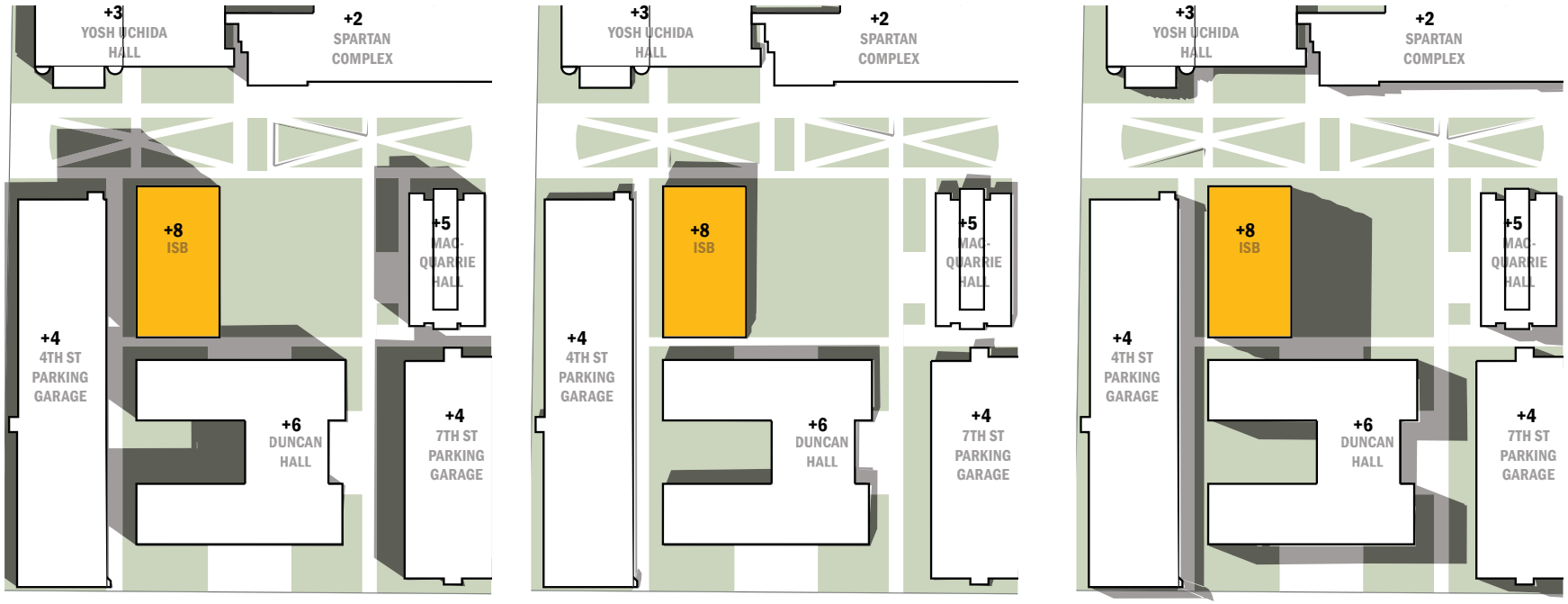
The proposed project would include lighting. However, given the extent of existing lighting on the site, a substantial change in lighting would not occur. Furthermore, the SJSU Exterior Lighting Master Plan (Strata, 2016) contains specific requirements for outdoor lighting to ensure that lighting integrates with campus aesthetics, is low-maintenance and energy efficient, results in minimal light trespass and reduced light pollution while providing good nighttime visibility. Compliance with these existing development standards would ensure that impacts would be **less than significant.**

The proposed project would result in new sources of glare that may affect daytime visibility for off-site land uses. However, although reflective materials are anticipated to be used in the construction of the proposed building, the new structure would be internal to the campus, and levels of glare would be similar to existing conditions. Therefore,

impacts to the area surrounding the campus related to glare would be **less than significant**.

Shading Effects. In the built environment, shadows are an important aspect of a site's aesthetics. Daytime shadows form based on the sun's position in the sky, relative to the ground, and a given structure's location and dimensions. The sun's position in the sky varies substantially depending on the time of year. On June 20 (summer solstice), the sun is the highest in the sky and shadows are the shortest. As winter approaches, the sun's angle relative to the earth's horizon changes and shadow lengths become longer. On December 21 (winter solstice), the sun is lowest in the sky and shadows are greatest. The spring (vernal) and fall (autumnal) equinoxes represent midpoints in this progression between solstices. The length and direction of shadows also vary based on the time of day. At approximately 12 noon, the sun is closest to a vertical position relative to the ground surface, creating the shortest shadows during a given day. By contrast, shadows are longest near sunrise and sunset due to the sun's position near the horizon. The term "shading" refers to the effect of shadows cast upon adjacent areas by proposed structures.

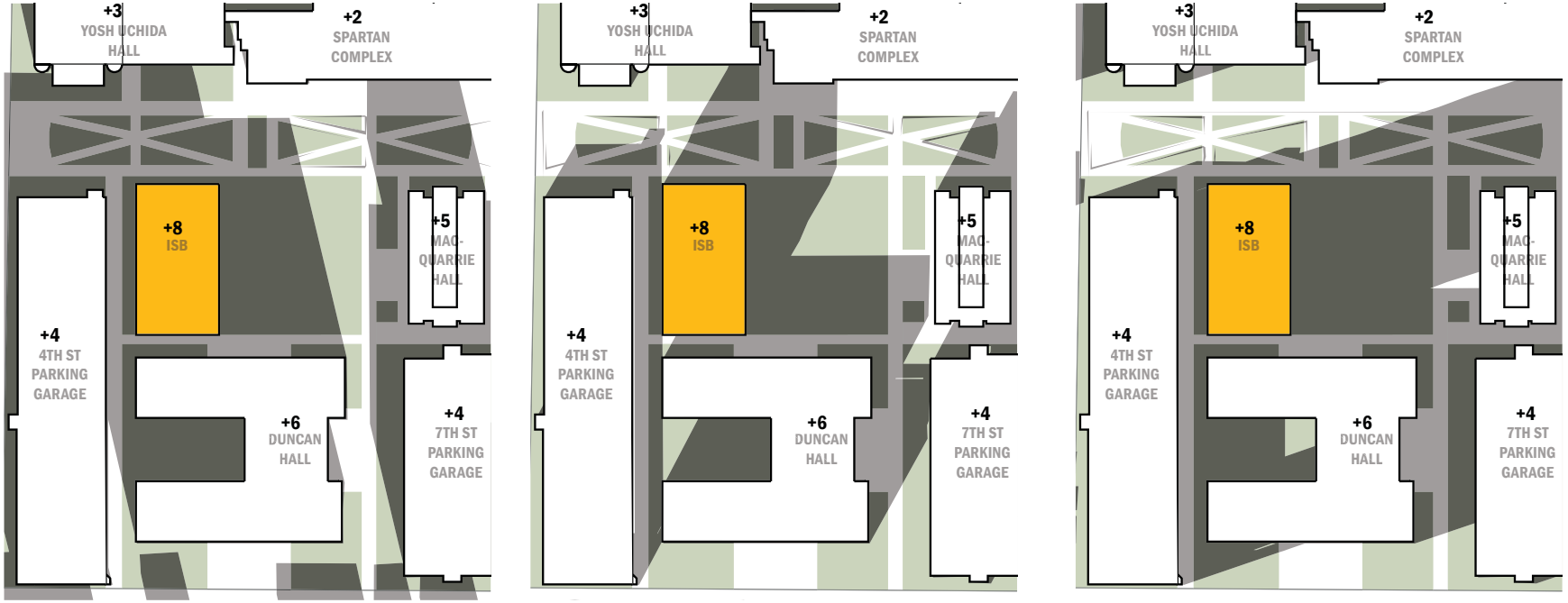
The shading that would occur as a result of the proposed ISB structure can be seen in Figures 6a and 6b. As shown in Figure 6a, during the summer solstice, the proposed ISB building would cast shadows over the walkways to the north and west of the project site, as well as the 4th Street Parking Garage west of the site in the morning. In the afternoon, shadows would extend onto the lawn area east of the site, as well as onto the walkway in front of Duncan Hall south of the site. As shown in Figure 6b, during the winter solstice, shadows would extend farther to the north, west, and east of the project site. Morning shadows would add to existing shadows from Duncan Hall, shading part of Yoshihiro Uchida Hall to the north. Mid-day winter shadows would shade the walkways to the north and portions of Yoshihiro Uchida Hall and Spartan Complex. In the afternoon, shadows would cover the lawn area to the east, as well as walkways and portions of MacQuarrie Hall. Specific outdoor uses such as large open lawns and already-shaded seating would be shaded as a result of the project. However, the project-generated shadows would contribute to an existing shaded condition, rather than resulting in substantial new shadows. Visual impacts associated with shading effects from the proposed ISB would be **less than significant**.



Source: Gensler, June 2017.

Summer Shadows

Figure 6a



Source: Gensler, June 2017.

Winter Shadows

Figure 6b

Agricultural Resources - Would the project:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, 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?				X
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				X
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?				X
d) Result in the loss of forest land or conversion of forest land to non-forest use?				X
e) Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?				X

a-e. The project site lies within the urban core of the City of San Jose and no agricultural use of this land has occurred for many decades. The proposed project would involve the construction of an approximate 215,000 GSF ISB on a 210,000 square foot infill site located on the SJSU campus, as associated 10-foot wide and approximately 185-foot long underground utility corridor between Duncan Hall and the proposed ISB. The project does not involve any development that would convert agricultural land to a non-agricultural use, conflict with the existing zoning of forest land or timberland, result in the loss or conversion of forest land to non-forest uses, or interrupt ongoing agricultural activity. Therefore, the proposed project would not adversely affect agricultural, forest land, or timberland resources. **No impacts** would occur.

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

Background Information

Federal and state standards have been established for six criteria pollutants, including ozone (O_3), carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), particulates less than 10 and 2.5 microns in diameter (PM_{10} and $PM_{2.5}$), and lead (Pb). California has also set standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles. Table 1 lists the current federal and state standards for criteria pollutants.

Table 1
Current Federal and State Ambient Air Quality Standards

Pollutant	Federal Standard	California Standard
Ozone	0.075 ppm (8-hr avg)	0.09 ppm (1-hr avg) 0.07 ppm (8-hr avg)
Carbon Monoxide	35.0 ppm (1-hr avg) 9.0 ppm (8-hr avg)	20.0 ppm (1-hr avg) 9.0 ppm (8-hr avg)
Nitrogen Dioxide	0.10 ppm (1-hr avg) 0.053 ppm (annual avg)	0.18 ppm (1-hr avg) 0.030 ppm (annual avg)
Sulfur Dioxide	0.075 ppm (1-hr avg) 0.14 ppm (24-hr avg)	0.25 ppm (1-hr avg) 0.04 ppm (24-hr avg)
Lead	1.5 $\mu g/m^3$ (calendar quarter)	0.15 $\mu g/m^3$ (3-month avg)
Particulate Matter (PM_{10})	150 $\mu g/m^3$ (24-hr avg)	50 $\mu g/m^3$ (24-hr avg) 20 $\mu g/m^3$ (annual avg)
Particulate Matter ($PM_{2.5}$)	35 $\mu g/m^3$ (24-hr avg) 12 $\mu g/m^3$ (annual avg)	12 $\mu g/m^3$ (annual avg)

ppm= parts per million
$\mu g/m^3$ = micrograms per cubic meter
Source: California Air Resources Board, www.arb.ca.gov/research/aaqs/aaqs2.pdf, *May 4, 2016*

The project site is located within the San Francisco Bay Area Air Basin (the Basin), which is under the jurisdiction of the Bay Area Air Quality Management District (BAAQMD). As the

local air quality management agency, the BAAQMD is required to monitor air pollutant levels to ensure that state and federal air quality standards are met and, if they are not met, to develop strategies to meet the standards.

Depending on whether the standards are met or exceeded, the air basin is classified as being in "attainment" or "nonattainment." The SFBAAB is in nonattainment for both the federal and state standards for ozone, as well as the state standard for particulate matter (PM_{10} and $PM_{2.5}$) and the federal standard for 24 hour $PM_{2.5}$. The BAAQMD has adopted the 2017 Bay Area Clean Air Plan (CAP) that provides a strategy for the attainment of state and federal air quality standards. To comply with the California Clean Air Act, the BAAQMD and its cooperating partners adopted the Bay Area 2010 CAP. The BAAQMD has made updates to the 2010 CAP and included those updates in the 2017 CAP.

On March 5, 2012 the Alameda County Superior Court issued a judgment finding that the BAAQMD had failed to comply with CEQA when it adopted the thresholds contained in the BAAQMD's 2010 Updated CEQA Guidelines. In August 2013, the First District Court of Appeal overturned the trial court and held that the thresholds of significance adopted by the BAAQMD were not subject to CEQA review. The California Supreme Court granted review of the Court of Appeal decision limited to the question whether CEQA encompasses impacts of the environment on the project. On December 17, 2015, the court issued its opinion, concluding that that, subject to certain enumerated statutory exceptions, agencies subject to CEQA are not required to analyze the impact of existing environmental conditions on a project's future users or residents. The result of this litigation is that BAAQMD's thresholds have been upheld, with the exception of thresholds that seek to evaluate the impact of the environment on the project (unless one of the enumerated exceptions applies). The thresholds have never been ruled inadequate or lacking in evidentiary support.

For the purpose of this analysis, the Trustees of the California State University has determined that the BAAQMD's significance thresholds in the updated May 2017 CEQA Guidelines for project operations within the SFBAAB are the most appropriate thresholds for use to determine air quality impacts of the project. These thresholds are lower than the 1999 BAAQMD thresholds, and thus use of the thresholds in the May 2017 CEQA Guidelines is more conservative. Therefore, these thresholds are considered reasonable for use in this IS-MND. The project would result in a significant impact if operational emissions would exceed any of the following thresholds:

- *54 pounds per day or 10 tons per year of ROG*
- *54 pounds per day or 10 tons per year of NO_x*
- *82 pounds per day or 15 tons per year of PM_{10}*
- *54 pounds per day or 10 pounds per year of $PM_{2.5}$*

The following significance thresholds for construction emissions within the SFBAAB are also based on the BAAQMD May 2017 CEQA Guidelines:

- *54 pounds per day of ROG*
- *54 pounds per day of NO_x*
- *82 pounds per day of PM_{10} (exhaust only)*
- *54 pounds per day of $PM_{2.5}$ (exhaust only)*

According to the *BAAQMD CEQA Guidelines* (May 2017), localized CO concentrations are often associated with heavy traffic congestion, which most frequently occur at signalized intersections of high-volume roadways. The proposed project would not permanently impact any roadways or generate any permanent increases in traffic and would therefore not contribute to localized CO concentrations on roadways.

Certain population groups are considered more sensitive to air pollution than others. Sensitive population groups include children, the elderly, the acutely ill, and the chronically ill, especially those with cardio-respiratory diseases. Residential uses are also considered sensitive to air pollution because residents (including children and the elderly) tend to be at home for extended periods of time, resulting in sustained exposure to any pollutants present. The nearest sensitive receptors would be the off-campus Colonnade Apartments, approximately 300 feet to the west of the project site.

Project emissions for both construction and operation of the project were modeled using the CalEEMod air quality modeling program (version 2016.3.1), based on the total square footage of the proposed project. Since the project would not result in a substantial change in overall vehicle trips to and from campus (refer to checklist items b. through d., below, for additional discussion), the estimate of operational emissions is primarily related to energy use.

Discussion of Checklist Questions

a. The ISB is intended to house laboratories, faculty offices, and interdisciplinary spaces. It would replace existing facilities and would generate an estimated 294 new full time equivalent students (FTES). The project would generate approximately 500 vehicle trips to and from campus on weekdays and approximately 380 vehicle trips on to and from campus on Saturdays, which would not be considered a substantial increase (refer to *Transportation/Traffic)*. The relocation of the Associated Student House and underground utility corridor would also serve the existing SJSU population. Therefore, the proposed project would not conflict with or prevent attainment of the BAAQMD's existing CAP (2017). Impacts would be **less than significant.**

b-d. An evaluation of both short-term and long-term air pollutant emissions is provided in the paragraphs below.

Construction Impacts

Project construction would generate temporary air pollutant emissions. These impacts are associated with fugitive dust (PM_{10} and $PM_{2.5}$) and exhaust emissions from heavy construction vehicles, in addition to reactive organic gases (ROG) that would be released during the drying phase upon application of architectural coatings. Construction would generally consist of site preparation, grading, construction of the proposed building, paving, and architectural coating, as well as trenching activities associated with the utility infrastructure and relocation of the Associated Student House. PM_{10} emitted during construction activities varies greatly, depending on the level of activity, the specific operations taking place, the equipment being operated, local soils, and weather conditions.

The construction phase would begin in June 2019 and conclude in December 2021. This analysis assumes site preparation and grading activities would occur over approximately two months, from mid-June 2019 to mid-August 2019, and would include excavation for the building basement. The Associated Student House relocation would occur over two weeks at the beginning of the construction phase in June 2019. Calculation of emissions from the Associated Student House relocation in CalEEMod assume that two cranes would be used for the duration of the activity to account for the typical use of hydraulic caddies to relocate buildings. Construction would include the utility trenching which is included in the CalEEMod calculations. The CalEEMod calculations are available in Appendix A.

Table 2 summarizes the estimated maximum daily construction emissions of ROG, NO_X, CO, PM_{10}, and $PM_{2.5}$ relative to the significance thresholds. As shown in Table 2, construction emissions would not exceed the established thresholds for ROG and NO_x.

Table 2
Estimated Construction Maximum Daily Air Pollutant Emissions (lbs/day)

Construction Year	Maximum Emissions (lbs/day)				
	ROG	**NO_X**	**CO**	**PM_{10}**	**$PM_{2.5}$**
2019	3.2	37.4	19.0	4.1	2.3
2020	2.5	19.1	16.5	1.8	1.1
2021	20.3	17.5	15.9	1.7	0.9
Maximum total lbs/day	**20.3**	**37.4**	**19.0**	**4.1**	**2.3**
Threshold	*54*	*54*	*None*	*82 (exhaust only)*	*54 (exhaust only)*
Threshold Exceeded?	***No***	***No***	***No***	***No***	***No***

Notes: All calculations were made using CalEEMod winter mitigated construction emissions data, which is generally higher than summer mitigated construction emissions data. See Appendix A for calculations. Site Preparation, Grading, Paving, Building Construction and Architectural Coating totals include worker trips, construction vehicle emissions and fugitive dust.

** Site Preparation and Grading phases includes adherence to the conditions listed above that are required by BAAQMD to reduce fugitive dust.*

For all proposed projects, BAAQMD recommends implementing all the *Basic Construction Mitigation Measures,* listed in Table 8-2 of the *BAAQMD CEQA Air Quality Guidelines,* to meet the best management practices threshold for fugitive dust, whether or not construction-related emissions exceed applicable thresholds. Compliance with the BAAQMD standard dust control measures outlined below would reduce construction-related air quality impacts, and these measures are incorporated, as feasible, into the calculations. With incorporation of the BAAQMD standard dust control measures, air quality impacts during construction would be less than significant.

Construction Dust Control Measures

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;*

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 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 visible emissions evaluator; and*

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.*

Operational Impacts

The project would result in the addition of 294 full time equivalent students (FTES). The proposed ISB would primarily meet the needs of the existing student, faculty, and staff population at SJSU, but would generate a net increase in instructional space, thus allowing for a slight increase in FTES. The new building would house laboratories, faculty offices, and interdisciplinary spaces. The project would replace the existing Science 1 building and accommodate functions currently housed in Duncan Hall. Due to the increase in student population, operation of the proposed facilities would result in additional vehicle trips and associated emissions.

Table 3 summarizes projected emissions associated with operation of the proposed building. Project-related operational air pollutant emissions would be due to vehicle trips associated with the increase in FTES, energy use (natural gas), and long-term, low-level architectural coating emissions as the proposed structures are repainted over the life of the project (area sources). The proposed project would aim to obtain a minimum of LEED Silver certification or equivalent. In order to present a reasonable worst-case scenario, the energy efficient reductions that the proposed project would implement were not accounted for in the emissions modeling. However, because CalEEMod version 2016.3.1

uses 2008 Title 24 standards, a 25% exceedance of Title 24 standards was assumed in the emissions modeling to account for compliance with 2013 Title 24 (Sacramento Metropolitan Air Quality Management District 2015). As such, the emissions estimates provided in Table 3 are conservative estimates for energy emissions. Emissions calculations also take into consideration water conservation efforts proposed for the project such as the use of reclaimed water for landscaping water use as well as water used in toilets and urinals. This analysis assumes that toilets account for 10% of indoor water use (Laporte 2005).

Table 3
Project Operational Emissions (lbs/day)

Emission Source	ROG	NO_x	CO	PM_{10}	$PM_{2.5}$
Area (Consumer Products and Architectural Coating)	5.2	<0.1	<0.1	<0.1	<0.1
Energy (Natural Gas)	0.1	1.1	1.0	0.1	0.1
Mobile (Vehicle Trips)	0.8	4.2	10.1	2.8	0.8
Total Emissions	**6.2**	**5.3**	**11.1**	**2.8**	**0.8**
Threshold	*54*	*54*	*None*	*82*	*54*
Threshold Exceeded?	***No***	***No***	***No***	***No***	***No***

Notes: All calculations were made using CalEEMod winter mitigated operational emissions data. See Appendix A for calculations.

Operational emissions from the project would be relatively low, as shown in Table 3. In addition, the proposed project would result in a less than significant impact to localized CO concentrations as it would not result in a substantial increase in traffic volumes beyond existing conditions or degrade acceptable levels of service for surrounding roadways.

Overall emissions would not exceed the BAAQMD thresholds for any criteria pollutant (see Table 2). Consequently, the project's regional air quality impacts would be **less than significant**.

e. Odors are typically associated with industrial projects involving the use of chemicals, solvents, petroleum products, and other strong-smelling elements used in manufacturing processes, as well as sewage treatment facilities and landfills. As a proposed science building, the proposed project may involve the use of small quantities solvents and reagents associated with chemistry and biology classes. However, the quantities would not be sizeable enough to create a substantial odor outside the building. Further, academic facilities are not listed on Table 3-3 of the May 2017 BAAQMD CEQA Guidelines as uses that should be screened for the generation of odors. Therefore, the proposed project would not generate objectionable odors affecting a substantial number of people. **A less than significant impact** would result.

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

a-c. The proposed ISB building would be located in the southwest quadrant of the SJSU campus. The project site lies within the urban core of the City of San Jose in an area that has already been disturbed from its natural state and the proposed project would not significantly affect biological resources. A review of the Biogeographic Information and Observation System (BIOS) and the U.S. Fish and Wildlife Service (USFWS) Critical Habitat Portal indicates that no listed species are known to be located or anticipated to be found in this area. No riparian or other sensitive resource habitat is present within the Main SJSU Campus. A review of the USFWS National Wetlands Inventory indicates that no federally protected wetlands are present within the vicinity of the SJSU Campus. **No impact** would result with respect to these issues.

d. The project site is not located within any wildlife movement corridors or native wildlife nursery sites. Therefore, implementation of the proposed project would not result in any impacts in this regard.

The site contains an existing botanical garden, which is identified as Botanical/Arboretum within SJSU's 2013 Landscape Master Plan. This garden, which is planted with a variety of

native plant species, would be removed as a result of the proposed project. This removal of the botanic, native plant garden is not anticipated to result in significant impacts on habitat. The botanical garden is planted and does not comprise a native or sensitive habitat for special status species. In addition, a new botanical garden would be placed elsewhere on the site, and is anticipated to be similar in size if not larger than the current botanical garden.

There are approximately 29 trees on the project site that would be removed by the proposed project. In addition, several mature trees are located in close proximity to the site, which could be indirectly impacted by construction activities. Removed trees would be replanted elsewhere on campus at a 2:1 ratio. Regardless, construction of the project may cause significant impacts to migratory birds. This impact would be **potentially significant unless mitigation is incorporated**. Implementation of mitigation measure BIO-1 and BIO-2 would reduce the potential impacts to native bird habitat and migratory pathways possibly provided by trees affected by this project to a less than significant level.

e. Development of the proposed project would require the removal of approximately 29 trees. As described above, trees would be replaced at a 2:1 ratio elsewhere on campus. Neither California State University (CSU) nor SJSU have a tree protection and replacement ordinance or policy. Therefore, the project would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. **No impact** would result**.**

f. The City of San Jose has entered into a regional partnership with five Local Partners (the cities of Gilroy, Morgan Hill, County of Santa Clara, the Santa Clara Valley Transportation Authority, and the Santa Clara Valley Water District) and two Wildlife Agencies (the U.S. Fish and Wildlife Service, and California Department of Fish and Game) to develop Habitat Conservation Plan and Natural Communities Conservation Plan for Santa Clara Valley. The Final Santa Clara Valley Habitat Plan (HP) was released in August 2012. In January 2013, the Plan was adopted by the City of San Jose.

Although the HP would not directly apply to SJSU lands, much of the HP, as discussed in the San Jose 2040 General Plan, focuses on urban development being contained within urban areas, a goal with which the proposed project is aligned.

The HP requires that projects avoid direct impacts on legally protected plant and wildlife species; the proposed project has no direct impacts on protected species other than those discussed above regarding native/breeding native birds. Impacts would be **less than significant**.

Mitigation Measures

BIO-1 **Native/Breeding Native Bird Protection.** To avoid impacts to nesting birds, including birds protected under the Migratory Bird Treaty Act, all initial ground disturbing activities including tree removal should be limited to the time period between August 16 and January 31 (i.e., outside the nesting season) if feasible. If initial site disturbance, grading, and

vegetation removal cannot be conducted during this time period, a pre-construction survey for active nests within the project site shall be conducted by a qualified biologist at the site no more than two weeks prior to any construction activities. If an active bird nest is located, the nest site shall be fenced at a distance commensurate with the particular species and in consultation with the California Department of Fish and Wildlife (CDFW) until juveniles have fledged and when there is no evidence of a second attempt at nesting. Limits of construction to avoid a nest should be established in the field with flagging and stakes or construction fencing. Construction personnel shall be instructed on the sensitivity of the area. The project proponent shall record the results of the recommended protective measures described above to document compliance with applicable state and federal laws pertaining to protection of native birds.

BIO-2 **Tree Protection.** Existing trees on and adjacent to the project site shall be avoided through setbacks and installation of protective fencing to the extent feasible during demolition and construction. All fencing must be installed prior to the beginning of construction activities.

Significance After Mitigation. Implementation of the above mitigation measure would reduce impacts to the native bird habitat provided by specific trees to a **less than significant** level.

Cultural Resources - Would the project:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?		X		
b) Cause a substantial adverse change in the significance of an archaeological resource as defined in §15064.5?		X		
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?			X	
d) Disturb any human remains, including those interred outside of formal cemeteries?		X		

This analysis is based on the Cultural Resources Study conducted for the project (refer to Appendix B.1). On July 29, 2016, Rincon requested a search of the California Historical Resources Information System (CHRIS) at the Northwest Information Center (NWIC) located at Sonoma State University. The search was conducted to identify any previously recorded cultural resources and previously conducted cultural resources studies within the project site and a 0.5-mile radius around it. The CHRIS search included a review of the National Register of Historic Places, the California Register of Historical Resources, the California Points of Historical Interest list, the California Historical Landmarks list, the Archaeological Determinations of Eligibility list, and the California State Historic Resources Inventory list. The

records search also included a review of all available historic USGS 7.5- and 15-minute quadrangle maps.

No previously recorded archaeological resources were identified within the project area. The NWIC records search identified four previously recorded cultural resources within a 0.25-mile radius of the project area. In addition, the NWIC also provided the records for three sites located outside of the 0.25-mile buffer that were identified by campus personnel on behalf of the Muwekma Tribal Administration, in conjunction with Native American scoping (see Section 4.2). The CHRIS records search also identified three previously conducted cultural resources studies within the project area, and thirty-five additional previously conducted cultural resources studies within a 0.25-mile radius of the project area. Details regarding these previous studies are provided in Appendix B.1.

a. A *historical resource* is a resource listed in or determined to be eligible for listing in the California Register of Historical Resources (CRHR) (Section 21084.1), a resource included in a local register of historical resources (Section 15064.5[a][2]), or any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant (Section 15064.5[a][3]).

PRC Section 5024.1, Section 15064.5 of the CEQA Guidelines, and PRC Sections 21083.2 and 21084.1 were used as the basic guidelines for this evaluation. PRC Section 5024.1 requires an evaluation of historical resources to determine their eligibility for listing in the CRHR. The purpose of the register is to maintain listings of the state's historical resources and to indicate which properties are to be protected from substantial adverse change. The criteria for listing resources in the CRHR were expressly developed to be in accordance with previously established criteria developed for listing in the NRHP, enumerated below.

According to PRC Section 5024.1(c)(1–4), a resource is considered *historically significant* if it: 1) retains substantial integrity, and 2) meets at least one of the following California Register criteria.

1. It is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.

2. It is associated with the lives of persons important in our past.

3. It embodies the distinctive characteristics of a type, period, region or method of installation, or represents the work of an important creative individual, or possesses high artistic values.

4. It has yielded or may be likely to yield information important in prehistory or history.

Impacts to significant cultural resources that affect the characteristics of any resource that qualify it for the NRHP or adversely alter the significance of a resource listed in or eligible for listing in the CRHR are considered a significant effect on the environment. These impacts could result from 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 (CEQA Guidelines, Section 15064.5 [b][1], 2000). Material impairment is defined as

demolition or alteration in an adverse manner [of] those characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for inclusion in, the California Register… (CEQA Guidelines, Section 15064.5[b][2][A]).

On August 11, 2016, a Rincon Consultants Architectural Historian conducted an intensive-level cultural resources survey of the project area. Archival research regarding the project site was completed in August 2016. The project site contains one building; the Scheller (Associated Students) House, which is a former single-family residence that has been converted to offices. Constructed in 1904, it was designed as a Colonial Revival style home and is two stories in height.

The subject building was found eligible for the California Register of Historical Resources (CRHR) in the San Jose State University Historic Resources Survey completed in 2005. It was not found to be a contributor to a CRHR-eligible district nor eligible for the National Register of Historic Places.

The current evaluation corroborated that the Scheller (Associated Students) House continues to be eligible for listing in the California Register of Historical Resources under Criterion 2 for its associations with Victor Scheller, as well as under Criterion 3 as a good example of a California Colonial Revival residence designed by noted local architect Theodore Lenzen, who can be considered a master architect at the local level. It is therefore considered a historical resource in accordance with CEQA. The subject building's period of significance is 1904-1915, coinciding with its construction and Scheller's occupancy of the house. The residence features many character-defining features of its style such as its semi-circular tower; asymmetrical massing and floor plan; shiplap siding; wrap-around porch; hipped roof with dormers; wide boxed eaves with exposed rafter tails; modillions, dentils, classical frieze; rounded columns; spindle-post balustrade; bay windows; double-hung wood windows; and art glass window.

While eligible for the CRHR, the subject building was previously relocated and reoriented in 2000 from its relocation approximately 80 feet to the west, and has been absorbed into the campus of San Jose State University. As a result of these changes, its integrity of location, setting, feeling and association has diminished so that it does not meet eligibility standards for the National Register of Historic Places under any of the significance criteria (A-D). The California Office of Historic Preservation recognizes that properties that no longer retain sufficient integrity for NRHP listing may still be eligible for the CRHR (California Office of Historic Preservation 2001). In consideration of this guidance, the historic structure remains eligible for CRHR listing because it retains many of its character-defining features as defined above.

Relocation of an historical resource may constitute an adverse impact to the resource. However, in situations where relocation is the only feasible alternative to demolition, relocation may mitigate the impact below a level of significance provided that the new location is compatible with the original character and use of the historical resource and the resource retains its eligibility for listing on the California Register (14 CCR Section 4852(d)(1)).

In May 2017, a Historical Resource Relocation Feasibility Study was completed to determine the feasibility of relocating the Scheller (Associated Students) House from its current location to a

proposed Receiver Site on the SJSU campus across from the Student Union building and adjacent to South 10th Street to the east. The purpose of the study was to provide SJSU with substantial environmental and technological evidence that can be used to assess the feasibility of relocating and restoring the historic structure. Methods of the study included background research, client meetings, a field survey, and a relocation analysis. The study was divided into four sections: Existing Conditions; Historic Context and Character Analysis; Relocation Analysis; and Proposed Receiver Site Analysis, including a preliminary cost estimate. The building was found to be in good overall condition and the study provided recommendations for completing a successful relocation to the proposed receiver site.

The historic residence was moved to its current location in 2000 and no longer retains integrity of location as a result. Integrity of setting has also been affected due to the extensive growth and development of the surrounding SJSU campus. Nonetheless, the building retains sufficient integrity of design, materials, workmanship, feeling, and association, to convey its significance as a property directly associated with Victor Scheller and as a good example of California Colonial Revival style architecture designed by notable local architect Theodore Lenzen. The physical features that convey this significance are embodied primarily in the building itself and less its setting or location.

Because the property no longer retains integrity of location and setting, these aspects are not considered a character-defining feature and the building could be moved to a new location where it would still be able to convey its historic significance.

Relocating the Scheller (Associated Students) House to the proposed receiver site within the SJSU campus would allow the building to retain integrity of association and avoid the material impairment of the physical characteristics that convey its historical significance. According to the Historical Resource Relocation Feasibility Study, the historic structure is in good overall condition and it is physically feasible to relocate the building. Implementation of the relocation plan that follows the recommendations presented in the Historical Resource Relocation Feasibility Study (Appendix B) would not result in the loss or negative impact of the historic structure's character-defining features and would ensure that the potential impacts generated by the project would be reduced to a less-than-significant level. Potential impacts to the historic structure would be **potentially significant unless mitigation is incorporated**.

b,d. The proposed project involves the construction of new science building on a currently disturbed infill site located on the SJSU main campus. The surface of the project site has been previously graded, disturbed, and developed and no archaeological resources are known to have been discovered within the project site. Thus, no archaeological survey was warranted.

Archival research indicates that the project vicinity is moderately to highly sensitive for buried archaeological resources. Four previously recorded resources are located within 0.25 mile of the project: CA-SCL-39H, CA-SCL-563H, CA-SCL-894H, and CA-SCL-948. Two of these yielded intact buried archaeological deposits: CA-SCL-948, a Native American burial; and CA-SCL-563H, three historic trash pits. The remaining two are historic in age, and may potentially have buried archaeological deposits associated with them: CA-SCL-39H, the original Plaza de San Jose de Guadalupe which was established in 1777; and CA-SCL-894H, the Fox California Theater which was built in 1927. In addition, three previously recorded archaeological resources located within approximately 1 mile of the project site are known to have included intact,

buried cultural deposits, including Native American burials: CA-SCL-4/H, CA-SCL-128, and CA-SCL-690. The prehistoric component of CA-SCL-4/H consists of a Native American village site with an unknown number of burials, which was reportedly identified up to 10 feet below the ground surface. Site CA-SCL-128, located within 0.5 mile of the project, is a Native American burial ground with 57 burials and other cultural materials. Site CA-SCL-690 is also a Native American burial ground with 125 burials.

Although the project site has been previously developed and disturbed and no known archaeological resources have been recorded within the project boundary, the level of previous disturbance is unknown. In addition, numerous sites in the vicinity have yielded intact, buried deposits, including a large village site with Native American burials (CA-SCL-4/H) and multiple other Native American burials (CA-SCL-128, CA-SCL-690, and CA-SCL-948). Further, the village site (CA-SCL-4/H) was buried up to 10 feet below the ground surface. Thus, there is some potential for intact, archaeological deposits present within the project site that could be disturbed by project construction. Impacts would be **potentially significant unless mitigation is incorporated**.

c. The proposed project is located within an area that has already undergone substantial ground disturbance during construction of existing facilities; thus, the likelihood of encountering unknown paleontological or geological resources is unlikely. Thus, the proposed project would result in **less than significant impacts** with respect to paleontological resources.

Mitigation Measures

CUL-1 **Scheller (Associated Students) House Relocation Implementation Plan.** SJSU shall develop a relocation implementation plan in accordance with the recommendations of San Jose State University Associated Students House Relocation, San Jose, California: Feasibility Study and Appendices (included in Appendix B.2). This will be accomplished through coordination with a qualified Historic Preservation Architectural Consultant Team, which will finalize the relocation strategy based on the recommendations of the 2017 feasibility study, coordinate the relocation and provide for subsequent restoration work as required to minimize displacement of the Associated Students staff during the relocation. The Consultant Team shall include architectural historians, preservation architects, structural engineers, the building mover, and other consultants, such as Landscape, Civil and Mechanical, Electrical, and Plumbing Engineering. If necessary, a geotechnical report and civil survey of the Receiver Site shall be completed prior to beginning the relocation work. Should the historic structure be damaged during the relocation the Consultant Team shall ensure that any repairs are consistent with the Secretary's Standards for Rehabilitation.

CUL-2 **Historic Building Documentation**. Impacts resulting from the relocation of the Scheller (Associated Students) House shall be minimized through archival documentation of as-built and as-found condition. Prior to the building's relocation, SJSU shall ensure that documentation of the residence is completed in accordance with the general guidelines of Historic American Building Survey

(HABS) documentation. The documentation shall include high-resolution, digital photographic recordation, a historic narrative report and a compilation of historic research. The documentation shall be completed by a qualified architectural historian or historian who meets the Secretary of the Interior's Professional Qualification Standards for History and/or Architectural History. The original archival-quality documentation shall be offered as donated material to repositories that will make it available for current and future generations. Archival copies of the documentation also shall be submitted to the History|San Jose Library and Archives and the SJSU Special Collection and Archives at the Dr. Martin Luther King Library where it would be available to local researchers.

CUL-3 **Interpretive Display.** A historic preservation professional qualified in accordance with the Secretary of the Interior's Standards shall be selected to prepare an onsite interpretive display to be located at the new location of the building. The interpretive display shall include a brief history of the building and its significance within SJSU and the community. The interpretive plan shall be installed within one year of the building's relocation.

CUL-4 **Retain a Qualified Principal Investigator.** A qualified principal investigator, defined as an archaeologist who meets the Secretary of the Interior's Standards for professional archaeology, shall be retained to carry out all mitigation measures related to archaeological resources (hereafter principal investigator).

CUL-5 **Preconstruction Worker Training.** At the project kickoff and before construction activities begin, the principal investigator or his/her designee will provide training to construction personnel on information regarding regulatory requirements for the protection of cultural resources. As part of this training, construction personnel will be briefed on proper procedures to follow should unanticipated cultural resources discoveries be made during construction. Workers will be provided contact information and protocols to follow in the event that inadvertent discoveries are made. If necessary, the project archaeologist can create a training video, PowerPoint presentation, or printed literature that can be shown to new workers and contractors to avoid continuous training throughout project construction.

CUL-6 **Archaeological Construction Monitoring.** A qualified archaeological monitor will be retained to conduct archaeological monitoring of initial ground disturbing activities within the project site. The archaeological monitor will work under the supervision of the principal investigator. The duration and timing of the monitoring will be determined by the principal investigator. If the principal investigator determines that monitoring is no longer warranted, he or she may recommend that monitoring cease entirely or be reduced to periodic spot-checking. In addition, if the principal investigator determines that an increase in the level of monitoring is warranted, he or she may recommend that monitoring continue beyond initial ground disturbance.

CUL-7 **Procedure for Treatment of Previously Unidentified Cultural Resources.** If previously unidentified cultural resources are encountered during construction,

all work will be halted in the vicinity of the archaeological discovery until a qualified archaeologist can visit the site of discovery and assess the significance of the cultural resource. In the event that any artifact or an unusual amount of bone, or shell is encountered during construction, work will be immediately stopped and relocated to another area. Construction will be stopped within 100 feet of the exposed resource until a qualified archaeologist/ paleontologist can evaluate the find (see 36 CFR 800.11.1 and CCR, Title 14, Section 15064.5[f]). Examples of such cultural materials might include: ground stone tools such as mortars, bowls, pestles, and manos; chipped stone tools such as projectile points or choppers; flakes of stone not consistent with the immediate geology such as obsidian or fused shale; historic trash pits containing bottles and/or ceramics; or structural remains. If the resources are found to be significant, they should be avoided. If avoidance is not feasible, they should be mitigated to less than significant levels. If the resources are determined to be Native American, consultation with tribes may be necessary.

CUL-8 **Procedure for Unanticipated Discovery of Human Remains.** In the event of an unanticipated discovery of any human remains, the steps and procedures specified in Health and Safety Code Section 7050.5, California Environmental Quality Act (CEQA) Section 15064.5(e), and Public Resources Code Section 5097.98 will be implemented. No further excavation or disturbance of the area where the remains are discovered and a 50 foot radius until the coroner is contacted and the appropriate steps taken pursuant to Health and Safety Code §7050.5 and Public Resource Code §5097.98. If the coroner determines the remains to be Native American in origin, the coroner will contact the Native American Heritage Commission (NAHC) within 24 hours. For remains of Native American origin, no further excavation or disturbance will take place in the area where the remains are discovered and a 50 foot radius until the NAHC appointed Most Likely Descendant, the project archaeologist and the CSU SJSU determine a course of action regarding preservation or excavation of Native American human remains. If a Most Likely Descendent cannot be located or does not make a recommendation, the project archaeologist and the CSU SJSU will determine a course of action regarding preservation or excavation of Native American human remains, which will be submitted to the NAHC for review prior to implementation.

Significance After Mitigation. Implementation of the above mitigation measure would reduce impacts to the currently unknown cultural resources to a **less than significant** level.

Geology and Soils – Would the project:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?			X	
ii) Strong seismic ground shaking?			X	
iii) Seismic-related ground failure, including liquefaction?		X		
iv) Landslides?				X
b) Result in substantial soil erosion or the loss of topsoil?		X		
c) Be located on a geologic unit or soil that is unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?		X		
d) Be located on expansive soil, as defined in Table 1-B of the Uniform Building Code (1994), creating substantial risks to life or property?			X	
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?				X

a (i). According to the Official Maps of Earthquake Fault Zones delineated by the California Geological Survey, San Jose East Quadrangle map, the project area is not located within an earthquake fault zone (Alquist-Priolo Special Studies Zones) for surface fault rupture. No active faults are located on the project area or the SJSU campus; therefore, impacts related to surface rupture would be **less than significant**.

a (ii). The closest known fault to the project area, with a mappable surface expression, is the Hayward Fault (Southwest Branch) located approximately four miles northeast of the project site. Other nearby seismic sources include the Evergreen fault, located approximately five miles northeast; the Hayward Fault (Northwest Branch), located approximately six miles northeast; the Calaveras Fault, located approximately eight miles northeast; and the San Andreas Fault, located approximately 12 miles southwest.

The project is located in an area subject to seismic shaking, liquefaction, and expansive soils. New construction in areas with such hazards can expose structures and occupants to geotechnical hazards. However, the CSU Board of Trustees has enacted stringent requirements for structural assessment of seismic performance of buildings within CSU campus locations than the current edition of the California Building Code (CBC 2010) as adopted by the California Building Standards Commission. According to CSU Seismic

Requirements (January 2016), seismic ground parameters are required to be reported for CSU campus locations. This policy applies to all construction activity undertaken by CSU for new and existing buildings, where university operations and activities occur. Adherence to the CSU Seismic Design Parameters and the requirements of the California Building Code would reduce impacts associated with strong seismic ground shaking to a **less than significant** level.

a (iii). The State of California Seismic Hazard Zone Map for the San Jose East Quadrangle (February 7, 2002) shows the project site is located within an area of historic occurrence or potential for liquefaction. The Geotechnical Evaluation Report completed for the ISB (Ninyo & Moore, 2016) also indicates a moderate liquefaction potential. Liquefaction could lead to dynamic settlement during intense seismic events and potentially static settlement in the soft silts and clays if the building loads were to be supported on relatively shallow spread foundations. Risks to the utility improvements component of the project associated with liquefaction would be reduced to a less than significant level through standard engineering practices.

Impacts on the ISB project related to liquefaction would be **potentially significant, but mitigable**. Implementation of Mitigation Measure GEO-1 would be required to reduce impacts to a less than significant level.

a (iv). The project area is not located within a landslide hazard zone as defined by Santa Clara County Geologic Hazards Zones (2012). Furthermore, the project area is not located within any earthquake-induced landslide areas due to the relatively flat condition of the site topography. There would be **no impact** with respect to landslides.

b. Construction of the proposed project would involve grading, trenching, and other ground disturbing activities that could result in soil erosion or loss of top soil. This is a **potentially significant but mitigable** impact. Implementation of Mitigation Measure GEO-1 would be required to reduce impacts to a less than significant level.

c. Based on the Santa Clara County Geologic Hazards Zones (2012), Geotechnical Evaluation Report (Ninyo & Moore, 2016), and the topography of the project area and immediate vicinity, the project area is not in a landslide hazard zone. However, the project area is within a State of California-defined Liquefaction Hazard Zone. In addition, subsidence could occur if the ISB was built on low-strength unconsolidated foundation materials, two different types of foundation materials, tectonic movement, hydro-compaction, oxidation or dewatering of organic-rich soil materials, and withdrawal of subsurface fluids. Although subsidence generally occurs slowly enough that its effects are not dangerous to inhabitants, it can cause significant building damage over time. Portions of the project site that contain loose or uncontrolled (non-engineered) fill may be susceptible to subsidence. Therefore, Impacts to soil stability would be **potentially significant, but mitigable**. Implementation of Mitigation Measure GEO-1 would be required to reduce impacts to a less than significant level.

Seismically induced lateral spreading involves primarily lateral movement of earth materials due to ground shaking. It differs from slope failure in that complete ground failure involving

large movement does not occur due to the relatively smaller gradient of the initial ground surface. Lateral spreading is demonstrated by near-vertical cracks with predominantly horizontal movement of the soil mass involved. The topography of the project area and in the immediate vicinity of the area is flat. The Geotechnical Evaluation Report described the ground conditions of the ISB site to be level and liquefiable soil encountered to be relatively thin and discontinuous. Therefore, the potential for lateral spreading at the proposed project area is considered relatively low. Impacts related to liquefaction, subsidence, or collapse would be **potentially significant but mitigable** for the ISB project**.**

d. According to the site-specific Geotechnical Evaluation (Ninyo & Moore, 2016), soil of the project site has a low expansion characteristic. Typical engineering controls, including compliance with the CBC, would ensure the safety of structures and inhabitants. Impacts related to expansive soils would be **less than significant.**

e. The project does not propose to utilize septic tanks or septic systems. The proposed ISB would be connected to the City of San Jose sewer system via a new sewer line, which is included in this project and would replace the existing sewer line on the site. **No impacts** pertaining to septic systems would occur.

Mitigation Measure.

GEO-1 **ISB Geotechnical Measures.** Grading, foundation design, and construction of the proposed ISB shall comply with recommendations in the site specific Geotechnical Evaluation by Ninyo & Moore (2016), including but not limited to: materials to be used, moistening of subgrade, fill placement and compaction, stabilization of excavations, dewatering, utilities, seismic design, avoidance of site drainage, as well as all applicable earthwork recommendations. The measures are described in more detail in the Geotechnical Evaluation (2016) in Appendix C.

Significance After Mitigation. Compliance with the recommendations provided by the Geotechnical Evaluation Report (Ninyo & Moore, 2016) would reduce geologic impacts pertaining to subsidence, collapse, liquefaction, and expansive soils to the extent feasible. It is acknowledged that seismic hazards cannot be completely eliminated even with site specific geotechnical investigation and advanced building practices described above. However, exposure to seismic hazards is a generally accepted part of living in the San Francisco Bay Area and the building and design practices described above reduces the potential hazards associated with seismic activity to a less than significant level.

Greenhouse Gas Emissions - Would the project:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			X	
b) Conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			X	

Local Regulations and CEQA Requirements

Pursuant to the requirements of SB 97, the Resources Agency adopted amendments to the *CEQA Guidelines* for the feasible mitigation of GHG emissions and analysis of the effects of GHG emissions. The adopted *CEQA Guidelines* provide regulatory guidance on the analysis and mitigation of GHG emissions in CEQA documents, while giving lead agencies the discretion to set quantitative or qualitative thresholds for the assessment and mitigation of GHGs and climate change impacts. The BAAQMD adopted significance thresholds for GHGs in June 2010, which considers operational emissions of over 1,100 metric tons (MT) carbon dioxide equivalent (CO_2e)/year to be significant. As discussed under *Air Quality* above, on March 5, 2012, the Alameda County Superior Court issued a judgment finding that the BAAQMD had failed to comply with CEQA when it adopted the air quality and greenhouse gas emissions thresholds contained in the BAAQMD's Draft CEQA Guidelines (BAAQMD, May 2010). The court did not determine whether the thresholds were valid on the merits, but found that the adoption of the thresholds was a project under CEQA and therefore determined that the BAAQMD was required to do CEQA analysis on the thresholds. On August 13, 2013, California's First District Court of Appeal determined that the adoption of air quality and greenhouse gas thresholds was not a project under CEQA and that BAAQMD's adoption of these numeric thresholds was not a failure to comply with CEQA. Furthermore, the Court of Appeal ruled that the thresholds were not invalid based on the merits. However, BAAQMD has not reinstated its thresholds as of August 2016. Therefore, in light of the most recent court's order, lead agencies need to determine appropriate air quality and GHG thresholds of significance based on substantial evidence in the record.

In the absence of other local GHG thresholds of significance, for this analysis, the proposed project is evaluated based on the project-level threshold of 1,100 MT of CO_{2e}/year. This threshold was adopted by the BAAQMD as a quantitative GHG emissions threshold for project-level analysis (BAAQMD, 2010). Other air pollution control districts have also adopted similar thresholds. For example, the San Luis Obispo County Air Pollution Control District (SLOAPCD) has adopted a project-level threshold of 1,150 MT of CO_2e/year (SLOAPCD, 2012). As such, the threshold of 1,100 MT of CO_2e/year was considered the most reasonable for use in this IS-MND.

Assembly Bill (AB) 32, signed in September 2006, requires the State's global warming emissions to be reduced to 1990 levels by 2020. After completing a comprehensive review and update process, the ARB-approved a 1990 statewide GHG level and 2020 limit of 427 MMT CO_{2e} (California Air Resources Board, 2007).

In 2005, the BAAQMD initiated a Climate Protection Program. On June 1, 2005, the Air District Board of Directors adopted a resolution establishing a Climate Protection Program and acknowledging the link between climate protection and programs to reduce air pollution in the Bay Area. On March 25, 2014, the Board of Directors of the BAAQMD adopted the 10-Point Climate Action Work Program which includes policy approaches and a technical program focused on reducing GHG emissions.

Discussion of Checklist Questions

a. The proposed project would result in an increase of 294 FTES within the College of Science. This student generation would be below the BAAQMD's operational GHG screening size of 320 students for University/college uses. As described in the BAAQMD CEQA Guidelines (2010), projects below the applicable screening criteria would not exceed the 1,100 MT of CO_2e/yr GHG threshold of significance. As such, impacts resulting from operational GHG emissions would be **less than significant**.

b. CalEPA's Climate Action Team (CAT) published the 2006 CAT Report which includes GHG emissions reduction strategies intended for projects emitting less than 10,000 tons CO_2e/year. In addition, the California Attorney General's Office has developed Global Warming Measures (2008) and OPR's CEQA and Climate Change (CAPCOA, 2008) document includes greenhouse gas reduction measures intended to reduce GHG emissions in order to achieve statewide emissions reduction goals. All of these measures aim to curb the GHG emissions through suggestions pertaining to land use, transportation, renewable energy, and energy efficiency. Several of these actions are already required by California regulations, such as:

    - AB 1493 (Pavley) requires the state to develop and adopt regulations that achieve the maximum feasible and cost-effective reduction of climate change emissions emitted by passenger vehicles and light duty trucks.
    - In 2004, ARB adopted a measure to limit diesel-fueled commercial motor vehicle idling.
    - The Integrated Waste Management Act of 1989, (AB 939, Sher, Chapter 1095, Statutes of 1989) established a 50% waste diversion mandate for California.
    - Public Resources Code 25402 authorizes the CEC to adopt and periodically update its building energy efficiency standards (that apply to newly constructed buildings and additions to and alterations to existing buildings).
    - California's Renewable Portfolio Standard (RPS), established in 2002, requires that all load serving entities achieve a goal of 33%of retail electricity sales from renewable energy sources by 2020, within certain cost constraints.
    - Green Building Executive Order, S-20-04 (CA 2004), sets a goal of reducing energy use in public and private buildings by 20%by the year 2015, as compared with 2003 levels.

    The project is pursuing a LEED Silver certification. Therefore, the project would be consistent with State and local regulations intended to reduce GHG emissions from new development. Consistency with these State regulations and goals illustrates that the project would not conflict with the State's greenhouse gas-related legislation and would not contribute to the inability to meet reduction goals. Impacts would be **less than significant**.

Hazards and Hazardous Materials - Would the project:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			X	
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?			X	
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 1/4-mile of an existing or proposed school?			X	
d) Be located on a site which is included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?			X	
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?				X
f) For a project in the vicinity of a municipal airstrip, would the project result in a safety hazard for people residing or working in the area?				X
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				X
h) Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?				X

Environmental Records Source Review

Review of environmental records included a database search from Environmental Data Resources, Inc. (EDR), and the online GeoTracker and EnviroStor databases maintained by the State Water Resources Control Board and Department of Toxic Substances Control, respectively. A report summarizing the environmental records review is included in Appendix D.

Off-Site Contamination

Nearby Properties Located within a One-Quarter Mile Radius of the Project site

Twenty nearby properties with environmental listings are reported to be present within one-quarter mile of the project site. Nineteen of these listings are closed cases and are therefore not expected to impact the project site.

The remaining listing is an open leaking underground storage tank (LUST) case located at the Spartan Gas Station, 498 South 4th Street, approximately 1,050 feet southwest of the project site. This case is currently being assessed for a low-risk case closure of a TPHg plume with MTBE that has been detected up-gradient to the southeast. However, an evaluation of the site, described on the GeoTracker database, explains that groundwater monitoring data has indicated that there is a clear decreasing trend for all petroleum constituents indicating plume stability and substation natural attenuation. Residual contamination from the site poses an insignificant risk to human health (Allterra Environmental, Inc., 2011).

As a result of the recent site evaluation of the former gas station and the distance from the project site, the chemical plume would not be anticipated to result in contamination of groundwater at the project site that would pose a significant risk to human health, and would have no impact on the proposed project.

Properties Located between One-Quarter and One-Half Mile of the Project site

110 nearby properties with environmental listings are reported to be present within one-quarter to one-half mile of the project site. 103 of the 110 properties are closed cases and are therefore not expected to impact the project site.

The remaining eight sites were reviewed to evaluate their potential to impact the subject property, based on the following factors:

- Reported distance of the listing from the project site
- The nature of the database on which the facility is listed, and/or whether the facility was listed on a database reported unauthorized releases of hazardous materials, petroleum products, or hazardous wastes
- Reported case type (e.g., soil only, failed UST test only)
- Reported substance released (e.g., chlorinated solvents, gasoline, metals)
- Reported regulatory agency status (e.g., case closed, "no further action")
- Location of the facility with respect to the reported groundwater flow direction to the north, northeast.

A summary of this evaluation is summarized in Table 4 and further discussed below.

Table 4
EDR Listed Properties Between One-Quarter and One-Half Mile of the Project Site

Property Name and Location	Environmental Category	Approximate Property Distance from Project Site	Reported Case Type	Reported Regulatory Agency Status	Reported Substance Released
Pete's Stop Inc. 447 East William Street	Reported unauthorized release of hazardous substances	0.35 miles	LUST Cleanup Site	Remediation	Benzene, Toluene, Xylene, MTBE/TBA/Other Fuel Oxygenates, Gasoline
Former Texaco Station 598 South First Street	Reported unauthorized release of hazardous substances	0.41 miles	LUST Cleanup Site	Site Assessment	MTBE/TBA/Other Fuel Oxygenates, Gasoline
San Jose Convention Center South Market Street	Discovered unauthorized release of hazardous substances	0.37 miles	Cleanup Program Site	Site Assessment	Solvents, Lead, Gasoline
Heart of the City – Block 3 100 South Second Street	Discovered unauthorized release of hazardous substances	0.32 miles	Cleanup Program Site	Inactive	Petroleum – Automotive gasolines, Solvents, Stoddard solvent, Mineral Spriits, Distillates
San Jose New City Hall 200 East Santa Clara Street	Discovered unauthorized release of hazardous substances	0.37 miles	Cleanup Program Site	Remediation	Other petroleum, Stoddard solvent/Mineral Spirits/Distillates
Art Cleaners – San Jose 400 East Santa Clara Street	Discovered unauthorized release of hazardous substances	0.47 miles	Cleanup Program Site	Site Assessment	Tetrachloro-ethylene (PCE), Gasoline
Dr. Eu Building 35 & 43 Santa Clara Street	Discovered unauthorized release of hazardous substances	0.49 miles	Cleanup Program Site	Site Assessment	Chlorinated Solvents - PCE

Sources: SJSU ISB Building EDR Report, GeoTracker database, and EnviroStor database

Pete's Stop Inc., located at 447 East William Street approximately 2,000 feet to the southeast of the project site is listed as a LUST site and is currently undergoing remediation. The Pete's Stop Inc. site formerly had USTs which had releases of petroleum hydrocarbons that caused soil and groundwater contamination in the immediate vicinity of the former USTs. However, based on a GeoTracker review, the contamination plume from the USTs does not extend to the proposed project site, nor is it expected to reach the proposed site based on groundwater flow direction to the north, northeast. Therefore the site is not expected to impact the project site.

A Former Texaco Station, located at 598 South First Street approximately 2,000 feet to the southwest of the project site is a LUST site and is currently undergoing site assessment. A recent groundwater monitoring report, found on GeoTracker indicates that the groundwater gradient at the site is northeast. The plume, containing petroleum hydrocarbons, from the site has

commingled with a potential off-site source to the south; however, the plume is generally stable or decreasing in overall size and concentration. Therefore, the combination of the groundwater flow downgradient from the project site and decreasing size and concentration of the plume, this site is not expected to impact the project site.

The San Jose Convention Center, located at South Market Street approximately 2,100 feet to the east of the project site, is a cleanup program site that is currently undergoing site assessment. This site is a city block which consisted of multiple parcels and that has been redeveloped into an annex of the San Jose Convention Center. There is groundwater contaminated with gasoline and diesel beneath a portion of the site. Nonetheless, due to the distance between the site and the proposed project site, as well as groundwater flow direction being to the north, northeast, there is not an anticipated impact from the Convention Center site on the proposed project.

Heart of the City – Block 3, located at 100 South Second Street, approximately 1,500 feet to the northwest of the project site, is currently an inactive cleanup program site. The Phase I environmental investigation and remedial actions that included removal of USTs and contaminated soil, has been completed at the site. Sampling of the groundwater for petroleum hydrocarbons, volatile organic compounds, and metals was performed. Low levels of contaminants were found; however, the levels were below the RWQCB Environmental Screening Levels, except for one slight exceedance for chromium. Because of the distance between the site and the proposed project site, there is not an anticipated impact from this site.

San Jose New City Hall, located at 200 East Santa Clara Street, is approximately 2,000 feet to the south of the project site. Remediation involving excavation of the soil was conducted in 2002 when construction of the Civic Plaza Parking Garage took place. The site was a dry cleaning facility that released solvents into the subsurface; however, the dry cleaning facility site's case was closed as of April 1997. Because of the distance from the project site and remediation of the contamination, there is not an anticipated impact from the site.

Art Cleaners – San Jose, located at 400 East Santa Clara Street, is approximately 2,500 feet to the northeast of the project site. It is a cleanup program site that is currently undergoing site assessment. The site is an inactive dry cleaner. Based on a groundwater monitoring report on GeoTracker, the groundwater flow from the site is west, northwest. Based on the location of the site and project site and groundwater flow, away from the project site, the site is not anticipated to impact the project site.

The Dr. Eu Building, located at 35 and 43 Santa Clara Street, approximately 2,400 feet to the northwest of the project site, is a cleanup program site that is currently undergoing site assessment. This site is an historical building in downtown San Jose. It was formerly a hotel that had a dry cleaning facility in the basement. There has been a release of tetrachloroethene (PCE), a solvent used in dry cleaning, to soil and groundwater. However, due to the distance between the site and the proposed project site as well as the location in respect to the groundwater flow, there is not an anticipated impact from this site.

On-site Contamination

The project site was not listed in the hazardous materials records search as having or storing potential hazardous contaminants. However, the address of SJSU is listed within the EDR report as being a Large Quantity Generator (LQG) of hazardous waste. The wastes generated are spent solvents likely from the chemistry department, among others, of the university. There have also been closed cases of LUST Cleanup Sites being on the campus grounds. However, with the case being closed, the potential for contamination is not anticipated.

Discussion of Checklist Questions

a,c. The proposed project would involve the construction of an approximately 215,000 GSF ISB, located on the SJSU main campus. The proposed project may involve the transport, use, or disposal of small quantities of hazardous materials such as solvents and reagents, associated with chemistry and biology classes. However, proper handling, transportation, and disposal in accordance with federal, state, and local laws and regulations would avoid significant exposure and hazards to people and the environment from potential hazardous materials contamination. Impacts would be **less than significant**.

b. Operational use of the proposed project would not emit or handle substantial quantities of hazardous materials. Activities at the facility may involve the use of small amounts of hazardous materials such as solvents and reagents, and could generate small amounts of hazardous waste. Chemicals frequently used for chemistry or biology classes may be handled or transported to the facility for delivery. All chemicals would be stored within containment areas as required per the California Fire Code. Proper handling, transportation, and disposal in accordance with federal, state, and local laws and regulations would limit exposure and hazards to people and the environment from potential hazardous materials contamination. With compliance with these existing regulations, impacts would be **less than significant**.

d. The proposed project is not located on a site which has been included on a list of hazardous material sites. As described above, the project area is located within ½ mile of 130 environmental database listings. However, because of the distance between these listings and the project site, as well as the specific conditions from each of the sites as described above, the listings would not be anticipated to result in contamination of soil or groundwater at the project site. Therefore, impacts would be **less than significant.**

e, f. The project area is located approximately three miles southeast of the Norman Y. Mineta San Jose International Airport, and is outside the safety zones and flight path of the airport (Santa Clara County Airport Land Use Commission 2011). Therefore, significant airport safety hazards are not anticipated. **No impacts** would result.

g. The proposed project would not interfere with any emergency response plan or evacuation route (San Jose State University, Police Department). Currently, the Duncan Hall building evacuation assembly point is on the project site. However, an alternate assembly point – potentially within the open space portions of the developed project site – would be identified. No permanent changes to off-site circulation would occur and the

trenching required for underground utility infrastructure would not be located along an evacuation route. Impacts would be **less than significant**.

h. The SJSU campus is in an urbanized area of the city of San Jose. Therefore, the project is not subject to wildland fire hazards. **No impacts** would result.

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

a, f. The proposed project would involve the construction of a ten-story building located on an infill site in the southwestern quadrant of the SJSU campus, as well as construction of an underground utility corridor between Duncan Hall and the proposed ISB. The campus is already developed, and is surrounded by urbanized areas of the City of San Jose. The San Francisco Bay Regional Water Quality Control Board (RWQCB) is responsible for issuing

construction stormwater permits on behalf of the State Water Resources Control Board (SWRCB). Construction of the ISB would disturb approximately 1.9 acres of land. Therefore, the project would require a National Pollutant Discharge Elimination System (NPDES) Phase 2 Construction General Permit, including preparation of a Storm Water Pollution Prevention Plan (SWPPP) identifying construction Best Management Practices (BMPs). Design and implementation of such a plan, as required, would ensure that the project would not substantially degrade water quality or violate any water quality standards or waste discharge requirements. Impacts would be **less than significant**.

b. The proposed project would not adversely affect groundwater supplies. The overall ratio of developed to open space areas on the SJSU campus would be similar to existing conditions, and would not significantly interfere with groundwater recharge. Impacts would be **less than significant.**

c-e. The proposed project would involve the removal of existing features on the site, including two parking lots, a grass area and botanical garden, and the existing ASH building, which would be relocated. The project would construct a ten-story structure and would incorporate shaded seating, large open lawns, water features, and botanical gardens in the outside areas. Overall, the amount of impervious surface on the site would be expected to be similar under both existing conditions and post-project conditions. In addition, development of the proposed project would not alter the existing drainage pattern or create a significant change in runoff conditions. Impacts would be **less than significant.**

g, h. The proposed project does not involve construction of any housing. It would not place housing in a 100-year flood hazard area as mapped on the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map; therefore, it would not expose people to risks from flooding nor would the building or utilities impede or redirect flood flows. **No impacts** would occur.

i, j. The SJSU campus is not located within a dam inundation area and is not subject to flooding risks from dam failure. According to the Santa Clara County Geologic Hazard Zones Map, the project area is not located within the dike failure hazard zone. The campus is located inland from the coast and is not subject to tsunami hazards, and it is not located near any impounded bodies of water that could present hazards from seiches. **No impacts** would occur.

Land Use and Planning - Would the project:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
a) Physically divide an established community?				X
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?				X
c) Conflict with an applicable habitat conservation plan or natural community conservation plan?				X

a-c. The proposed ISB project would be internal to the SJSU main campus. The proposed ISB is intended to offer laboratories, faculty offices, and interdisciplinary spaces to the student, faculty, and staff population, and would not generate additional on-campus growth that would have the potential to affect adjacent City land uses. The project would not physically divide an established community, nor would it conflict with any land use plans or policies or any habitat conservation plans, the latter of which is described in more detail in the *Biological Resources* section above. **No impacts** would result.

The project conforms to the 2001 Master Plan for SJSU with respect to campus growth. The 2001 Master Plan states that SJSU sits on 88.5 acres in the middle of downtown San Jose. A well-defined open space system organizes the campus and gives it breathing room. To sacrifice this space to development would radically alter the quality and character of the campus. The University cannot build outward, and, internally, there are no vacant sites left. The only way to meet the demand for space is to build up. The proposed project aligns with the campus development need to build up and not out, as it would relocate the Associated Students House and replace it with a ten-story structure. In addition, the project would be located on a site that is currently occupied by other structural development.

Other 2001 Master Plan goals include:

Maintaining Campus Character. The proposed ISB would be compatible with other campus buildings in terms of architectural style. See *Aesthetics* section for further description.

Identifying Logical Sites that Fit Within the Existing Open Space Framework, Yet Offer Replacement Options for Inefficient Campus Facilities. ISB would replace the existing Science 1 building and accommodate functions currently housed in Duncan Hall.

Open Space Framework from 1995 Campus Landscape Master Plan (and subsequent 2013 Landscape Master Plan). The 2001 Master Plan reiterates the University's desire to maintain the 7th, 9th, and San Carlos Street rights-of-way to conserve open space and protect the mall boundaries and widths from encroachment by new buildings. The proposed project would reinforce the boundaries of the mall space and edges along the San Carlos Street Mall.

Mineral Resources - Would the project:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				X
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?				X

a-b. The project area is not currently used or otherwise identified for mineral resource extraction. **No impact** to mineral resources is anticipated.

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

Noise level (or volume) is generally measured in decibels (dB) using the A-weighted sound pressure level (dBA). The A-weighting scale is an adjustment to the actual sound pressure levels to be consistent with that of human hearing response, which is most sensitive to frequencies around 4,000 Hertz (about the highest note on a piano) and less sensitive to low frequencies (below 100 Hertz).

Sound pressure level is measured on a logarithmic scale with the 0 dB level based on the lowest detectable sound pressure level that people can perceive (an audible sound that is

not zero sound pressure level). Based on the logarithmic scale, a doubling of sound energy is equivalent to an increase of 3 dBA, and a sound that is 10 dBA less than the ambient sound level has no effect on ambient noise. Because of the nature of the human ear, a sound must be about 10 dBA greater than the reference sound to be judged as twice as loud. In general, a 3 dBA change in community noise levels is noticeable, while 1-2 dB changes generally are not perceived. Quiet suburban areas typically have noise levels in the range of 40-50 dBA, while arterial streets are in the 50-60+ dBA range. Normal conversational levels are in the 60-65 dBA range, and ambient noise levels greater than 65 dBA can interrupt conversations.

Noise levels typically decrease (or drop off) at a rate of 6 dBA per doubling of the distance from point sources (such as industrial machinery). Noise from lightly traveled roads typically attenuates at a rate of about 4.5 dBA per doubling of distance. Noise from heavily traveled roads typically attenuates at about 3 dBA per doubling of distance. Noise levels may also be reduced by intervening structures; generally, a single row of buildings between the receptor and the noise source reduces the noise level by about 5 dBA, while a solid wall or berm reduces noise levels by 5 to 20 dBA (FTA, 2006).

The land use compatibility guidelines for community noise for the City of San Jose are described in the Envision San Jose 2040 General Plan. Table EC-1 within the general plan explains noise thresholds for schools as 50-60 dBA as normally acceptable, 60-75 dBA as conditionally acceptable, and 75-85 dBA as unacceptable. An ambient noise level survey was completed in 2001 as part of the EIR for the 2001 San Jose State University Campus Master Plan. The levels recorded over a 24-hour period were 66 dBA and 69 dBA. Both measurements fall under the conditionally acceptable ambient noise levels for a school.

a, c. The proposed project would involve the construction of a ten-story building located on the SJSU main campus. The project would also include the relocation of the Associated Students House, vegetation removal, removal of existing surface parking lots, and trenching for the proposed utility corridor. Operation of this facility would not generate any substantial long-term, or permanent, noise levels beyond existing levels. The underground utility infrastructure would not generate any perceivable operational noise. The proposed ISB is intended to replace the existing Science 1 building and provide enhanced services to the existing campus population. The anticipated increase in FTES would generate a relatively minor amount of new vehicle trips, as described under *Transportation/Traffic*. Therefore, the project would not result in substantial traffic-related noise or other operational noise that would result in significant noise level increases. Impacts would be **less than significant**.

b. Equipment used in the ISB, such as chemical fume hoods and scientific instrumentation, would be similar to other science buildings on campus. Any vibration would be localized within the ISB and would be part of an expected environment for this type of use. The utility infrastructure would not generate substantial levels of vibration.

Heavy equipment would be required for site-preparation and construction of the proposed project. Construction vibration sources have a wide range of energy and velocity, as a function of time, transmitted on the ground. The ground motion caused by

vibration is measured as particle velocity in inches per second and, in the U.S., is referenced as vibration decibels (VdB).

The Federal Transit Administration (FTA) has identified vibration impact criteria for sensitive buildings, residences, and institutional land uses near rail transit and railroads. Because construction thresholds are based on single events, they do not apply narrowly to railway operations, but can be used for most construction activities. According to the FTA, groundborne vibration impact criteria for high sensitivity buildings, such as Duncan Hall, a potential university research operation location, is 65 vibration decibels (VdB) for all types of events (frequent, occasional, and infrequent). For residential receptors the criteria is 72 vibration decibels (VdB) for frequent events, 75 VdB for occasional events, and 80 VdB for infrequent events (FTA 2006). As construction would be temporary and infrequent, a threshold of 80 VdB is used for off-site residences.

The nearest noise-sensitive receptors to the project site are the classroom and lab facilities within Duncan Hall, located approximately 150 feet south of the project site; and the off-campus Colonnade Apartments, located approximately 300 feet west of the project site. Over the 32 to 38 months of construction of the proposed ISB, these nearby sensitive receptors would be in use. The proposed ISB is internal to the campus, and existing buildings would help to shield off-campus residences from exposure to excessive noise levels during construction activities; however, the vibration levels that would occur at off-campus residences as a result of the construction activities for the proposed project are also considered.

Table 5 identifies vibration velocity levels for the types of construction equipment that would operate at the project site during construction at a distance of 150 feet (the distance to Duncan Hall classrooms) and 300 feet (the distance to the Colonnade Apartments). Piles would be drilled and cast in concrete, so conventional pile driving equipment, which generate high levels of vibration, would not be used for the proposed project.

Table 5
Vibration Source Levels for Construction Equipment

	Approximate VdB	
Equipment	**150 feet**	**300 feet**
Loaded Trucks	62	53
Jackhammer	55	46
Bulldozer	64	55

Source: Federal Railroad Administration, 2012

As illustrated in Table 5, vibration levels could reach approximately 64 VdB at the nearest classroom and laboratory facilities in Duncan Hall, located approximately 150 feet south of the project site. The nearest off-site residences, located roughly 300 feet to the west of the project site, could experience vibration levels of up to 55 VdB during construction. These vibration levels would not exceed the groundborne vibration threshold level of 65 VdB for Duncan Hall or 80 VdB for the off-site residences. Impacts resulting from temporary construction vibration levels would therefore be **less than significant**.

d. The construction of the proposed ISB would involve the use of heavy construction equipment. Noise levels as a result of project construction activities could impact classroom and laboratory facilities in Duncan Hall, located 150 feet south of the site, as well as at off-campus residences located 300 feet west of the site.

Table 6 demonstrates the typical noise levels associated with heavy construction equipment. As shown therein, noise levels range from 49 to 81 dBA at a distance of 150 feet from the construction site and 43 to 75 dBA at a distance of 300 feet from the construction site (FTA 2006).

Table 6
Typical Noise Levels at Construction Sites

Equipment	Typical Level (dBA)	
	150 Feet	300 Feet
Air Compressor	60	54
Backhoe	59	53
Concrete Mixer	64	58
Crane	74	68
Dozer	81	75
Forklift	58	52
Generator	71	65
Grader	76	70
Paver	68	62
Saw	49	43
Scraper	68	62
Truck	67	61

Source: FTA, May 2006. Noise levels at 150 feet and 300 feet were extrapolated using a 6 dBA attenuation rate for the doubling of distance. Numbers were rounded to the nearest whole number.

Equipment used during construction would include equipment such as: a back hoe, graders, tractors, a crane, forklifts, welders, cement mixers, loaders, rollers, an air compressor during the architectural coating phase, and a paving machine. The primary source of construction noise would be generated during site preparation, grading and building construction. Noise levels typically attenuate (or drop off) at a rate of 6 dB per doubling of distance from point sources such as construction equipment. As previously mentioned, the closest sensitive receptors are located approximately 150 feet south of where proposed construction activities would occur. At this distance, temporary noise generated by construction activities could be as high as 81 dBA. At off-campus residences, located approximately 300 feet west of the site, noise levels could reach up to 75 dBA. Impacts resulting from temporary construction noise would be **significant, but mitigable**. Mitigation Measure N-1 would be required to reduce construction and demolition noise impacts to a less than significant level.

e, f. The project area is located approximately three miles southeast of the Norman Y. Mineta San Jose International Airport, and the proposed project does not involve the development of new noise-sensitive uses. Thus, **no impacts** relating to aircraft noise are anticipated.

Mitigation Measure

NOISE-1 **Construction Noise Reduction.** The following requirements shall be implemented during construction of the project:

- Limit construction activities to between the hours of 7:00 AM and 4:00 PM except for construction activities that do not generate substantial noise.
- To ensure that noise emissions from construction vehicles and other equipment are limited to the minimum feasible levels, equip all noise-producing equipment and vehicles using internal combustion engines with mufflers, and air-inlet silencers where appropriate, that meet or exceed original factory specification. Equip mobile or fixed "package" equipment (e.g., arc-welders, air compressors) with shrouds and noise-control features that are readily available for that type of equipment.
- Install a temporary sound barrier, such as a temporary sound wall panel system or screened fence, around the active construction work area or adjacent housing uses during construction, during operation of heavy construction equipment.
- Stage asphalt/concrete crushing operation and equipment away from residences and adjacent uses that are sensitive to noise and vibration.
- The construction manager/contractor shall act as a noise disturbance coordinator. The noise disturbance coordinator shall be responsible for coordinating construction activities so as to not impact noise-sensitive uses. The noise disturbance coordinator shall also respond to any local complaints about construction noise, determine the cause of the noise complaint, and institute reasonable measures warranted to correct the problem. The telephone number of the noise disturbance coordinator shall be posted at the project site and provided to adjacent neighbors.

Significance after Mitigation. Implementation of the required mitigation measure would reduce noise impacts from construction to a less than significant level.

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

a. The proposed project would not induce population growth in the area or growth in the enrollment numbers for SJSU. The proposed ISB would serve the existing campus community. It would not impact housing availability or demand. Thus, **no impact** relating to population and housing would occur.

b-c. The proposed project consists of construction of a ten-story building; an underground utility corridor; relocation of the Associated Students House; vegetation removal; and removal of existing surface parking lots. All of this construction would be within an infill site located on the SJSU main campus. The ISB facility would house laboratories, faculty offices, and interdisciplinary spaces. The proposed project would not displace any housing or people. Therefore, **no impact** to population or housing would occur.

Public Services - Would the project:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
a) Fire protection?			X	
b) Police protection?			X	
c) Schools?				X
d) Other public facilities?				X

a. The City of San Jose Fire Department (SJFD) provides emergency response and public safety services on the SJSU campus. Response times to the campus are within the four-minute response time called for in the San Jose 2040 General Plan (Campus Master Plan 2001 Environmental Impact Report, URS, 2001). Emergency access throughout the campus is facilitated by the campus design, incorporation of fire lanes, and access to fire

hydrants. Future buildings would be required to comply with applicable building and fire codes and therefore could be served by SJFD in the event of an emergency. Implementation of the proposed project would not require SJFD to provide new facilities or services that could result in an environmental impact. Impacts would be **less than significant.**

b. The SJSU campus has its own on-campus police department, which is located approximately 800 feet from the proposed project site. The City of San Jose 2040 Envision General Plan set a goal of a response time for the police department of 11 minutes or less to any emergency call. According to Captain Cavallo of the University Police Department, the proposed project would require an alarm system, cameras, potentially create a need for additional staff, and could potentially affect the response times due to the high-rise nature of the building. However, the proposed building would not create a need of new facilities (Captain Alan Cavallo, personal communication, August 2016). **Less than significant impacts** would occur.

c-d. The proposed ISB on the SJSU campus is intended to accommodate the existing campus population. The proposed project would not generate population growth and therefore would not increase the demand for schools or other public facilities. **No impacts** would occur.

Recreation	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?			X	
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?			X	

a, b. The proposed project consists of construction of ten-story building on an infill site within the SJSU main campus. The proposed project would not increase population and therefore would not affect existing recreational facilities nor create demand for new recreational facilities.

During construction of the proposed ISB, there would be no physical deterioration of other existing facilities, nor would it require the construction or expansion of recreational facilities. **Less than significant impacts** would occur.

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

a, b. The proposed ISB would replace the existing Science 1 Building and accommodate functions currently housed within Duncan Hall. The project is anticipated to increase enrollment within the College of Science from 4,354 full-time equivalent students (FTES) to 4,648 FTES. This represents an increase of 294 FTES, or an approximately 6.7 percent increase. This level of increase would not result in a substantial permanent change to daily, AM peak hour, and PM peak hour traffic volumes, nor would there be any effects on the level of service at intersections and on roadways in the vicinity, as described below. In addition, although the proposed ISB would be operational approximately three years prior to demolition of the existing Science 1 Building, this temporary overlap in building operations would not result in increased enrollment. Although additional space would be available for teaching, research, and other instruction, the campus would not admit additional students to fill this space for a three-year time frame. As such, this analysis considers the long-term increase of 294 FTES resulting from the net increase in space after demolition of the Science 1 Building.

The City of San Jose's *Traffic Impact Analysis Handbook: Volume I – Methodologies & Requirements* (November 2009) explains that a transportation impact analysis is needed based on the number of peak-hour trips generated by the project using City of San Jose approved trip generation rates. The Santa Clara Valley Transportation Authority (VTA), which is designated as Santa Clara County's congestion management agency, provides guidelines for when a development project must complete a Transportation Impact Analysis to assess the impact at Congestion Management Plan intersections. The VTA

Transportation Impact Analysis Guidelines (October 2014) require a transportation impact analysis if a land use generates more than 100 AM or PM peak hour trips. Projects that generate less than 100 AM or PM peak hour trips are considered to have a less than significant effect on the roadway network within VTA's authority.

As stated earlier, the proposed project would result in an increase of 294 FTES within the College of Science. Based on average trip generation rates from the Institute of Transportation Engineers (ITE) of 1.71 weekday trips with 0.17 peak hour trips per student and 1.30 Saturday trips, this increase would generate 503 average daily trips (ADT) on weekdays, including 50 trips in both the AM and PM peak hours, and 382 ADT on Saturdays (ITE, 2012). This peak hour trip generation would be less than the VTA's guidelines for requiring a transportation impact analysis. As such, project circulation performance and congestion management impacts would be **less than significant**.

Temporary impacts to the circulation system may occur as a result of worker and truck trips during construction. However, off-site construction trips typically occur during off-peak traffic periods, when intersections and roadways operate well within acceptable levels of service. Therefore, impacts to the circulation system during the construction or operational period would also be **less than significant.**

c-f. The proposed project would not generate any air traffic, create any traffic hazards, conflict with emergency access patterns, or conflict with any adopted transportation plans or policies. The project would not permanently change vehicular, transit, pedestrian, or bicycle access to SJSU or other parcels. The project would not introduce incompatible uses or hazards related to a roadway design feature. **No impacts** would occur.

Tribal Cultural Resources - Would the project:	**Potentially Significant Impact**	**Potentially Significant Unless Mitigation Incorporated**	**Less than Significant Impact**	**No Impact**
a) Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as sites, features, places, cultural landscapes, sacred place, or objects with cultural value to a California Native American tribe, and that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or			**X**	
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code section 2024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.			**X**	

a, b. To date, no Native American tribes have formally requested government to government consultation as required under AB 52. As part of the Cultural Resources Study conducted for this project (Appendix B.1), Rincon conducted Native American scoping to identify cultural resources of interest to Native Americans within the project area. Rincon contacted the Native American Heritage Commission (NAHC) to request a Sacred Lands File (SLF) search of the project area and a 0.25-mile radius surrounding it. Rincon submitted the request on July 29, 2016. The NAHC responded on August 11, 2016 stating that "site(s) were found," and provided the contact information for an individual to be contacted with more information about the site. Rincon attempted to contact this individual and was unsuccessful. Rincon additionally prepared and mailed letters to seven Native American contacts provided by the NAHC on August 12, 2016 requesting information regarding cultural resources within or immediately adjacent to the project area. On August 19, 2016, Rincon received a response from Alan Leventhal, a tribal archaeologist on behalf of the Muwekma Tribal Administration. Mr. Leventhal asked for results from the cultural resources records search, and provided Rincon with information regarding ancestral heritage sites within the vicinity of the project area and two tribal publications concerning cultural resources. Mr. Leventhal did not identify any tribal cultural resources within the project area. Rincon sent follow-up emails to Native American contacts on August 29, 2016. On August 30, 2016, Irene Zwierlein, Chairperson for the Amah Mutsun Tribal Band of Mission San Juan Bautista, emailed Rincon stating that they were not going to make a comment on the project and to direct communication to Mr. Leventhal, representative of the Muwekma people. As of May 2017, no additional responses have been received. Thus, no known tribal cultural resources have been identified within the project area and SJSU has satisfied the requirements of AB 52 for the project. Therefore, the proposed project would not result in a substantial adverse change to a tribal cultural resource. Impacts would be **less than significant.**

Utilities and Service Systems - Would the project:	**Potentially Significant Impact**	**Potentially Significant Unless Mitigation Incorporated**	**Less than Significant Impact**	**No Impact**
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?			**X**	
b) Require or result in the construction of new water or wastewater treatment facilities of expansion of existing facilities, the construction of which could cause significant environmental effects?			**X**	
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			**X**	
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?			**X**	
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?			**X**	

Utilities and Service Systems - Would the project:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?			X	
g) Comply with federal, state, and local statutes and regulations related to solid waste?			X	
h) Result in a Substantial increase in demand of existing sources of energy or require the development of new sources of energy?			X	

a, b. The San Francisco Bay RWQCB regulates wastewater treatment for the City of San Jose. Sewage generation rates for a typical university or college provided by the Los Angeles CEQA Thresholds Guide for utilities were used as the most similar type of use and sewage generation rate to the proposed project. Based on these rates, the project would generate 18 gallons per day (gpd) of wastewater per student. SJSU has approximately 30,000 students enrolled, with approximately 4,350 enrolled with the College of Science (SJSU IEA 2016). Conservatively assuming that all 4,350 College of Science students use the ISB each day, the maximum wastewater discharged from the proposed ISB would be 78,300 gpd. This wastewater would be discharged into a campus sewer line and delivered to the San Jose-Santa Clara Regional Wastewater Facility. The San Jose-Santa Clara Regional Wastewater Facility is currently treating an average of 110 million gallons per day, with the capacity to treat 167 million gallons per day (San Jose-Santa Clara Regional Wastewater Facility 2016). Therefore, the San Jose-Santa Clara Regional Wastewater Facility has excess capacity of 57 million gpd. The proposed project would generate less than 1% of this excess capacity. The proposed project would not cause the wastewater facility to exceed its wastewater treatment capacity. No off-site improvements would be necessary. Therefore, the project would not cause a significant increase in wastewater or exceed wastewater treatment requirements. Impacts would be **less than significant.**

c. Storm water drainage facilities on the SJSU campus would not be substantially altered as a result of the proposed project. As the project site contains existing impervious surfaces, including two parking lots, the developed surface area would not substantially increase as a result of the proposed project. The proposed project would be engineered to address storm water drainage and flooding standards by connecting to existing storm water drainage utilities on the SJSU campus. Therefore, there would be no additional off-site disturbance as a result of the proposed project. In addition, SJSU would be required to comply with regulations and policies set forth by the SWRCB and the San Francisco Bay Area RWQCB to meet storm water quality regulations. Therefore, the proposed project would not cause significant environmental effects by adding or expanding storm water drainage facilities. Impacts would be **less than significant.**

d. The proposed project would aim to achieve a minimum of LEED Silver certification or equivalent. As such, the project would contain sustainable design principles, including the protection and conservation of water. The proposed project would accommodate the needs of the existing student, staff, and faculty population, and would not generate additional students. Therefore, existing water entitlements would be sufficient for the

campus population upon completion of the proposed project. Impacts would be **less than significant.**

e. Wastewater generated at SJSU is discharged into City wastewater mains that range in size from six inch diameter to 72 inch diameter. As previously mentioned, the small amount of wastewater flow on existing infrastructure would be anticipated to be minimal. As such, there would be adequate capacity in these mains and at the City Water Pollution Control Plant to accommodate flows from the proposed project. Impacts associated with the utility infrastructure improvements included as part of this project are analyzed throughout this IS-MND. Therefore, **less than significant** impacts would result.

f, g. The SJSU campus disposes of solid waste through a contract with Republic Services, independent of the City of San Jose. Solid waste is disposed of at Newby Island Landfill, which has a permitted capacity of 4,000 tons/day. The landfill has a remaining capacity of 37%, or 21,200,000 cubic yards as of October 31, 2014 (California Department of Resources Recycling and Recovery 2016). Demolition waste from the existing parking lots and from trenching for the utilities improvements would be transported to the landfill. The proposed project would not be anticipated to generate additional solid waste beyond the capacity of the landfill. Additionally, the campus promotes an effective recycling program, and approximately 83% of waste is diverted, and recycled (Annual Sustainability Report 2014). Therefore, impacts would be **less than significant.**

h. Gas lines on the SJSU campus are owned and operated by the Pacific Gas & Electric Company (PG&E). The Central Plant on campus provides electricity, chilled water for cooling, and steam for heating campus buildings. The existing campus central cooling plant has insufficient capacity to accommodate construction and operation of the ISB. Construction of a satellite plant to be connected to the main distribution center is recommended to meet anticipated demands of the campus over the next 20 years (Salas O'Brien 2014). However, this has already been determined when construction of the Campus Village Phase 2 and Recreation and Aquatics Center was evaluated (SJSU Southeast Quadrant Phasing Study 2013).

As mentioned, the proposed ISB would apply for LEED Gold or Platinum certification. As such, sustainable design principles would be used in the construction of the proposed project, which would reduce energy consumption to the extent feasible. Energy saving features would improve building efficiency, such as heating, ventilation, and air conditioning efficiency measures, low flow water fixtures, and solar/thermal hot water. The facility would be served by the existing Central Plant operated by SJSU on the main campus and would not require the development of any new sources of energy, nor would it increase the demand on Central Plant. With implementation of these sustainable design principles, impacts related to energy demand would be **less than significant.**

Mandatory Findings of Significance	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
a) Does the project have the potential to substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self- sustaining levels, eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?		X		
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, and the effects of probable future projects)?			X	
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?		X		

a. The project is located in an existing developed area that does not contain known wildlife habitat. Therefore, the project would not impact fish or wildlife populations, or eliminate or reduce the number or restrict the range of a plant or animal community. As noted above in *Cultural Resources*, the project would result in potential impacts to the historic Scheller (Associated Students) House, which is eligible for listing in the California Register of Historic Resources (CRHR), and is proposed for relocation. In addition, although no known archaeological resources are located on the project site, the site is located in an area of archaeological sensitivity, and could potentially disturb previously unidentified archaeological resources. With implementation of mitigation measures, the project would not eliminate important examples of the major periods or California history of prehistory. Impacts would be **significant, but mitigable.**

b. The project would not create any significant impacts that cannot be mitigated. The project would accommodate the needs of the student, staff and faculty population by providing expanded spaces for teaching, research laboratories, and lab support areas; and would not generate substantial additional off-site vehicle trips that could impact the City's circulation system, existing level of service standards, regional operation air contaminant emissions or greenhouse gas emissions standards, or noise standards, on a cumulative basis. Therefore, the project's contribution to cumulative impacts would be **less than significant**.

c. The proposed project could result in **potentially significant** direct or indirect impacts to humans. Refer to the *Geology and Soil* and *Noise* sections in the above analysis. However, as described in these sections, **all impacts would be mitigated to a less than significant level**. Therefore, with implementation of the required measures, no substantial adverse effects on human beings would occur as a result of the proposed project.

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