ENVIRONMENTAL CHECKLIST

Initial Study

1. Project Title:	Evergreen Valley College Sports Complex
2. Lead Agency Name and Address:	San José Evergreen Community College District
3. Contact Person and Phone Number:	Terrance S. DeGray Associate Vice Chancellor Physical Plant Development and Operations (408) 270-6401 Terrance.DeGray@sjeccd.edu
4. Project Location:	3095 Yerba Buena Road, San José, CA 95135
5. Project Sponsor's Name and Address:	San José Evergreen Community College District
6. General Plan Designation(s):	Public/Quasi-Public (P/QP)
7. Zoning:	City of San José Land Use Zoning: Single-Family Residential (R-1-5)

8. Description of Project:

The San José Evergreen Community College District (SJECCD) proposes to construct and operate a sports complex development on the SJECCD's Evergreen Valley College campus, located in the southeast section of the City of San José. The following section includes a detailed description of the proposed project.

9. Surrounding Land Uses and Setting:

The project site is located within the Evergreen Valley College campus and is surrounded by other campus facilities. Surrounding uses include the Math and Science Building (MS3) to the north, tennis courts to the south, open space to the east, and surface parking and driveway areas and a soccer field to the west.

10. Other Public Agencies Whose Approval is Required: (e.g., permits, financing approval, or participation agreement.)

N/A

11. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, is there a plan for consultation that includes, for example,

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

The SJECCD has not received a request for consultation from California Native American Tribes pursuant to Public Resources Code section 21080.3.1. Nevertheless, the SJECCD sent notification letters to the representatives of applicable California Native American Tribes for which the SJECCD and its consultants anticipate may have an interest in commenting on the proposed project. This consultation is taking place on an informal basis, consistent with the requirements for the SJECCD as a CEQA lead agency.

Project Description

The San José Evergreen Community College District proposes to construct a Sports Complex at the Evergreen Valley College (EVC), that would provide exercise and recreational use for EVC students, faculty, and users from the surrounding community.

Project Site

The project site is located within the EVC campus, located at 3095 Yerba Buena Road in the City of San José. The EVC campus is located in the southeastern area of the City of San José, in the southeastern Santa Clara County. The project site located in the southern portion of the EVC Campus, adjacent to existing sports and recreational facilities. **Figure 1** provides a regional context for the project site and **Figure 2** shows the project site within the EVC campus. The approximately 1.8-acre project site is currently occupied by turf and landscaped areas inclusive of a soccer practice field and a softball field (see **Figure 3**). The intent of the project is to allow for the continued use of the practice soccer field. Surrounding structures include the Math and Science Building (MS3) to the north, tennis courts to the south, open space to the east, and surface parking and driveway areas and a soccer field to the west.

Proposed Project

Project Elements

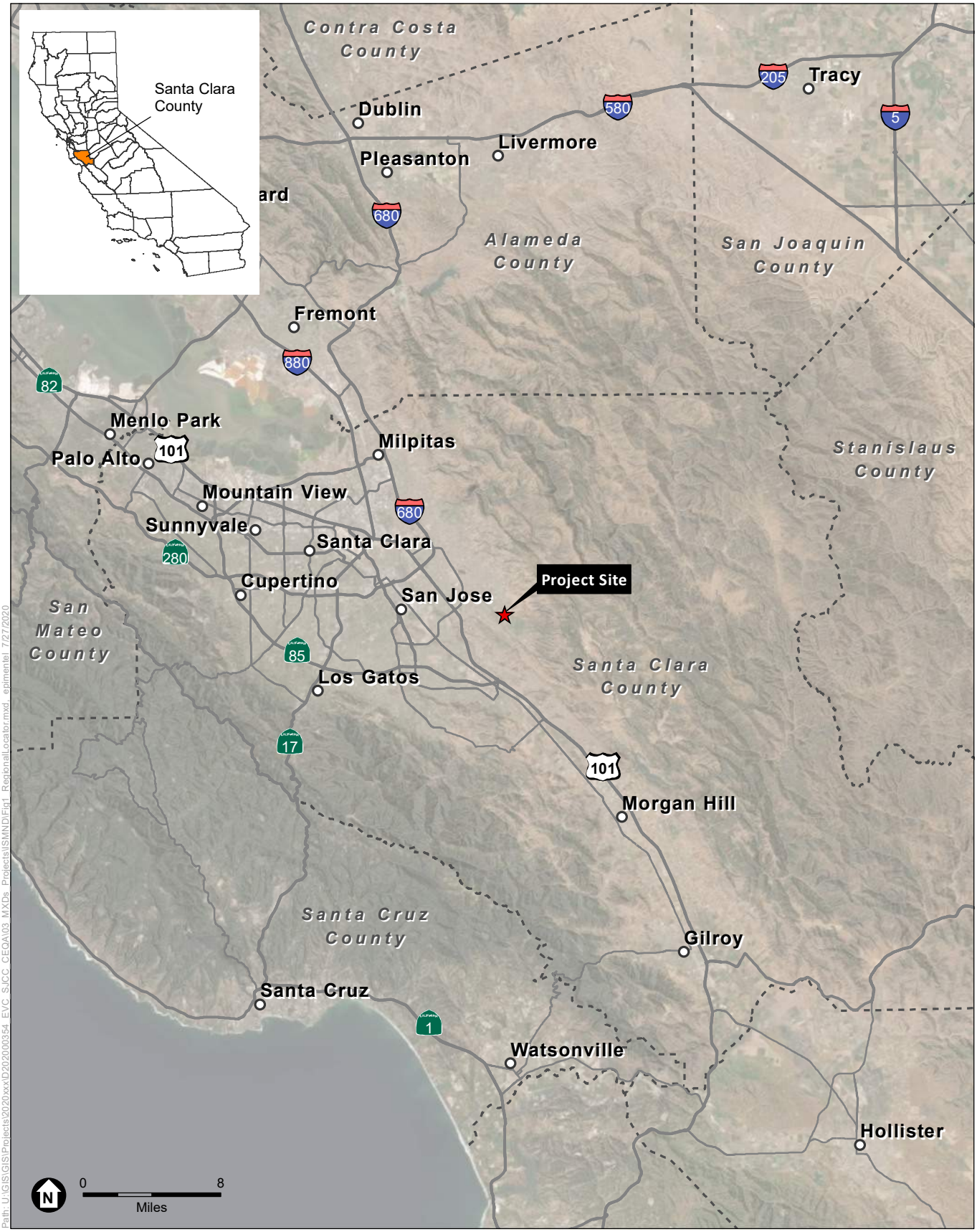
The project would develop a Sports Complex, which would include the installation of eight (8) pickleball courts and one (1) combination futsal court/basketball court on asphalt paving, a bleacher with shade structure, raised viewing patio with shade structure, seating terrace adjacent to the tennis courts, and associated site improvements, including fencing, landscaping, paving and lighting. The proposed project would have an approximately 79,800 square feet (s.f.) footprint, which would include paved or landscaped areas, and approximately 1,650 s.f. of structures. **Figure 4** shows the proposed site plan for the project.

Sports Complex

Figure 5 shows the conceptual site plan for the Sports Complex component of the proposed project. The total area of the proposed Sports Complex would be approximately 44,000 square feet of paved surface, not including the proposed bleachers and shade structure.

The proposed combination futsal court/basketball court would measure 94 feet by 50 feet and would include two basketball goals, one in the center of each 50-foot end of the court. Each basketball goal would have a pole footing that would require excavation of approximately 4 feet 6 inches below ground level, with a diameter of 2 feet 6 inches.

The eight proposed pickleball courts would measure approximately 44 feet in length and 20 feet at each end, with a net across the center supported by net posts. The net posts footing will require excavation to a depth of approximately 4 feet, with an approximate diameter of 2 feet. Each pickleball court would be enclosed by 4-foot-high chain link fencing.



SOURCE: Esri, 2012; ESA, 2020

Evergreen Valley College Sports Complex

Figure 1
Regional Locator

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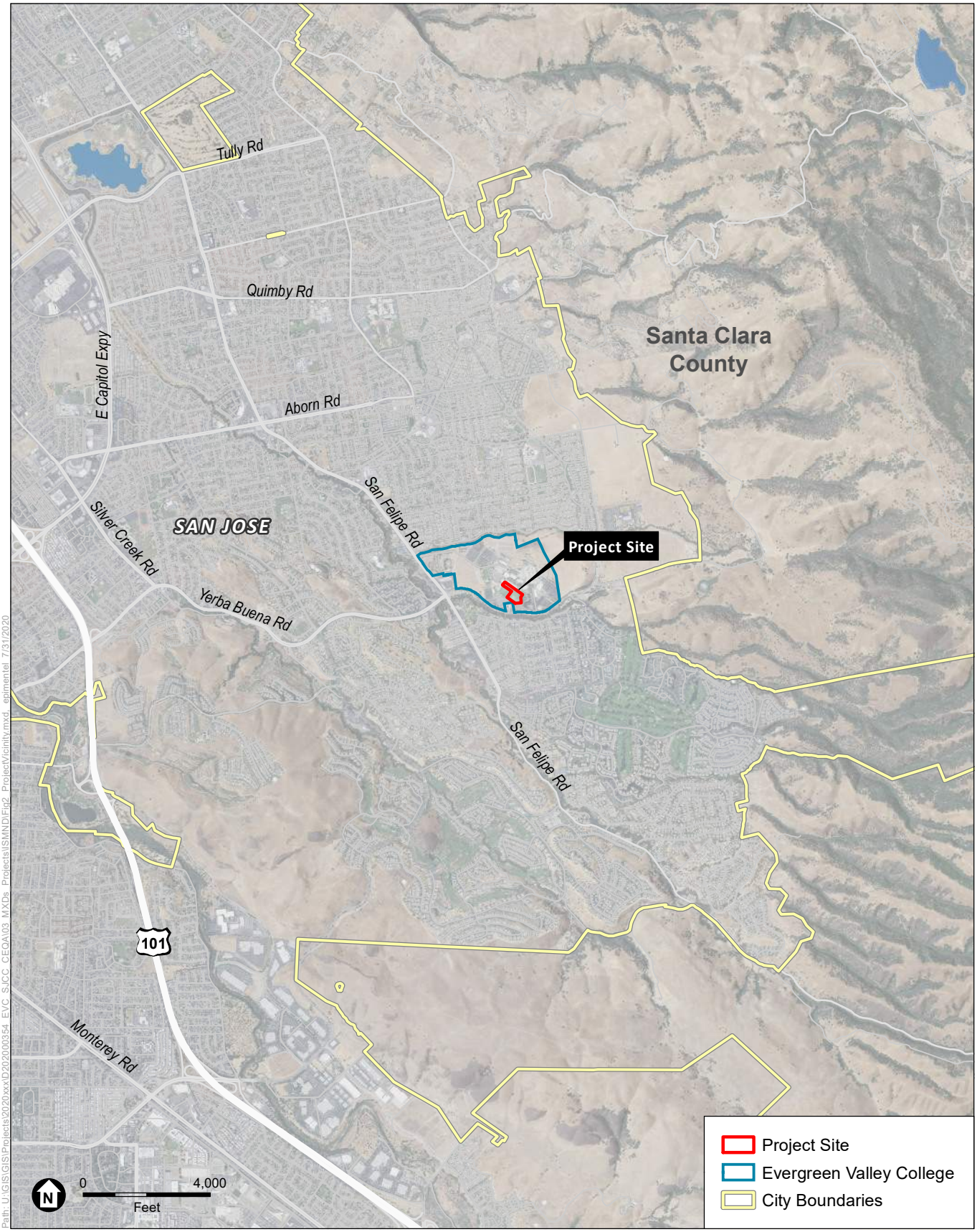

SOURCE: Esri, 2012; ESA, 2020

Evergreen Valley College Sports Complex

Figure 2
Project Vicinity

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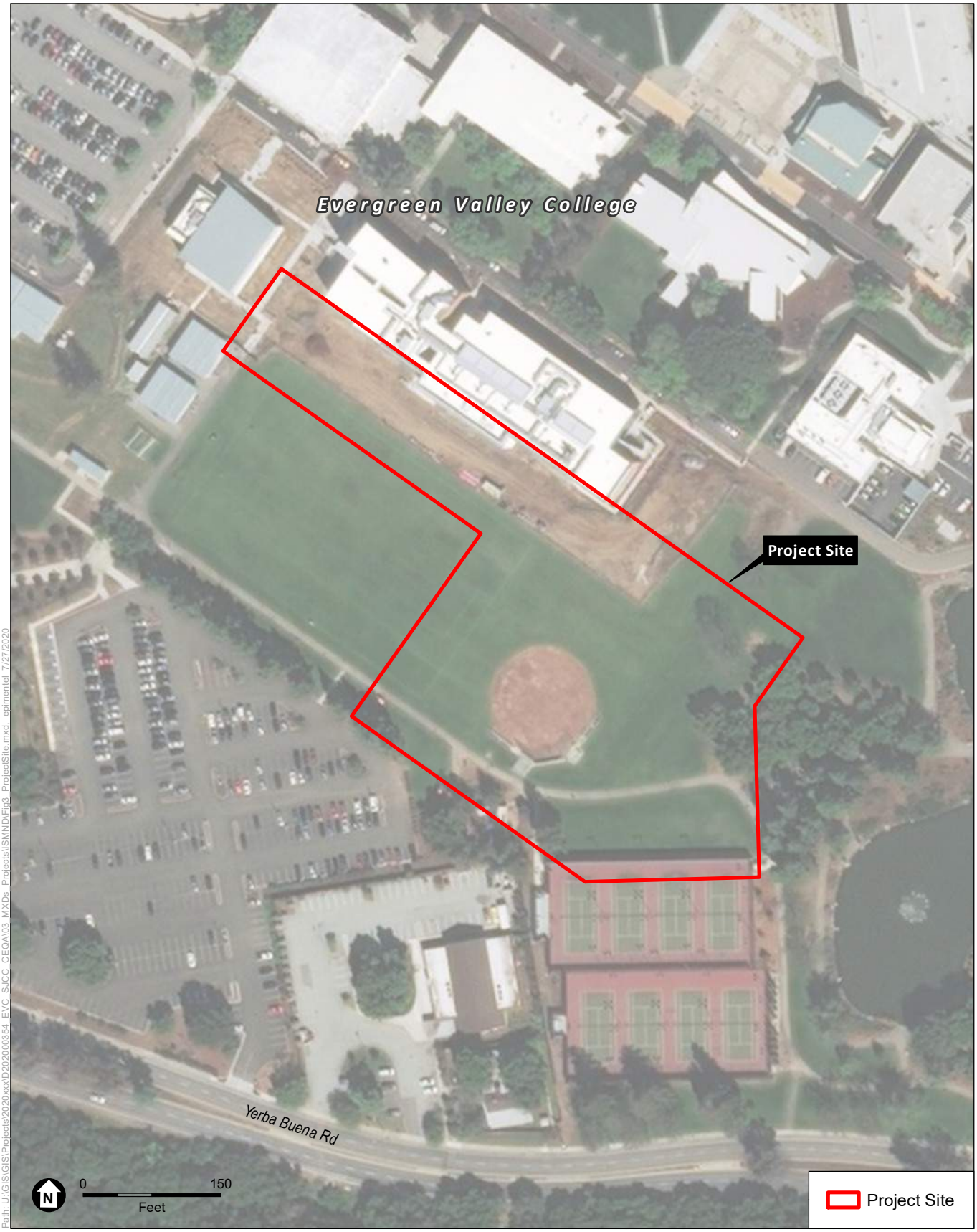
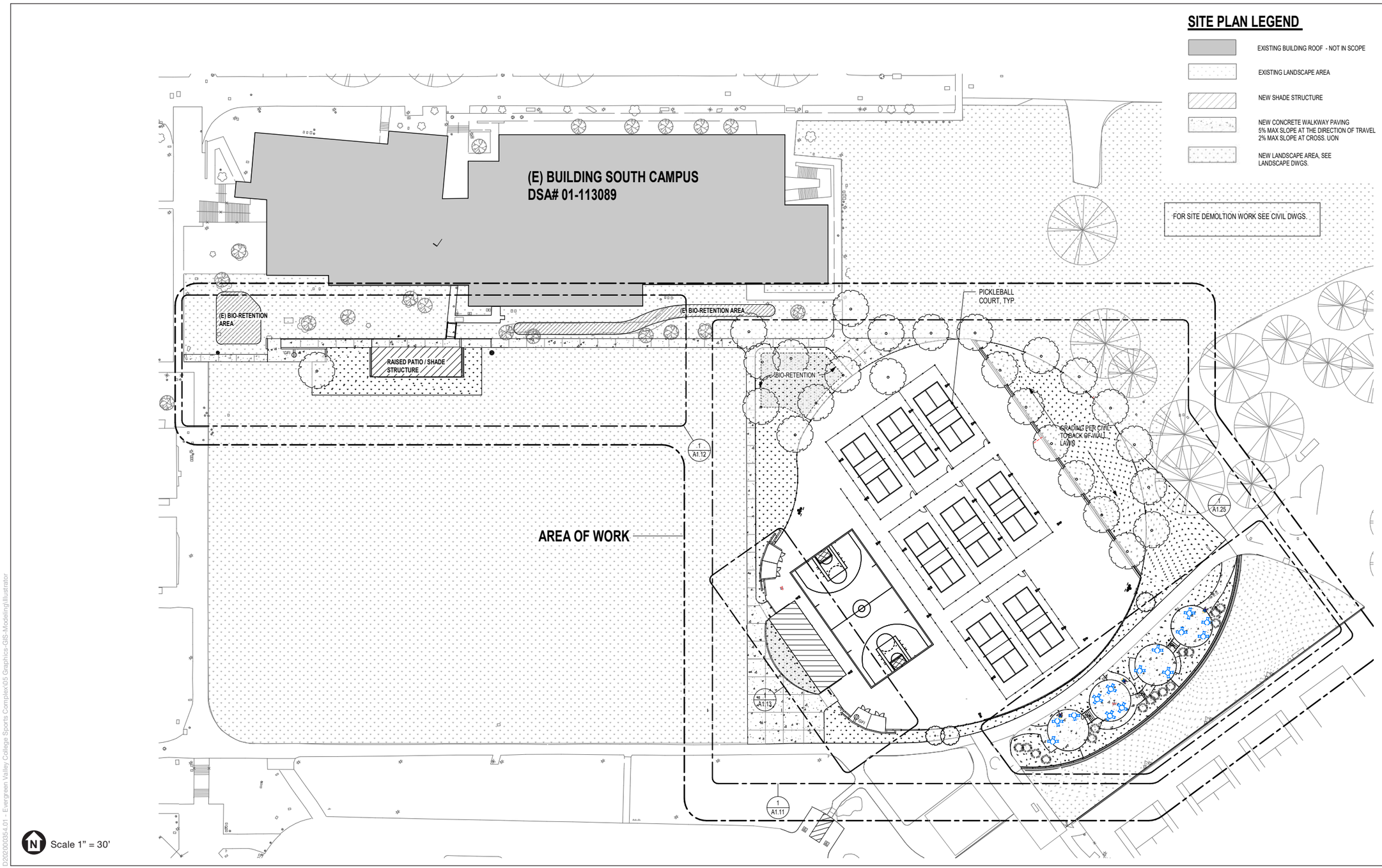


SOURCE: Esri, 2012; ESA, 2020

Evergreen Valley College Sports Complex

Figure 3
Project Site



SOURCE: DSK Architects, 2020

Evergreen Valley College Sports Complex

Figure 4
Proposed Site Plan

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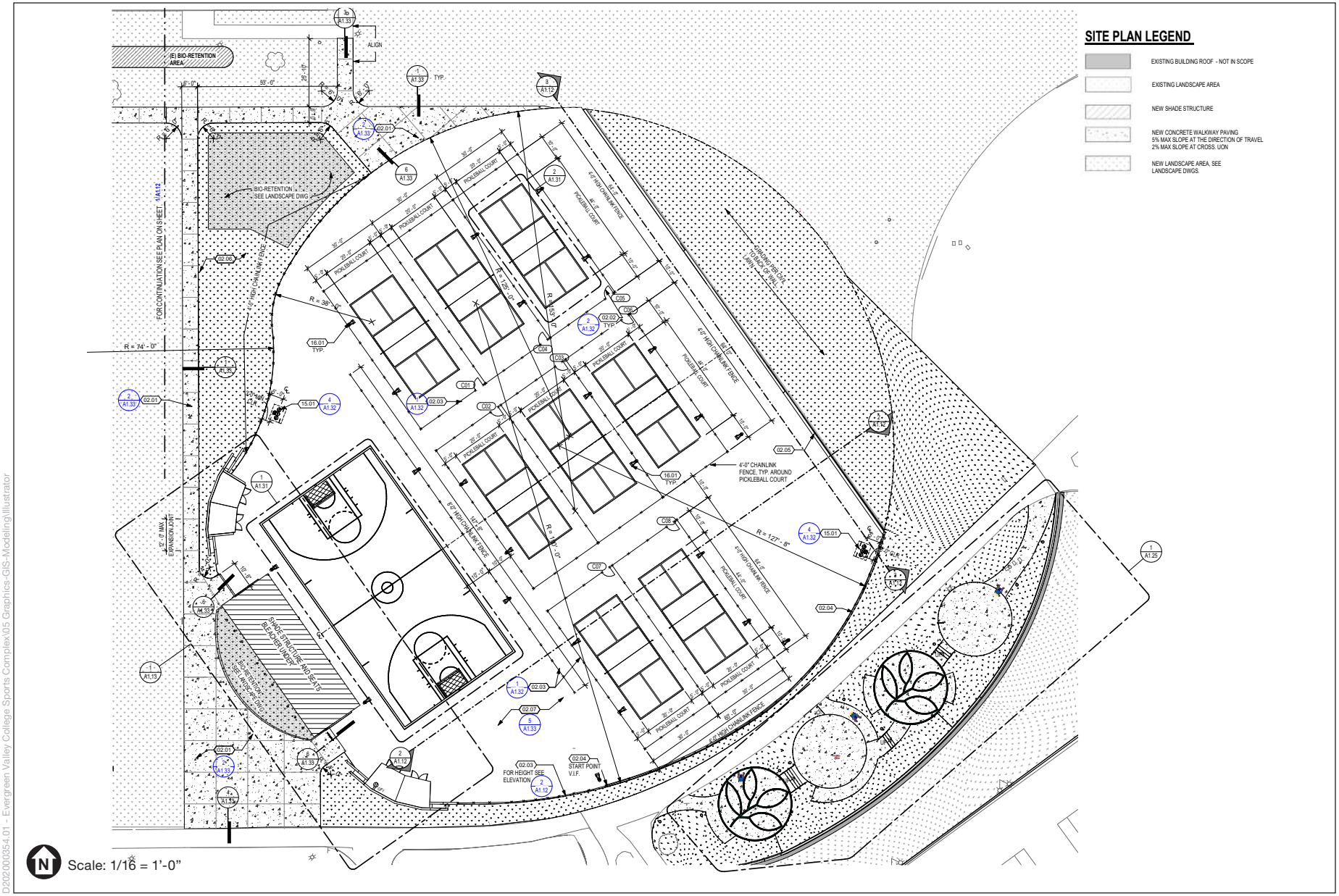

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SOURCE: DSK Architects, 2020

Evergreen Valley College Sports Complex

Figure 5
Conceptual Site Plan for the Proposed Sports Complex

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The Sports Complex would also include the construction of two metal storage sheds, with footprints of approximately 230 s.f. each, at the northwest and southwest sides of the proposed combination futsal basketball court (see **Figure 6**). Each shed would be constructed to a height of approximately 12 feet and would be supported by concrete footings constructed to a depth of 24 inches below ground level.

Also, adjacent to the court on the west side a proposed shade structure and bleachers would be constructed (see **Figure 7**). The bleachers would be 60 feet in length, and have an approximate height of 10 feet and 8 inches above ground level, and would contain guardrails on each end. The prefabricated shade structure above the bleachers would have an approximate height of 23 feet above ground. The shade structure would be supported by four steel tube-shaped canopy columns supported by concrete piers, constructed to a depth of 10 feet below ground level, with a diameter of 30 inches. In between each support column, three steel column screen braces would be constructed, each supported by concrete piers constructed to 7 feet below ground level, measuring 2 feet in diameter. The Sports Complex area would be surrounded by chain link perimeter fencing, constructed to a height of approximately 4 to 8-feet above ground level.

A bioretention area would be constructed behind the shade and bleacher structure, to the southwest. Concrete paving would be extended from this area to the existing landscape to the west and to the existing walkway to the south.

The proposed site pedestrian entries would be located 1) between the storage sheds and shade/ bleacher structure, on either side, providing access to and from the concrete paved area at the southwest perimeter of the Sports Complex, 2) to the north and east, towards the MS3 building and future General Education Building, and 3) from the hillside to the south leading from the campus lake and tree grove (known as Founder's Grove).

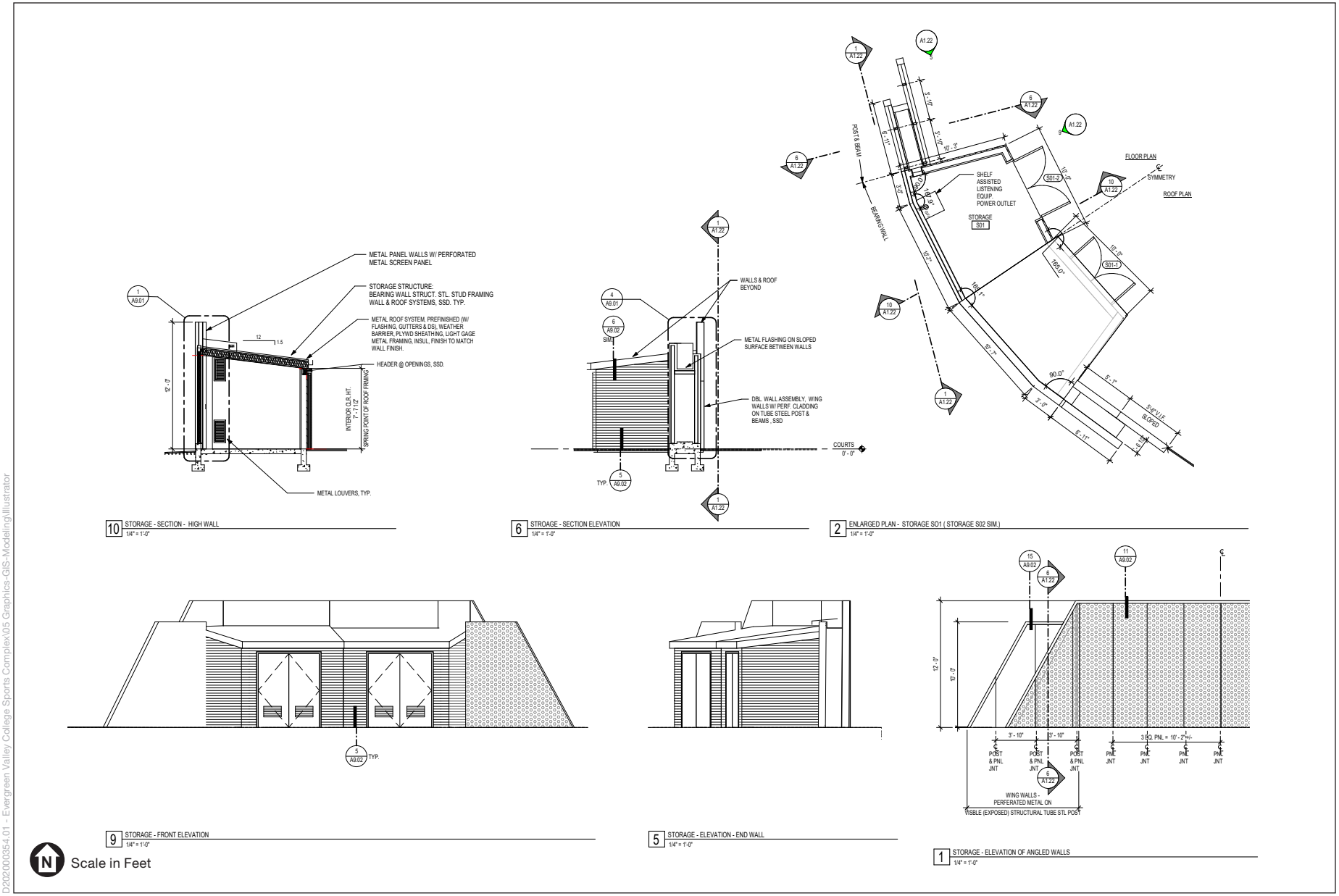
Plaza Seating Area

A plaza seating area would be constructed between the existing walkway and the existing tennis courts (see **Figure 8**). The northern boundary of the existing tennis courts consists of a mural wall, which would remain. The Plaza seating area would include four separate seating areas that would be evenly separated along the gradual slope of the existing grade.

Raised Viewing Patio and Shade Structure

The proposed project would also include construction of an approximately 1,232-s.f. raised viewing patio and shade structure in the area between the soccer field and the Math & Science building (MS3), in the northwest area of the project site. **Figure 9** shows plans, elevations, and cross sections for the proposed viewing patio. The raised patio would be connected to adjacent walkways via ADA compliant ramps and walkways to the northwest and southeast of the platform, as well as ramp with railings that would connect the raised platform and landing to the existing walkway infrastructure adjacent to the MS3 building, to the northeast of the platform.

A proposed shade structure would cover the majority of the proposed platform and would be supported by four steel tube-shaped canopy columns, mounted atop 10-feet-deep concrete piers, measuring 30 inches in diameter.



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SOURCE: DSK Architects, 2020

Evergreen Valley College Sports Complex

Figure 6
Conceptual Storage Structure

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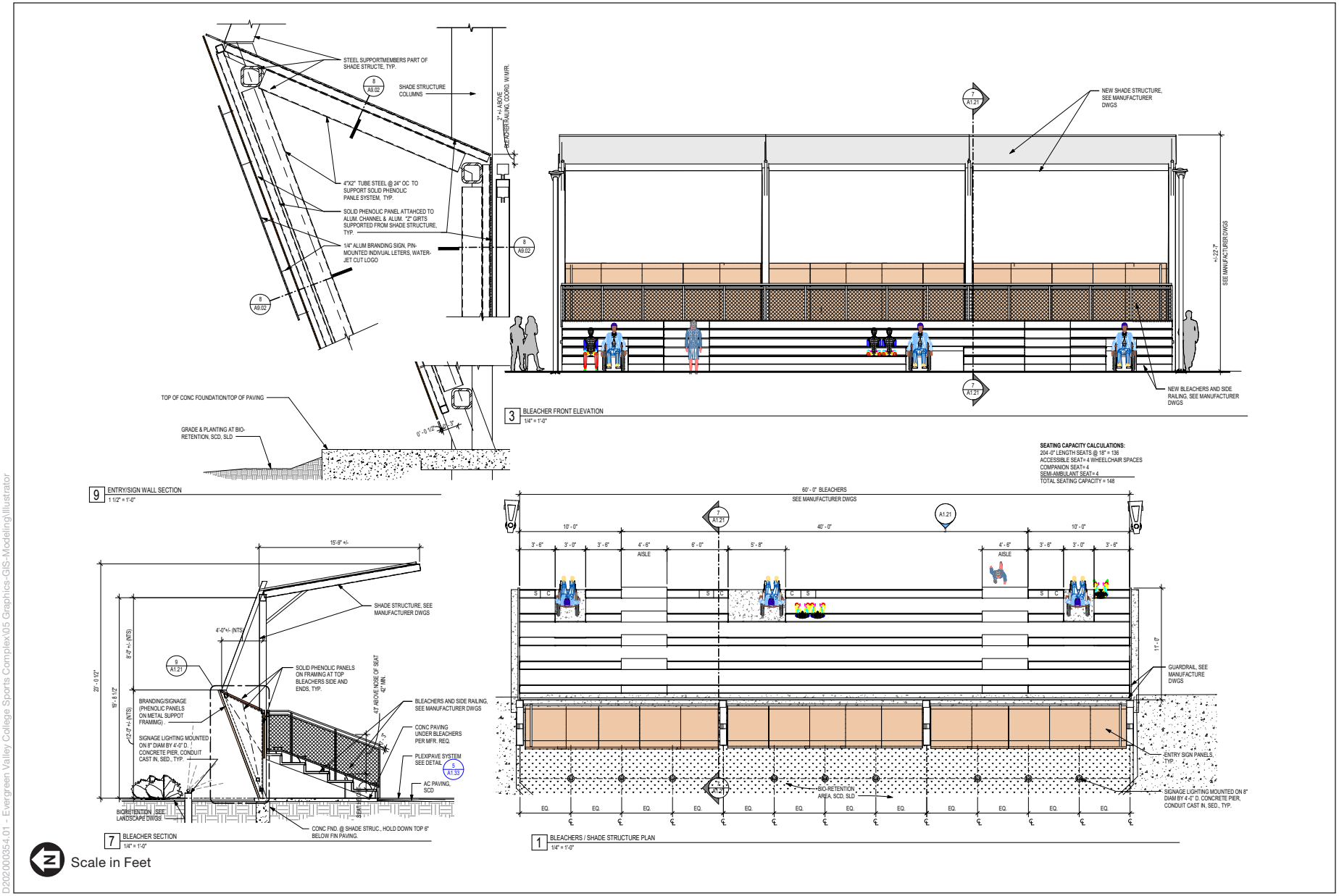

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SOURCE: DSK Architects, 2020

Evergreen Valley College Sports Complex

Figure 7
Conceptual Bleacher/Shade Structure Plans, Elevations, and Sections

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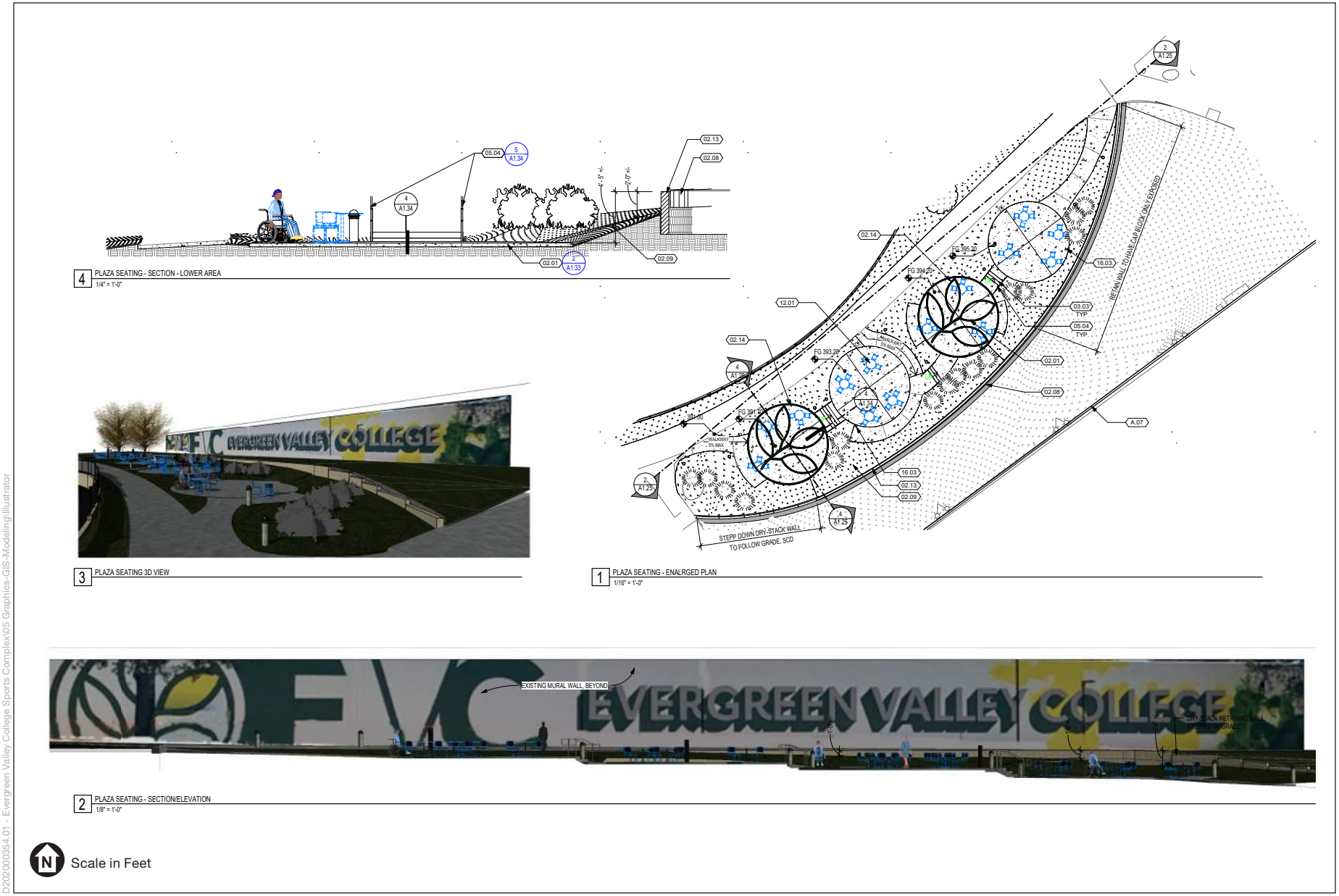

SOURCE: DSK Architects, 2020

Evergreen Valley College Sports Complex

Figure 8
Conceptual Plaza Seating Area Plan, Cross Section, and Rendering

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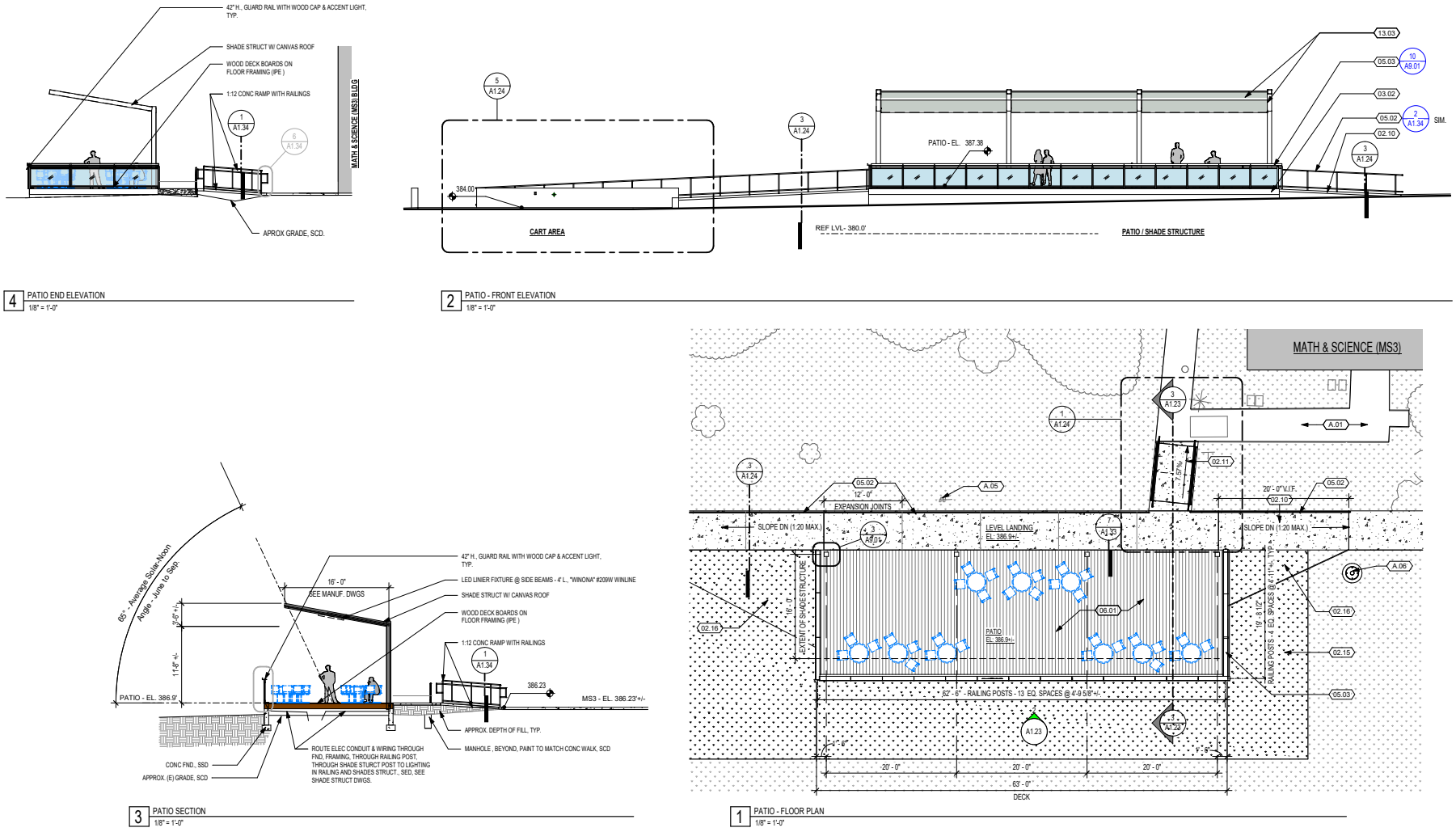

SOURCE: DSK Architects, 2020

Evergreen Valley College Sports Complex

Figure 9
Conceptual Raised Viewing Patio and Shade Structure Plans, Elevations, and Sections

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Transportation Infrastructure

No permanent roadway, driveway, bicycle, or transit facilities are included as part of the proposed project.

Walkways

Paved walkways would be constructed throughout the project site, connecting the raised viewing patio to walkways to the northwest of the project site, to the adjacent MS3 building, to the proposed Sports Complex, and to the existing walkway along the southeast side of the project site, near the existing parking area and tennis courts. Paved walkways would be constructed to meet ADA geometric design requirements and would include railing along sections of walkways with notable grades.

Utility Infrastructure

Drainage

Drainage infrastructure would be constructed to direct stormwater flows to bioretention areas on-site, providing onsite treatment, per Low Impact Design (LID) standards. Where flows are not directed to existing or proposed bioretention areas, drainage infrastructure would be connected to the existing drainage infrastructure, where such elements have not been removed or abandoned as part of the proposed project.

Electrical

Electrical infrastructure would be extended from existing infrastructure to serve the Sports Complex, viewing patio and illuminated walkways. No substantial new electrical infrastructure is proposed or required to serve the proposed project.

Irrigation

Water supply for landscape irrigation would be provided to the proposed project through installation of a new recycled water irrigation mainline from existing infrastructure that enters the east side of the project site from areas to the southeast of the project site. Another mainline connection would be established to the Sports Complex from an existing mainline to the south of the project site. Existing sections of the irrigation mainline, within the project site would be capped or removed as part of construction.

Lighting

Pole lighting and bollard lighting would be constructed along pedestrian pathways and within the proposed Sports Complex. Light poles would be approximately 24 feet above ground level and would be supported by reinforced concrete footings that would extend approximately 7 feet and 8 inches below ground level, and 2 feet above ground. Light fixtures would also be appended to proposed shade structures, and would be fixed to direct light downward, minimizing fugitive light, as would all pole lighting. **Figure 10** shows the photometric plan for proposed project lighting.

Landscaping

Project landscaping would consist of turf areas with intermittent tree planting, planter areas with a variety of standard planting, and bioretention areas with specific plants that would serve that function. **Figures 11a and 11b** show the proposed planting plan for the project.

Project Construction

Construction of the proposed project would include demolition of existing facilities within the footprint of the proposed project. Demolition and removal activities would include removal or clearing of existing surface materials, including sand, grass, soil, existing irrigation and drainage infrastructure, an existing fence at the softball diamond, and existing landscape between the walkway and the existing tennis courts in the southern portion of the project site.

The construction plan for the project includes the construction of a stabilized construction entrance and exit, connecting the project site to the adjacent parking and driveway area to the south of the project site. Temporary fencing would be erected around the project site for the duration of construction. Fiber rolls would be deployed around the project perimeter as erosion control. **Figure 12** shows the proposed erosion control plan for project construction.

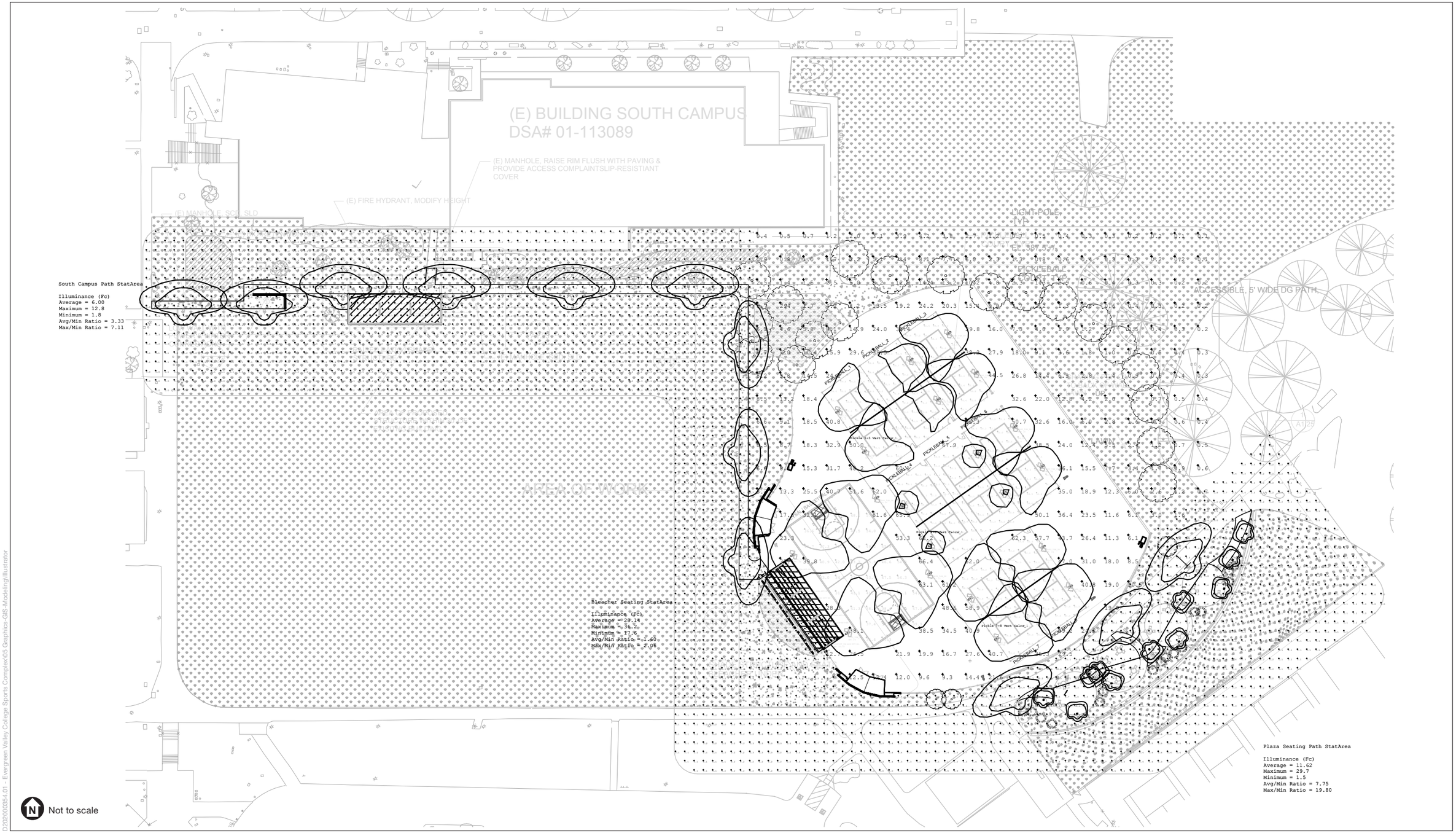
Project construction would begin approximately December of 2020, would be anticipated to last approximately 6 months. All construction activities would be completed between 7:00 a.m. and 7:00 p.m., Monday through Friday, in accordance with Section 20.100.450 of the City of San José's Municipal Code. No road closures or substantial interruption to existing campus operations would be anticipated to occur as a result of the proposed project.

Project construction would not include substantial excavation or grading and would not require the use of a pile driver or other substantial generators of construction noise or vibration.

Project Operation

The proposed Sports Complex is anticipated to be used by EVC students and faculty for College purposes during weekday College operational hours, and by the nearby community during evening and night hours, and on weekends. Night lighting would be operational until 10:00 P.M., consistent with the existing nighttime lighting of the tennis courts, adjacent to the project site.

The District anticipates that in addition to the typical use described above, the Sports Complex would be used periodically for organized public recreational sporting events. It is anticipated that these events may use portable amplified sound equipment furnished by those organizations. However, the proposed Sports Complex is not planned to be utilized for intercollegiate or intramural sports, and the installation of permanent amplified sound equipment at the complex is not included in the proposed project.



D202000354.01 - Evergreen Valley College Sports Complex\05 Graphics-GIS-Modeling\Illustrator

SOURCE: DSK Architects, 2020

Evergreen Valley College Sports Complex

Figure 10
Photometric Site Plan

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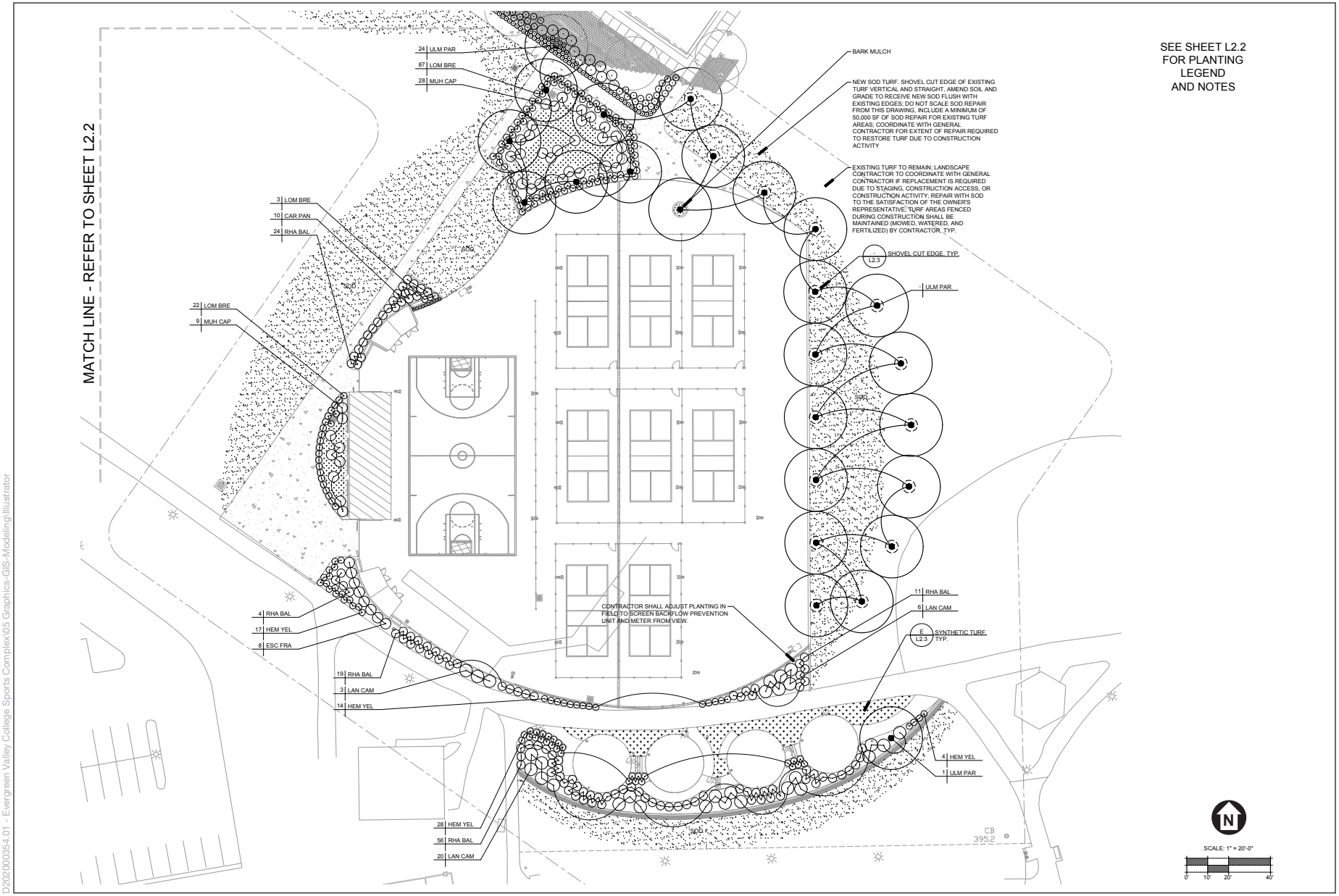

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SOURCE: DSK Architects, 2020

Evergreen Valley College Sports Complex

Figure 11a
Planting Plan

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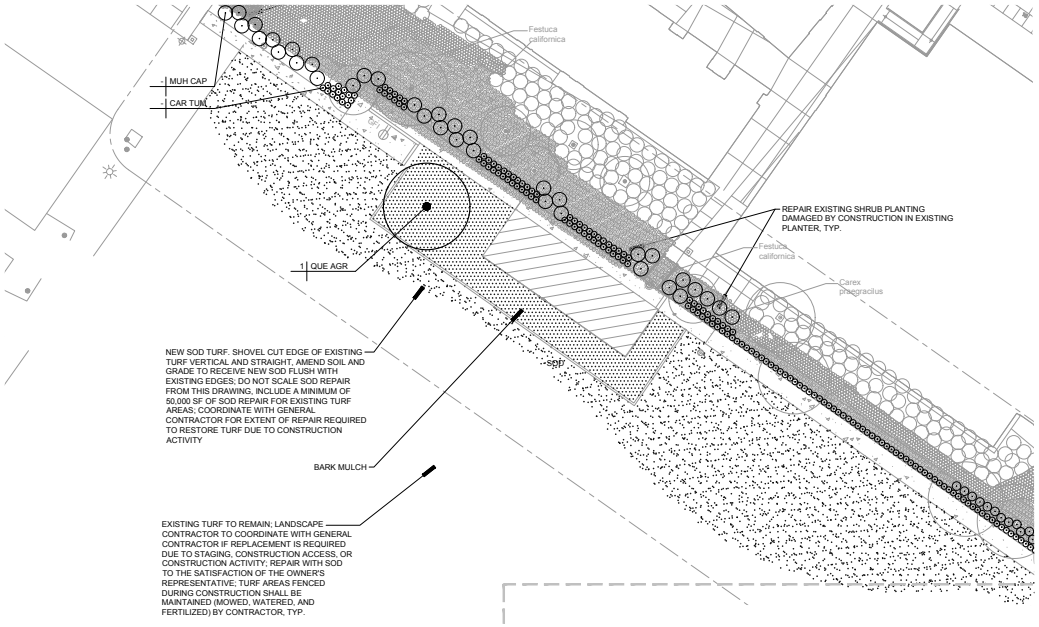

PLANTING NOTES

1. I HAVE COMPLIED WITH THE CRITERIA OF THE ORDINANCE AND APPLIED THEM ACCORDINGLY FOR THE EFFICIENT USE OF WATER IN THE LANDSCAPE DESIGN PLAN.

   ALISSA J. NOGUEZ, CALIFORNIA LANDSCAPE ARCHITECT #3676
2. THESE NOTES ARE FOR GENERAL REFERENCE IN CONJUNCTION WITH, AND AS A SUPPLEMENT TO THE WRITTEN SPECIFICATIONS, DETAILS, ADDENDA AND CHANGE ORDERS ASSOCIATED WITH THE CONTRACT DOCUMENTS.
3. CONTRACTOR SHALL COORDINATE ALL WORK WITH OTHER TRADES PRIOR TO INSTALLATION.
4. CONTRACTOR SHALL BECOME FAMILIAR WITH THE LOCATION OF ALL EXISTING AND PROPOSED UNDERGROUND SERVICES AND IMPROVEMENTS WHICH MAY CONFLICT WITH WORK TO BE DONE. CONTACT UNDERGROUND SERVICE ALERT (USA) AT (800) 642-2444 PRIOR TO DIGGING. NOTIFY OWNER IMMEDIATELY SHOULD CONFLICTS ARISE.
5. FINE GRADING, HEADERS AND IRRIGATION COVERAGE SHALL BE APPROVED BY THE OWNER'S REPRESENTATIVE PRIOR TO PLANTING OPERATIONS.
6. CONTRACTOR SHALL LAY OUT PLANT MATERIAL PER PLAN AND FACE TO GIVE BEST APPEARANCE OR RELATION TO ADJACENT PLANTS, STRUCTURES OR VIEWS. CONTRACTOR TO OBTAIN APPROVAL FROM OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION.
7. PLANT MATERIAL SHALL NOT BE INSTALLED IN AN AREA WHICH WILL CAUSE HARM TO ADJACENT STRUCTURES OR OBSTRUCT IRRIGATION SPRAY PATTERN. NOTIFY THE OWNER'S REPRESENTATIVE SHOULD CONFLICTS ARISE.
8. PLANT LOCATIONS ARE DIAGRAMMATIC AND MAY BE ADJUSTED IN THE FIELD AT THE OWNER'S REPRESENTATIVE REQUEST PRIOR TO INSTALLATION. OBTAIN APPROVAL OF PLANT LAYOUT FROM THE OWNER'S REPRESENTATIVE PRIOR TO PLANTING.
9. UNLESS OTHERWISE NOTED, FINISH GRADE OF SHRUB AND GROUND COVER AREAS SHALL BE 2" BELOW ADJACENT PAVING. TAPER 3" DEPTH BARK MULCH TOP DRESSING TO 1/2" BELOW ADJACENT PAVING (1-1/2" DEPTH) WITHIN 2' OF PAVING. FINISH GRADE OF SEEDED TURF AREAS SHALL BE 1/2" BELOW ADJACENT PAVING. FINISH GRADE OF SODDED TURF AREAS SHALL BE 1" BELOW ADJACENT PAVING.
10. PLANTING AREAS SHALL RECEIVE A 3" MIN. DEPTH BARK MULCH TOP DRESSING, UNLESS OTHERWISE NOTED. IN NON-BIORETENTION AREAS BARK MULCH SHALL BE REPUBLIC SERVICES PRO-CHIP MULCH, IN BIORETENTION AREAS BARK MULCH SHALL BE SUNGRO HORTICULTURE SHREDDED CEDAR BARK MULCH.
11. NEWLY PLANTED MATERIAL SHALL BE THOROUGHLY SOAKED WITH WATER WITHIN 3 HOURS OF PLANTING.
12. EXISTING TREES, SHRUBS AND GROUND COVERS TO REMAIN SHALL BE PROTECTED. ANY DAMAGE CAUSED BY CONTRACTOR'S WORK OR NEGLIGENCE SHALL BE REPLACED OR REPAIRED AT THE CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE OWNER.
13. THIRTY DAYS AFTER PLANTING, CONTRACTOR SHALL RE-STAKE AND STRAIGHTEN TREES AS NECESSARY.
14. CONTRACTOR TO COLLECT AND SUBMIT SOIL SAMPLE TO WAYPOINT ANALYTICAL FOR SOIL AMENDING AND PREPARATION RECOMMENDATION PER SPECIFICATION SECTION 32 90 00.
15. CONTRACTOR SHALL COORDINATE ROUGH GRADING AND FINE GRADING TO ENSURE EXISTING SUITABLE TOPSOIL IS REMOVED, STOCKPILED AND REINSTALLED INTO PROPOSED LANDSCAPE AREAS PER LANDSCAPE SPECIFICATION SECTION 32 90 00. IN THE EVENT THERE IS NOT ENOUGH EXISTING TOPSOIL, OR NO PLACE TO STOCKPILE TOPSOIL, CONTRACTOR SHALL IMPORT AND INSTALL TOPSOIL PER LANDSCAPE SPECIFICATION SECTION 32 90 00.
16. THE CONTRACTOR SHALL BE RESPONSIBLE UNDER THIS CONTRACT FOR REPAIRING OR REPLACING, AT HIS OWN EXPENSE, ANY STRUCTURES, FENCES, WALLS, PLANT MATERIAL OR TREES DAMAGED OR DESTROYED, BOTH ON THIS PROPERTY OR THOSE PROPERTIES ADJACENT TO THIS SITE. THE DAMAGED ITEM(S) WILL BE RESTORED TO THEIR ORIGINAL CONDITION OR REPLACED TO THE SATISFACTION OF THE OWNER'S REPRESENTATIVE.
17. REFER TO PLANTING DETAILS ON SHEET L2.3 AND SPECIFICATIONS SECTIONS:
    - 01 56 39 TEMPORARY TREE AND PLANT PROTECTION
    - 32 18 13 SYNTHETIC GRASS SURFACING
    - 32 90 00 PLANTING
    - 32 92 00 TURF PLANTING

PLANT LEGEND

SYMBOL	SIZE	BOTANICAL NAME	COMMON NAME	WATER NEEDS*
TREE PLANTING:				
QUE AGR	36" BOX	QUERCUS AGRIFOLIA	COAST LIVE OAK	MODERATE
ULM PAR	36" BOX	ULMUS PARVIFOLIA 'DRAKE'	CHINESE ELM	VERY LOW
STANDARD PLANTING:				
RHA BAL	5 GAL	RHAPHIOLEPIS INDICA 'BALLERINA'	BALLERINA INDIAN HAWTHORN	MODERATE
PIT TOB	5 GAL	PITTOSPORUM TOBIRA 'WHEELERS DWARF'	WHEELERS DWARF MOCK ORANGE	LOW
ESC FRA	5 GAL	ESCALLONIA FRADESII	PINK ESCALLONIA	MODERATE
HEL SEM	5 GAL	HELICTOTRICHON SEMPERVIRENS	BLUE OAT GRASS	MODERATE
LAN CAM	1 GAL	LANTANA CAMARA 'ORANGE TRAILING'	ORANGE SPREADING LANTANA	LOW
HEM YEL	1 GAL	HEMEROCALLIS 'SUNSHINE YELLOW'	DAYLILY - EVERGREEN	MODERATE
BIORETENTION PLANTING:				
CAR PAN	1 GAL @ 18" O.C.	CAREX PANSA	DUNE SEDGE	MODERATE
CAR TUM	1 GAL	CAREX TUMULICOLA	BERKELEY SEDGE	LOW
HEL SEM	5 GAL	HELICTOTRICHON SEMPERVIRENS	BLUE OAT GRASS	MODERATE
LOM BRE	5 GAL	LOMANDRA LONGIFOLIA 'BREEZE'	DWARF MAT RUSH	MODERATE
MUH CAP	5 GAL	MUHLENBERGIA CAPILLARIS	PINK MUHLY GRASS	LOW
MUH RIG	5 GAL	MUHLENBERGIA RIGENS	DEER GRASS	LOW
RHA BAL	5 GAL	RHAPHIOLEPIS INDICA 'BALLERINA'	BALLERINA INDIAN HAWTHORN	MODERATE

*WATER NEEDS BASED ON: "WATER USE CLASSIFICATION OF LANDSCAPE SPECIES", ZONE 1, UNIVERSITY OF CALIFORNIA COOPERATIVE EXTENSION AND THE DEPARTMENT OF WATER RESOURCES, 2014.

MATERIALS:

- "90/10 TALL FESCUE", AVAILABLE THROUGH DELTA BLUEGRASS, (800) 637-8873
- SYNTHETIC TURF, SEE DETAIL E, L2.3
- 3" BARK MULCH ONLY
- SHOVEL CUT EDGE, SEE DETAIL _,L2.3

HYDROZONES

- LOW
- MODERATE
- HIGH
- SPECIAL LANDSCAPE ZONE

NOTES:

1. HYDROZONES BASED ON PLANT SPECIES WATER USE FOR ZONE 1 PER WUCOLS IV, 2014.
2. SEE IRRIGATION PLAN FOR HYDROZONE NUMBERS AND CALCULATIONS.
3. TREE HYDROZONE AREA ESTIMATED FROM SPECIES CANOPY SIZE AT MATURITY.

N

SCALE: 1" = 20'-0"

0' 10' 20' 40'

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SOURCE: DSK Architects, 2020

Evergreen Valley College Sports Complex

Figure 11b
Planting Plan

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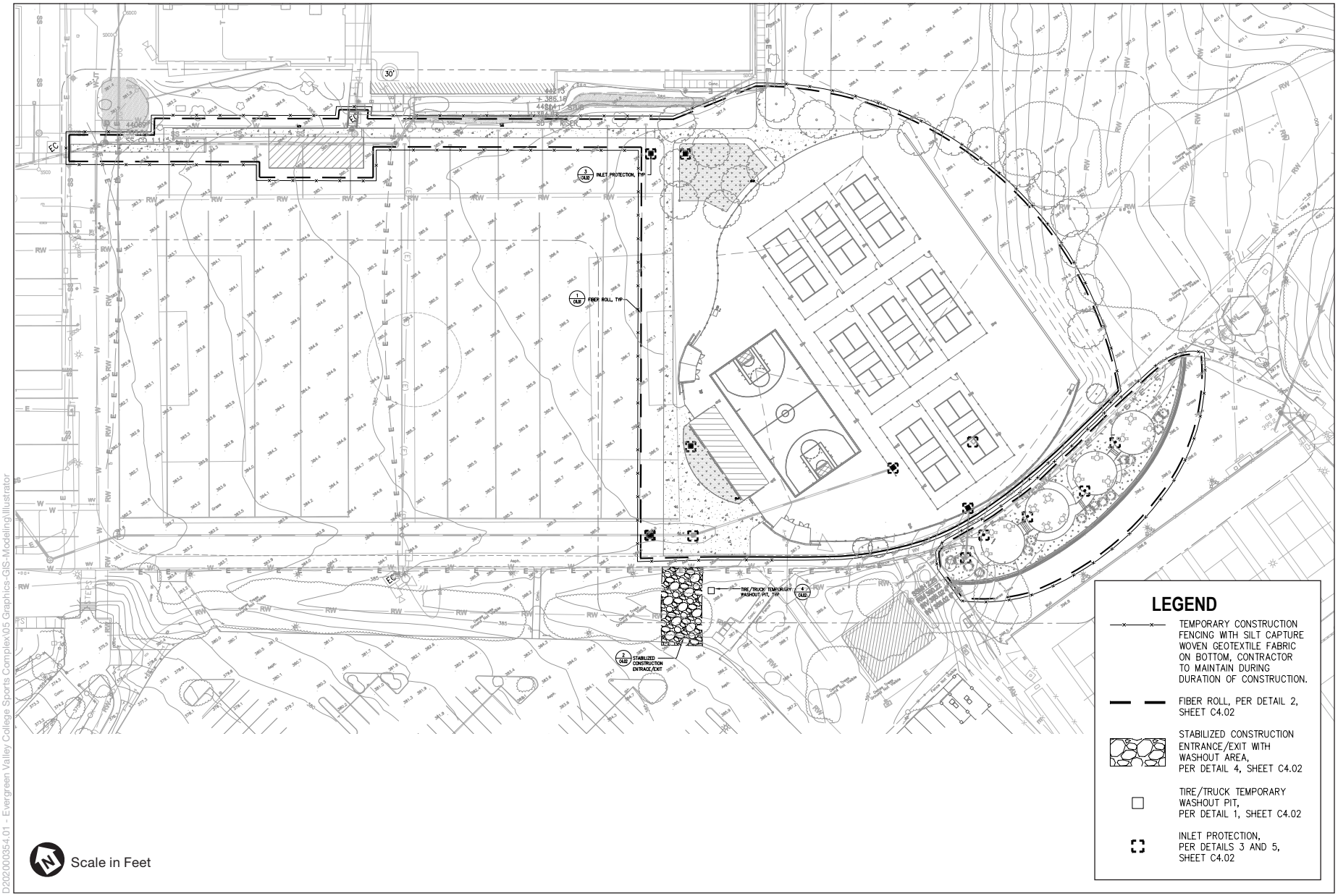

SOURCE: DSK Architects, 2020

Evergreen Valley College Sports Complex

Figure 12
Construction Erosion Control Plan

ESA

Environmental Factors Potentially Affected

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

☐ Aesthetics	☐ Agriculture and Forestry Resources	☒ Air Quality
☒ Biological Resources	☒ Cultural Resources	☐ Energy
☒ Geology/Soils	☐ Greenhouse Gas Emissions	☐ Hazards & Hazardous Materials
☐ Hydrology/Water Quality	☐ Land Use/Planning	☐ Mineral Resources
☐ Noise	☐ Population/Housing	☐ Public Services
☐ Recreation	☐ Transportation	☒ Tribal Cultural Resources
☐ Utilities/Service Systems	☐ Wildfire	☒ Mandatory Findings of Significance

DETERMINATION: (To be completed by the Lead Agency)

On the basis of this initial study:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

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

Terrance DeGray (Aug 12, 2020 21:33 PDT)

Signature

08/13/2020

Date

Environmental Checklist

Aesthetics

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

Discussion

a) **No Impact.** A scenic vista may be broadly defined as a publically-accessible, expansive view of highly valued landscape that is of benefit to the general public. While certain views accessible from within the campus, such as those across the campus to the San Felipe Hills, are considered of high visual quality, the existing campus development does not interfere with visual resources. There are also no scenic vistas present within the vicinity of the project site that include the EVC campus as part of a scenic view, as the campus is situated among existing residential development and open space areas (SJECCD 2013). As the proposed sports facilities would be similar in type, scale and use to those already developed on the campus near the project site, and as the campus is not part of any nearby scenic vistas, there would be no impact related to this criterion.

b) **No Impact.** No State or local scenic highways designated under the California Scenic Highway Program are present within the vicinity of the EVC campus (Caltrans 2020). Implementation of the proposed project would therefore not result in damage to scenic resources within a State scenic highway.

c) **Less than Significant Impact.** The facilities that would be constructed under the proposed project would include a sports complex consisting of eight (8) pickleball courts and one (1) asphalt futsal/basketball court, bleachers, a raised viewing patio, shade structures, and associated site improvements. As the project site is currently occupied by turf and landscaped areas and portions of a soccer field and a softball field, the proposed project could alter the existing visual character of the site as visible from the immediate surrounding vicinity. However, these proposed facilities would be located on an already-developed portion of the EVC campus, and adjacent to existing sports and recreational

facilities similar in type, design, and scale to those intended under the proposed project. Given these factors, project implementation would have a less-than-significant impact on the visual character of the surrounding area.

d) **Less than Significant Impact.** Existing structures on the EVC campus, such as existing buildings, sports facilities, and infrastructural lighting, are a current source of light and glare, as do cars used to access and traverse the campus. The proposed project would include the construction of pole and bollard lighting along pedestrian pathways surrounding the project site and within the proposed sports complex. Light poles would be approximately 24 feet above ground level, and structural light fixtures would be attached to the proposed shade structures. These poles and fixtures would be installed to direct light downward and minimize fugitive light. As shown in Figure 10, the illuminance from the proposed Sports Complex lighting would largely be contained within the areas of the proposed courts, seating and walkways, and decrease substantially moving outward towards the project site boundary. Upon operation of the proposed project, night lighting would be in use until 10:00 P.M. This schedule is consistent with the existing night lighting of the tennis courts located adjacent to the proposed project site.

Although the proposed project would result in an increase in light sources at the project site, these changes would not represent a new substantial source of light or glare to surrounding areas beyond that already produced by the developed campus. Lighting installed under the proposed project would be designed to direct light downward and reduce fugitive light. Consequently, this impact is therefore considered less than significant.

References

Caltrans, 2020. "Scenic Highways: List of eligible and officially designated State Scenic Highways (XLSX)." Available: https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways. Accessed July 24, 2020.

San José-Evergreen Community College District (SJECCD), 2013. *Evergreen Valley College 2025 Updated Facilities Master Plan Final Environmental Impact Report, SCH No. 20000112004.* 2013.

Agriculture and Forestry Resources

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
II. AGRICULTURE AND FORESTRY RESOURCES — In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
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))?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

Discussion

a) **No Impact.** The proposed project site is located on the EVC campus. The entire campus is developed and is situated within a developed suburban/rural setting in east-central San José, and is designated as Urban and Built-Up Land and Other Land by the California Department of Conservation under the Farmland Mapping and Monitoring Program (FMMP). None of the campus is used for agricultural purposes, or is considered Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) as designated by the FMMP, and no Farmland exists within one mile of the proposed site (FMMP 2016). Therefore, there would be no impact related to this criterion.

b) **No Impact.** The land on which the project site is located is zoned for urban use, designated as Single-Family Residential (Up to Five Dwelling Units per Acre) (R-1-5) by the City of San José Zoning Ordinance. Furthermore, the project site is already developed and is occupied by turf and landscaped areas and portions of a soccer field and softball field. While certain other portions of the EVC campus are zoned Agriculture (A) by the City of San José Zoning Ordinance, including an area of existing parking and landscaping located west of the project site, the proposed project itself would have no effect on those agriculturally zoned areas. There is currently no Williamson Act contract applicable to

the project site or EVC campus. As a result, the proposed project would not conflict with existing zoning for agricultural use or an existing Williamson Act contract.

c) **No Impact.** The land on which the project site is developed and is currently zoned for urban use, designated for R-1-5 (residential) by the City of San José. No land designated for forest land or timberland use occurs within or near the proposed project site. The proposed project would therefore not conflict with existing zoning for or result in the rezoning of forest land or timberland.

d) **No Impact.** No forest land or timberland is present within the proposed project site or surrounding vicinity of the proposed project site; therefore, the proposed project would not result in the loss of forest land or the conversion of forest land to non-forest use.

e) **No Impact.** No Farmland as designated by the FMMP occurs within the proposed project site or surrounding vicinity. Implementation of the proposed project would therefore not involve changes which would result in the conversion of Farmland or forest land to non-agricultural or non-forest use.

References

California Department of Conservation (DOC); Farmland Mapping and Monitoring Program (FMMP), 2016. "California Important Farmland Finder." Available: https://maps.conservation.ca.gov/DLRP/CIFF/. Accessed July 22, 2020.

City of San José, 2020. Title 20 - Zoning. Available: https://library.municode.com/ca/san_jose/codes/code_of_ordinances?nodeId=TIT20ZO. Accessed July 30, 2020.

Air Quality

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
III. AIR QUALITY — Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☒	☐	☐
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	☒	☐	☐
c) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☒	☐

Discussion

The proposed project is located in the City of San José (City), within the San Francisco Bay Area Air Basin (SFBAAB). The SFBAAB encompasses the nine-county region including all of Alameda, Contra Costa, Santa Clara, San Francisco, San Mateo, Marin, and Napa counties, and the southern portions of Solano and Sonoma counties. The climate of the SFBAAB is determined largely by a high-pressure system that is often present over the eastern Pacific Ocean off the west coast of North America. During winter, the Pacific high-pressure system shifts southward, allowing an increased number of storms systems to pass through the region. During summer and early fall, when fewer storms pass through the region, emissions generated in the SFBAAB accumulate as a result of the more stable conditions. The combination of abundant sunshine and the restraining influences of topography and subsidence inversions creates conditions conducive to the formation of photochemical pollutants, such as ground-level ozone and secondary particulates, including nitrates and sulfates.

The United States Environmental Protection Agency (U.S. EPA) and the California Air Resources Board (CARB) have established the national ambient air quality standards (NAAQS) and the California ambient air quality standards (CAAQS) for criteria air pollutants, respectively. Areas of California are designated as either attainment or nonattainment with respect to both the NAAQS and CAAQS. The SFBAAB is currently designated as non-attainment for the national ozone and $PM_{2.5}$ standards; as well as the state standards for 8-hour ozone, 1-hour ozone, annual average standards for particulate matter with a diameter of less than 10 microns (PM_{10}), 24-hour PM_{10}, and annual average standards for particulate matter with a diameter of less than 10 microns ($PM_{2.5}$).

Some receptors are considered more sensitive than others to air pollutants and may include those with pre-existing health problems, proximity to an emissions source, or duration of exposure to air pollutants. Schools, hospitals, and convalescent homes are considered to be relatively sensitive to poor air quality. Residential areas are also sensitive to poor air quality because people usually stay home for extended periods of time. The nearest residential receptors to the project site are

located across Yerba Buena Road to the south of Park Estates Way, approximately 650 feet south of the southern boundary of the project site. In addition to residential receptors, three schools are located in the vicinity of the project site including:

- Pinnacle Learning Center, located at 2995 Yerba Buena Road, is approximately 95 feet south of the Project site;
- Parkside School, located at 2995 Yerba Buena Road, is approximately 210 feet south of the Project site; and
- Empire Montessori Preschool, located at 3095 Yerba Buena Road, is approximately 550 feet southeast of the Project site.

Regulatory Setting

Federal

Criteria Air Pollutants

The U.S. EPA is required by the federal Clean Air Act (CAA) to identify and establish NAAQS to protect health and the environment. The U.S. EPA has identified six criteria air pollutants including ozone, nitrogen dioxide (NO_2), carbon monoxide (CO), sulfur dioxide (SO_2), lead, and particulate matter (PM). There are two subcategories of PM regulated under the NAAQS which are $PM_{10}$and $PM_{2.5}$.

State

Criteria Air Pollutants

Under the California CAA, the CARB has established the CAAQS, which are at least as protective as the NAAQS, and are often more stringent. In addition to the six criteria air pollutants identified by the U.S. EPA, CARB also regulates sulfates, hydrogen sulfide, vinyl chloride, and visibility reducing particles. Both the NAAQS and the CAAQS are presented in **Table 1**.

Toxic Air Contaminants

In addition to criteria air pollutants, other pollutants of concern include toxic air contaminants (TACs), which are compounds that have been determined to pose an actual or potential risk to public health by increasing cancer risks or other health risks, such as respiratory diseases like asthma. Sources of TACs may include gasoline stations, automobiles, dry cleaners, industrial operations, hospital sterilizers, and painting operations. TACs of particular concern include diesel particulate matter (DPM) and asbestos. Growing evidence indicates that exposure to emissions from diesel-fueled engines, about 95 percent of which come from diesel-fueled mobile sources, may result in cancer risks that exceed those attributed to other measured TACs. Asbestos is a fibrous mineral, which is both naturally occurring in ultramafic rock (a rock type commonly found in California) and is used as a processed component of building materials. Because asbestos has been proven to cause serious adverse health effects, including asbestosis and lung cancer, it is strictly regulated based on its natural widespread occurrence and its former use as a building material. Geological mapping does not indicate the presence of naturally occurring asbestos at the project site, therefore, asbestos is not discussed further in this analysis (CDMG, 2000).

TABLE 1
FEDERAL AND STATE AMBIENT AIR QUALITY STANDARDS

Pollutant	Averaging Time	State Standard	Federal Primary Standard
Ozone	8 Hour	0.070 ppm	0.070 ppm
	1 Hour	0.09 ppm	---
Carbon Monoxide	8 Hour	9.0 ppm	9 ppm
	1 Hour	20 ppm	35 ppm
Nitrogen Dioxide	Annual Average	0.030 ppm	0.053 ppm
	1 Hour	0.18 ppm	0.100 ppm
Sulfur Dioxide	Annual Average	---	0.030 ppm
	24 Hour	0.04 ppm	0.14 ppm
	1 Hour	0.25 ppm	0.075 ppm
Respirable Particulate Matter (PM_{10})	Annual Arithmetic Mean	20 $\mu g/m^3$	---
	24 Hour	50 $\mu g/m^3$	150 $\mu g/m^3$
Fine Particulate Matter ($PM_{2.5}$)	Annual Arithmetic Mean	12 $\mu g/m^3$	12.0 $\mu g/m^3$
	24 Hour	---	35 $\mu g/m^3$
Sulfates	24 Hour	25 $\mu g/m^3$	---
Lead	Calendar Quarter	---	1.5 $\mu g/m^3$
	30-Day Average	1.5 $\mu g/m^3$	---
	3-Month Rolling Average	---	0.15 $\mu g/m^3$
Hydrogen Sulfide	1 Hour	0.03 ppm	No Federal Standard
Vinyl Chloride	24 Hour	0.010 ppm	---
Visibility Reducing Particles	8 Hour	Extinction of 0.23/km; visibility of 10 miles or more	No Federal Standard

NOTES:
ppm = parts per million
$\mu g/m^3$ = micrograms per cubic meter

SOURCE: BAAQMD, 2017a.

Regional

Air quality within Santa Clara County is monitored and regulated by the Bay Area Air Quality Management District (BAAQMD).

BAAQMD CEQA Air Quality Guidelines

The *BAAQMD CEQA Air Quality Guidelines (BAAQMD CEQA Guidelines)* is an advisory document that provides lead agencies, consultants, and project proponents with procedures for assessing air quality impacts and preparing environmental review documents. The document describes the criteria that BAAQMD uses when reviewing and commenting on the adequacy of environmental documents. It recommends thresholds for use in determining whether projects would have significant adverse environmental impacts, identifies methods for predicting project emissions and impacts, and identifies measures that can be used to avoid or reduce air quality impacts.

BAAQMD most recently updated its *CEQA Air Quality Guidelines* in May 2017. BAAQMD states that the quantitative significance thresholds are "advisory and should be followed by local governments at their own discretion," and that lead agencies are fully within their authority to develop their own thresholds of significance. However, BAAQMD offers these thresholds for lead agencies to use in order to inform environmental review for development projects in the SFBAAB.

According to the BAAQMD CEQA Guidelines, a project would be considered to have a significant impact to existing air quality conditions within the SFBAAB if construction and operation of a project were to exceed the significance thresholds shown in **Table 2**.

TABLE 2
BAAQMD THRESHOLDS OF SIGNIFICANCE

	ROG	NOx	PM_{10}	$PM_{2.5}$
Construction Emissions	54 ppd	54 ppd	82 ppd (exhaust only)	54 ppd (exhaust only)
Operational Emissions	54 ppd / 10 tpy	54 ppd / 10 tpy	82 ppd / 15 tpy	54 ppd / 10 tpy

NOTES:
ppd = pounds per day; tpy = tons per year; ROG = reactive organic gases; NO_x = oxides of nitrogen

SOURCE: BAAQMD, 2017b.

To determine the significance of fugitive dust emissions, the BAAQMD recommends taking a qualitative approach. According to the BAAQMD Guidelines, a project would have a less than significant impact with regards to emissions of fugitive PM if it were to implement the BAAQMD Basic Construction Mitigation Measures Recommended for All Proposed Projects (Best Management Practices).

BAAQMD 2017 Clean Air Plan

In April 2017, BAAQMD adopted the *2017 Clean Air Plan*, whose primary goals are to protect public health and to protect the climate (BAAQMD, 2017c). The *2017 Clean Air Plan* updates the *Bay Area 2010 Clean Air Plan* and complies with state air quality planning requirements, as codified in the California Health and Safety Code (although the 2017 plan was delayed beyond the three-year update requirement of the code). State law requires the Clean Air Plan to include all feasible measures to reduce emissions of ozone precursors and to reduce the transport of ozone precursors to neighboring air basins.

The 2017 Clean Air Plan contains 85 measures to address reduction of several pollutants: ozone precursors, PM, air toxics, and GHGs. Other measures focus on a single type of pollutant: super GHGs such as methane and black carbon that consist of harmful fine particles that affect public health. These control strategies are grouped into the following categories:

- Stationary Source Measures
- Transportation Control Measures
- Energy Control Measures
- Building Control Measures

- Agricultural Control Measures
- Natural and Working Lands Control Measures
- Waste Management Control Measures
- Water Control Measures
- Super GHG Control Measures

BAAQMD Rules and Regulations

In addition to the BAAQMD CEQA Guidelines, the BAAQMD regulates air quality within the region through various district rules and regulations. Several BAAQMD rules that would apply to the Project including Rule 6-6 (Prohibition of Trackout) and Rule 8-3 (Architectural Coatings).

BAAQMD Planning Healthy Places

In 2016, BAAQMD prepared its *Planning Healthy Places* guidebook to assist local governments, planners, elected officials, developers, community groups, and other parties in addressing and minimizing potential air quality issues associated with local sources of air pollutants, especially TACs and PM. The guidebook provides best management strategies to reduce emissions and human exposure to pollutants that can be implemented in city or county general plans, neighborhood or specific plans, land use development ordinances, or individual projects.

BAAQMD has developed a map identifying areas where BMPs should be applied, and where further study is needed (BAAQMD, 2016). As shown on the Planning Healthy Places map, the Project site is located in an area where the recommended BMPs should be applied to reduce exposure and subsequent health impacts associated with air pollution. BMPs recommended by the Planning Healthy Places guidebook include a number of emissions reduction strategies, some of which have been incorporated into the *Envision San José 2040 General Plan* (General Plan), discussed in further detail below.

Local

Envision San José 2040 General Plan

The Envision San José 2040 General Plan (General Plan) was adopted in November 2011, as amended, and includes policies to minimize impacts on environmental resources, including air quality. To achieve goals related to reduction of air pollutant emissions, TACs, objectionable odors, and construction air pollutant emissions, the General Plan has outlined various goals, policies, and actions to be implemented by the City and project proponents. These control measures are discussed further under the analysis of criterion a) below.

Discussion

a) **Less than Significant with Mitigation Incorporated.** The most recently adopted air quality plan for the SFBAAB is the 2017 Clean Air Plan, which provides control strategies to reduce ozone, PM, air toxics, and GHGs. The BAAQMD CEQA Guidelines

recommend that a project's consistency with the current air quality plan be evaluated using the following three criteria:

a. The project supports the goals of the air quality plan,

b. The project includes applicable control measures from the air quality plan, and

c. The project does not disrupt or hinder implementation of any control measures from the air quality plan.

If it can be concluded with substantial evidence that a project would be consistent with the above three criteria, then the BAAQMD considers it to be consistent with air quality plans prepared for the SFBAAB (BAAQMD, 2017c).

The primary goals of the 2017 CAP are to attain air quality standards, reduce population exposure and protect public health in the SFBAAB, and reduce GHG emissions and protect the climate. The BAAQMD-recommended guidance for determining if a project supports the goals in the current air quality plan is to compare estimated project emissions with the BAAQMD's thresholds of significance. If project emissions would not exceed the thresholds of significance after the application of all feasible mitigation measures, the project would be consistent with the goals of the 2017 CAP. As indicated in the discussion with regard to cumulative increase in pollutants in checklist question b), the project would result in a less-than-significant impact related to construction emissions with the implementation of **Mitigation Measure AQ-1: BAAQMD Basic Control Mitigation Measures**, which includes BAAQMD's applicable recommended fugitive dust control measures for all projects. The project would also result in operational emissions less than the significance thresholds. Therefore, the project would be considered to support the primary goals of the 2017 CAP.

The 2017 CAP includes 85 control measures aimed at reducing air pollutants and GHGs in the SFBAAB. Many of these measures address stationary sources and are therefore not applicable to the project. The CAP measure that would be applicable to the project is TR3 – Local Regional Bus Service. The project would support the use the Santa Clara Valley Transportation Authority, as the site is located approximately 800 feet from the Yerba Buena & Footbridge bus stop, on bus route 42. This route connects Evergreen Valley College to Santa Theresa Station and would be utilized by users of the project, reducing both VMT and associated emissions.

The project supports the goals of the air quality plan, is consistent with applicable measures from the air quality plan, and would not disrupt or hinder implementation of any control measures from the air plan. Therefore, the project would be considered consistent with the 2017 Clean Air Plan.

Consistency with the Envision San José 2040 General Plan

The General Plan includes various goals, policies, and actions to address air quality issues and reduce pollutant emissions. Project consistency with the applicable General Plan policies and actions are summarized in **Table 3.**

TABLE 3
ENVISION SAN JOSÉ 2040 GENERAL PLAN AIR QUALITY POLICIES

Policies and Actions		Project Consistency Measures
Air Pollutant Emission Reduction		
MS-10.1	Assess projected air emissions from new development in conformance with the Bay Area Air Quality Management District (BAAQMD) CEQA Guidelines and relative to state and federal standards. Identify and implement feasible air emission reduction measures.	The project would not generate emissions of criteria pollutants during construction or operation that would exceed the BAAQMD thresholds of significance, as discussed further under the evaluation of criterion b), below. Therefore, the project would be consistent with this policy.
MS-11.2	For projects that emit toxic air contaminants, require project proponents to prepare health risk assessments in accordance with BAAQMD-recommended procedures as part of environmental review and employ effective mitigation to reduce possible health risks to a less than significant level. Alternatively, require new projects (such as, but not limited to, industrial, manufacturing, and processing facilities) that are sources of TACs to be located an adequate distance from residential areas and other sensitive receptors.	As discussed under the evaluation of criterion c), below, the project would emit TACs during construction, through the use of heavy duty, diesel-fueled construction equipment. However, the results of the health risk assessment determined that the project would not generate emissions of TACs that would result in a significant health risk to nearby sensitive receptors. Therefore, the project would be consistent with this policy.
MS-13.1	Include dust, particulate matter, and construction equipment exhaust control measures as conditions of approval for subdivision maps, site development and planned development permits, grading permits, and demolition permits. At minimum, conditions shall conform to construction mitigation measures recommended in the current BAAQMD CEQA Guidelines for the relevant project size and type.	As discussed above, the BAAQMD recommends implementation of BMPs during construction to reduce fugitive dust emissions to a less than significant level. The project would implement **Mitigation Measure AQ-1: Implement BAAQMD Best Management Practices** to reduce fugitive dust emissions during construction. Therefore, the project would be consistent with this measure.

SOURCE: City of San José, 2011.

Conclusion

In summary, the proposed project would be consistent with all three criteria listed above to evaluate consistency with the 2017 CAP as well as applicable policies in the City General Plan. Therefore, with implementation of Mitigation Measure AQ-1 for fugitive dust control, this would be a less-than-significant impact.

b) **Less than Significant with Mitigation Incorporated.** According to the BAAQMD, no single project will, by itself, result in nonattainment of ambient air quality standards. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. The BAAQMD CEQA Air Quality Guidelines recommends using its quantitative thresholds of significance to determine if an individual project's emissions would considerably contribute to cumulative air quality impacts in the region. If a project's emissions exceed the identified significance thresholds, during construction or operation, its contribution to cumulative air quality would be considerable, resulting in significant adverse air quality impacts to the region's existing air quality conditions (BAAQMD, 2017b). Alternatively, if a project does not exceed the identified significance thresholds, then the project would not be considered cumulatively considerable and would result in less-than-significant air quality impacts. The project's individual contribution to the cumulative air quality of the area has been evaluated below by comparing its construction and operational emissions to the applicable BAAQMD thresholds.

Project-related air quality impacts fall into two categories: short-term impacts due to construction and long-term impacts due to project operation. During project construction, fugitive dust and diesel exhaust emissions would be generated from the use of heavy-duty construction equipment, truck trips for hauling demolition materials from the project site, and vehicle trips associated with transporting workers, construction materials and equipment to and from the project site. Operation of the project would result in emissions from automobile trips generated from users and employees traveling to the project site.

Project construction and operational emissions were estimated using the California Emissions Estimator Model (CalEEMod), version 2016.3.2. Model inputs included estimates of the anticipated construction schedule, construction equipment and usage data, and vehicle trip generation rates estimated by the traffic consultant (see Appendix D). Where project-specific data was unavailable, CalEEMod defaults were used. Detailed modeling assumptions are included in Appendix A.

Construction

The construction schedule provided by the project applicant assumed that construction would begin in December 2020 and would last 6 months. Annual and average daily emissions estimated to result from construction of the project are summarized in **Table 4** below.

TABLE 4
UNMITIGATED CONSTRUCTION-RELATED CRITERIA POLLUTANT EMISSIONS

Year	ROG (ppd)	NO_x (ppd)	Exhaust PM_{10} (ppd)	Exhaust $PM_{2.5}$ (ppd)
2021	1.2	8.3	0.3	0.3
BAAQMD Thresholds	54	54	82	54
Exceeds Thresholds?	No	No	No	No

NOTES:
PPD = pounds per day

SOURCE: ESA, 2020 (Appendix A)

As shown in Table 4, the project would not generate construction exhaust emissions that would exceed the BAAQMD thresholds of significance.

In addition to exhaust emissions, emissions of fugitive dust would also be generated by construction activities associated with grading and earth disturbance, travel on paved and unpaved roads and other activities. Such emissions could result in a potential significant impact. With regard to fugitive dust emissions, the BAAQMD Guidelines focus on implementation of recommended dust control measures rather than a quantitative comparison of estimated emissions to a significance threshold. For all projects, the BAAQMD recommends the implementation of BMPs whether or not construction-related exhaust emissions exceed the applicable significance thresholds (BAAQMD, 2017b). The

project would implement **Mitigation Measure AQ-1** during construction; therefore, fugitive dust emissions would be mitigated to a less-than-significant level.

Operation

Operation of the project would generate emissions from automobiles transporting employees and users of project facilities to and from the project site, as well as minor landscaping activities. **Table 5** presents a summary of estimated annual operational emissions that would result from the project.

TABLE 5
UNMITIGATED OPERATIONAL CRITERIA POLLUTANT EMISSIONS

	ROG (ppd/tpy)	NO_x (ppd/tpy)	PM_{10} (ppd/tpy)	CO (ppd/tpy)
Area	0.08 / 0.01	<0.01 / <0.01	0 / 0	0 / 0
Energy	<0.01 / <0.01	0.01 / <0.01	<0.01 / <0.01	<0.01 / <0.01
Mobile	0.36 / 0.07	1.48 / 0.27	1.20 / 0.22	0.33 / 0.06
Total Emissions	**0.44 / 0.08**	**1.49 / 0.27**	**1.20 / 0.22**	**0.33 / 0.06**
BAAQMD Thresholds	54/10	54/10	82/15	54/10
Exceed Thresholds?	No	No	No	No

NOTES:
TPY = tons per year
PPD = pounds per day

SOURCE: ESA, 2020 (Appendix A)

As shown in Table 5, operation of the project would not generate emissions in exceedance of the BAAQMD thresholds of significance.

Conclusion

With implementation of Mitigation Measure AQ-1, criteria pollutant emissions generated during construction of the project would not exceed the BAAQMD thresholds of significance; and operational criteria pollutant emissions are determined to be well below BAAQMD thresholds of significance. Therefore, the project would not result in a cumulatively considerable net increase of any criteria pollutant for which the SFBAAB is designated non-attainment under applicable ambient air quality standards. This impact would be less than significant with mitigation incorporated.

c) **Less than Significant Impact.** As discussed within the Environmental Setting section, both school and residential receptors are located within 1,000 feet of the project site. Therefore, as required by the BAAQMD, a screening level health risk assessment was conducted to analyze project health risk impacts to these receptors.

TAC Emissions

Construction

Construction of the project would require heavy-duty off-road diesel vehicles and equipment throughout the 6-month construction period, which would generate DPM, a TAC identified by CARB. Health risks for project construction were estimated for potential exposure to DPM and total $PM_{2.5}$ emissions (from combustion exhaust and fugitive sources) using project-specific construction activity data provided by the project sponsor. The construction health risk assessment was conducted using technical information from the BAAQMD, California Air Pollution Control Officer's Association (CAPCOA), CARB, Office of Environmental Health Hazard Assessment (OEHHA), and the U.S. EPA. DPM emissions were estimated using the CalEEMod and concentrations at off-site sensitive receptors were estimated using AERSCREEN, U.S. EPA's recommended screening level air quality dispersion model using source parameters for off-road equipment.

Health risks were calculated for the nearest off-site residential, after-school and preschool sensitive receptors discussed above. The estimated risks in the health risk assessment are based primarily on a series of conservative assumptions related to predicted environmental concentrations, exposure, and chemical toxicity, as recommended by BAAQMD and OEHHA.[1] The use of conservative assumptions in the health risk assessment is likely to result in overestimates of exposure and therefore risk, although it is difficult to quantify the uncertainties associated with all of the assumptions made in the health risk assessment. As such, the combination of several high-end and conservative estimates used as exposure parameters may substantially overestimate chemical intake, and the excess lifetime cancer risks calculated in the health risk assessment are therefore likely to be overestimated.

The unmitigated annual average total $PM_{2.5}$ concentration and increase in lifetime cancer risk associated with the project's construction activities at the off-site sensitive receptors are shown in **Table 6**. Table 6 also includes the thresholds of significance that the BAAQMD uses for evaluation of health risk impacts. Details of modeling assumptions and model outputs are included in Appendix A.

As shown in Table 6, unmitigated health risks would not exceed the threshold of significance for both annual average $PM_{2.5}$ concentrations and lifetime excess cancer risk during construction at all three receptors analyzed. Therefore, this would be a less-than-significant impact.

[1] This includes the youngest potential age of exposure (e.g., beginning with the 3rd trimester of pregnancy for residential receptors, age 0 – 2 for preschool receptors and age 5 for after-school receptors), the highest potential frequency of exposure (e.g., child residents are exposed 24 hours per day, 350 days per year for residential receptors), the highest recommended breathing rates (e.g., 80th to 95th percentile breathing rates), and the maximum age sensitivity factors for vulnerable populations such as infants and children. In addition, as a screening model, AERSCREEN uses worst-case meteorology to estimate concentrations.

TABLE 6
UNMITIGATED CONSTRUCTION HEALTH RISKS AT OFF-SITE SENSITIVE RECEPTORS

	Modeled Maximum Annual Average $PM_{2.5}$ Concentrations ($\mu g/m^3$)	Lifetime Excess Cancer Risk (per million)
Residential Receptors	0.07	2.7
Pinnacle Learning Center	0.2	0.7
Parkview Preschool	0.2	3.3
Significance Threshold	0.3	10.0
Significant Impact	**No**	**No**

NOTE:
$\mu g/m^3$ = micrograms per cubic meter

SOURCE: ESA, 2020

Operation

Once operational, the Project would contribute only minimal, negligible volumes of TAC emissions. Vehicle trips generated to the project site would be primarily gasoline-fueled light-duty vehicle trips of users of the facility. Any diesel-fueled vehicle trips would generate DPM emissions, but would be minimal and result in a less-than-significant impact from exposure to off-site sensitive receptors.

Conclusion

Construction and operational emissions of project TACs would not expose sensitive receptors to substantial pollutant concentrations. Therefore, this impact would be less than significant.

d) **Less than Significant Impact.** During construction, combustion of fuel in diesel powered construction equipment and vehicles operating onsite would generate localized odors. These odors would be temporary and are not likely to be noticeable for extended periods of time beyond the project site. Therefore, the potential for odor impacts from project construction would be less than significant.

Sources that typically generate odors include wastewater treatment and pumping facilities; landfills, transfer stations, and composting facilities; petroleum refineries, asphalt batch plants, chemical (including fiberglass) manufacturing, and metal smelters; painting and coating operations; rendering plants; coffee roasters and food processing facilities; and animal feed lots and dairies. No such uses are proposed as part of the project. Therefore, operational odor impacts associated with the Project would also be less than significant.

Mitigation Measures

Mitigation Measure AQ-1: Implement BAAQMD Best Management Practices.

The SJECCD would ensure that the following measures are implemented during construction of the project:

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

b) All haul trucks transporting soil, sand, or other loose material off-site shall be covered.

c) 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.

d) All vehicle speeds on unpaved roads shall be limited to 15 mph.

e) 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.

f) 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.

g) All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.

h) 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.

References

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Biological Resources

Issues (and Supporting Information Sources):		*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
IV.	**BIOLOGICAL RESOURCES —** Would the project:				
a)	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
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?	☐	☐	☐	☒
c)	Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
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?	☐	☐	☐	☒
e)	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
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?	☐	☒	☐	☐

Introduction

This section describes the existing conditions for biological resources present within the project site and surrounding area. The resources described include existing habitat conditions and special-status plants and wildlife (federally- or State-listed as endangered, threatened, proposed, and candidate species, and State or local species of concern).

The information on biological resources is based on a review of pertinent literature and database queries, as well as a reconnaissance survey conducted by ESA staff on July 17, 2020, to characterize existing conditions, assess habitat quality, and assess the potential presence of special-status species and sensitive natural communities. The sources of reference data reviewed for this evaluation included the following:

- *Evergreen Valley College 2025 Updated Facilities Master Plan Final Environmental Impact Report* (San José-Evergreen Community College District 2013);
- U.S. Fish and Wildlife Service (USFWS) list of Federal Endangered and Threatened Species that may occur in the proposed project area, and/or may be affected by the proposed Project (USFWS 2020a);

- The California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDB) list of special-status species occurrences within the proposed project area and within the San José East, Lick Observatory, Santa Teresa Hills, and Morgan Hill USGS 7.5-minute topographic quadrangles (CDFW 2020b);
- California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants (v8-03) known to occur within the San José East, Lick Observatory, Santa Teresa Hills, and Morgan Hill USGS 7.5-minute topographic quadrangles (CNPS 2020);
- USFWS Critical Habitat for Threatened and Endangered Species (USFWS 2020b);
- Special Vascular Plants, Bryophytes, and Lichens List (CDFW 2020a); and
- Special Animals List (CDFW 2019).

Existing Habitat

The project site is located in the southern section of the EVC campus adjacent to existing sports and recreational facilities. The project would be constructed on entirely developed areas that include turf and landscaped areas, part of a soccer field, and part of a softball field. Surrounding structures include the Math and Science Building (MS3) to the north, tennis courts to the south, open space to the east, and parking and driveway areas to the west. Mature landscaped trees border portions of the southern, northern, and eastern boundaries of the project site. These trees include coast redwood (*Sequoia sempervirens*), Monterey pine (*Pinus radiata*), coast live oak (*Quercus agrifolia*) and London planetree (*Platanus* × *acerifolia*). East of the project site is Evergreen Lake, an artificial pond with landscaped edges that include several trees including Monterey pine and willow trees (*Salix* spp.). A small patch of cattails (*Typha* sp.) is present within the southern end of the pond. To the west of the project site are two portable buildings on a small, unirrigated area that is dominated by ruderal, nonnative grasses and forbs.

Special-Status Species

Special-status species are regulated under the State and federal Endangered Species Acts or other regulations, or are species that are considered sufficiently rare by the scientific community to qualify for such listing. These species are in the following categories:

1. Species listed or proposed for listing as threatened or endangered under the federal Endangered Species Act (FESA) (50 Code of Federal regulations [CFR] 17.12 [listed plants], 17.11 [listed animals] and various notices in the Federal Register [FR] [proposed species]);

2. Species that are candidates for possible future listing as threatened or endangered under FESA (61 FR 40, February 28, 1996);

3. Species listed or proposed for listing by the State of California as threatened or endangered under the California Endangered Species Act (CESA) (14 California Code of Regulations [CCR] 670.5);

4. Plants listed as rare or endangered under the California Native Plant Protection Act (NPPA) (California Fish and Game Code, Section 1900 et seq.);

5. Animal species of special concern to CDFW;

6. Animals fully protected under Fish and Game Code (California Fish and Game Code, Sections 3511 [birds], 4700 [mammals], and 5050 [reptiles and amphibians]);

7. Species that meet the definitions of rare and endangered under CEQA. CEQA Guidelines Section 15380 provides that a plant or animal species may be treated as "rare or endangered" even if not on one of the official lists; and

8. Plants considered under the CDFW and CNPS to be "rare, threatened or endangered in California" (California Rare Plant Rank [CRPR] 1A, 1B, and 2) as well as CRPR Rank 3 and 4 plant species.[2]

The results of database searches from USFWS, CNDDB, and CNPS are provided in **Appendix B**. Conclusions regarding habitat suitability and species occurrence are based on the analysis of existing literature and databases described previously and known habitats occurring within the project site and regionally, and results of surveys. Species with a medium or high potential for occurrence are discussed, below. While not expected to occur within the project site, bay checkerspot butterfly (*Euphydryas editha bayensis*) is also discussed, as the proposed project is located within the boundaries of the Santa Clara Valley Habitat Conservation Plan (HCP/NCCP), which covers this species.

Special-Status Birds

Two special-status raptors have the potential to nest within trees adjacent to the project site. White-tailed kite (*Elanus leucurus*) is a California Fully Protected Species. This species primarily eats small mammals and typically nests in the upper third of trees near open habitats such as open woodlands, savannahs, marshes, desert grasslands, and open fields. Cooper's hawk (*Accipiter cooperii*) is included on the California Department of Fish and Wildlife's Special Animals List as a "watch list" species. This species mainly eats birds and is typically found in woodlands and forests, but is also commonly found in suburban areas. Cooper's hawks nest in a variety of trees including but not limited to pines, oaks, beeches, and spruces. Trees adjacent to the project site provide potential nesting habitat for both of these species.

Other Breeding and Migratory Birds

Trees adjacent to the project site offer foraging and nesting opportunity to a variety of resident and migratory birds. Raptors observed during the reconnaissance survey include red-tailed hawk (*Buteo jamaicensis*) and red-shouldered hawk (*Buteo lineatus*). Passerine species which could nest in the area include, but are not limited to, Anna's hummingbird (*Calypte anna*), black phoebe (*Sayornis nigricans*), house finch (*Haemorhous mexicanus*), and American crow (*Corvus brachyrhynchos*), among many others. The federal Migratory Bird Treaty Act (MBTA) and

[2] CRPR 3 and 4 plants may be analyzed under CEQA, pursuant to Section 15380 of the CEQA Guidelines, if sufficient information is available to assess potential impacts to such plants. Factors such as regional rarity vs. statewide rarity should be considered in determining whether cumulative impacts to a CRPR 3 or 4 plant are significant even if individual project impacts are not. CRPR 3 and 4 plants may be considered regionally significant if, for example, the occurrence is located at the periphery of the species' range, or exhibits unusual morphology, or occurs in an unusual habitat/substrate. For these reasons, CRPR 3 and 4 plants should be included in the special-status species analysis. CRPR 3 and 4 plants are also included in the CNDDB Special Plants, Bryophytes, and Lichens List. [Refer to the current online published list available at: http://www.dfg.ca.gov/biogeodata.].

California Fish and Game Code protect raptors, most native migratory birds, and breeding birds that could occur on the project site and/or nest in the surrounding vicinity.

Bay Checkerspot Butterfly

Bay checkerspot butterfly is a federally Threatened species of butterfly that was historically found along the spine of the San Francisco Peninsula, from Twin Peaks to southern Santa Clara County and in a few pockets in Alameda and Contra Costa counties. Typical habitat for this species is found on shallow, serpentine-derived or similar soils, which support the larval host plants dwarf plantain (*Plantago erecta*) and purple owl's clover. The nearest CNDDB record for this species is approximately 1.8 miles southwest of the EVC campus and was considered extirpated in 1977 (CNDDB Occurrence No. 13). The potential occurrence of bay checkerspot butterfly within the EVC campus was discussed in the Evergreen Valley College 2025 Updated Facilities Master Plan Final Environmental Impact Report (FEIR) (San José-Evergreen Community College District, 2013). The FEIR found that suitable habitat for this species is not present on the campus due to the absence of soil and vegetation conditions, which was confirmed during the reconnaissance survey for areas within and surrounding the project site.

Discussion

a) **Less than Significant with Mitigation Incorporated.** The CNDDB and USFWS document a total of 42 special-status wildlife species in the San José East, Lick Observatory, Santa Teresa Hills, and Morgan Hill California 7.5-minute quadrangles, and the CNDDB, USFWS, and CNPS document a total of 40 plant species in these quadrangles (Appendix B). The project site is located within developed sports fields within and surrounded by the EVC campus, and does not provide suitable habitat for most of these species. The following discussion analyzes potential significant impacts to species for which potentially suitable habitat is present and that have a moderate or high likelihood to occur in the study area.

Trees located in the vicinity of the project site could provide nesting habitat for special-status raptors like white-tailed kite and Cooper's hawk, as well as other native migratory birds. Construction related activities associated with the proposed project could indirectly impact these species during nesting by creating enough disturbance to result in the loss of nests, eggs, or nestlings, or by causing nest abandonment, which would be a significant impact.

Implementation of **BIO-1: Avoidance and Minimization Measures for Nesting Birds** would reduce impacts to **less than significant** by conducting work during the non-nesting season as feasible. If work is implemented during the nesting season, then a pre-construction survey would be implemented and a no-work buffer would be placed around an active nest. This measure applies to all nesting birds protected by the federal MBTA and Section 3503 of the California Fish and Game Code.

b) **No Impact**. The project site is not located within designated critical habitat. The project is located within developed areas on campus that do not contain riparian habitat or any

sensitive natural communities. As such, implementation of the project would not result in any impacts to sensitive habitats.

c) **No Impact**. A reconnaissance survey conducted by ESA confirmed that are no potentially jurisdictional wetlands or waters present within or near the project site. The closest waterbody to the project is Evergreen Lake, which is an isolated, artificial water feature. Other aquatic features in the vicinity of the project are located near the western, northern, and southern EVC campus boundaries and include Thompson Creek, Evergreen Creek, and Yerba Buena Creek. These features are removed from, and would not be affected by, implementation of the project.

d) **No Impact**. The project site would be located within the EVC campus on existing sports fields that provide no corridors for movement or breeding habitat for wildlife species. Although trees adjacent to the project site provide stopover and nesting habitat for migratory birds, no impacts to trees are anticipated. Therefore, the project would have no impact to wildlife movement corridors or breeding areas.

e) **No Impact.** Implementation of the project would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation or policy or ordinance. The project would not result in any tree removal. As such, there would be no impact with respect to this criterion.

f) **Less than Significant with Mitigation Incorporated.** The Santa Clara Valley Habitat Conservation Plan/Natural Community Conservation Plan (HCP/NCCP) is a regional partnership between six local partners (the County of Santa Clara, Santa Clara Valley Transportation Authority, Santa Clara Valley Water District, and the Cities of San José, Gilroy, and Morgan Hill) and two Wildlife Agencies (the CDFW and USFWS). The HCP/NCCP provides a framework for promoting the protection and recovery of natural resources, including Endangered species, while streamlining the permitting process for planned development, infrastructure, and maintenance activities. The HCP/NCCP will allow the signatories to receive Endangered-species permits for activities and projects they conduct and those under their jurisdiction.

The project site is located within the HCP/NCCP area. However, as the proposed project would be built on developed areas within the EVC campus, it would not result in any impacts to natural land cover types as described in the HCP/NCCP. However, the HCP/NCCP analyzed impacts to bay checkerspot butterfly and found that increased emissions of nitrogen from vehicles trips associated with new development in the Santa Clara Valley pose a threat to bay checkerspot butterfly habitat. As discussed under Section XVII, Transportation, below, the proposed project is expected to generate an additional 311 daily vehicle trips, and thus would contribute to an overall increase in nitrogen emissions, which would be a significant impact to bay checkerspot butterfly.

The HCP/NCCP identifies a one-time mitigation payment of $3.60 for each new vehicle trip generated by new development to mitigate for indirect impacts resulting in increases in airborne nitrogen deposition. Implementation of **BIO-2: Mitigation for Nitrogen**

Deposition would reduce impacts to **less than significant** by payment of HCP/NCCP nitrogen deposition fees.

Mitigation Measures

Mitigation Measure BIO-1 Avoidance and Minimization Measures for Nesting Birds

- No preconstruction surveys or avoidance measures are required for construction activities that would be completed entirely during the non-nesting season (September 1 to January 31).
- For all construction activities scheduled to occur during the nesting season (February 1 to August 31), a qualified biologist (i.e., experienced with the nesting behavior of bird species of the region) shall conduct a preconstruction avian nesting survey no more than 14 days prior to the start of staging, site clearing, and/or ground disturbance.
- If there is a break of 14 days or more in construction activities during the breeding season, a new nesting bird survey shall be conducted before reinitiating construction.
- The surveying biologist shall be capable of determining the species and nesting stage without causing intrusive disturbance. The surveys shall cover all potential nesting sites within 500 feet of the project area for raptors and within 300 feet for other birds.

If active nests are found in the proposed project area or vicinity, a no-disturbance buffer shall be created around the active nests, as determined by a qualified biologist. The buffer distance can be reduced in coordination with CDFW if construction activities would not cause an adult to abandon an active nest or young or change an adult's behavior so it could not care for an active nest or young. If the nest(s) are found in an area where ground disturbance is scheduled to occur, ground disturbance shall be delayed until after the birds have fledged.

If work must occur within the established buffers, nests shall be continuously surveyed for the first 24 hours prior to any construction related activities to establish a behavioral baseline and, once work commences, all nests shall be continuously monitored to detect any behavioral changes as a result of the project, if feasible. If behavioral changes are observed, work causing the change shall cease and CDFW shall be consulted for additional avoidance and minimization measures. The avoidance and minimization measures shall ensure that the construction activities do not cause the adult to abandon an active nest or young or change an adult's behavior so it could not care for an active nest or young.

Mitigation Measure BIO-2 Mitigation for Nitrogen Deposition

The SJECCD shall provide a one-time payment of $3.60 per new vehicle associated with implementation of the project to the Santa Clara Valley Habitat Agency for use in acquiring and managing land consistent with the adopted Santa Clara Valley HCP/NCCP.

References

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Cultural Resources

Issues (and Supporting Information Sources):		*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
V.	**CULTURAL RESOURCES —** Would the project:				
a)	Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	☐	☐	☐	☒
b)	Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☒	☐	☐
c)	Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☒	☐	☐

Discussion

a) **No Impact.** This section discusses historical resources according to CEQA Guidelines Section 15064.5. A significant impact would occur if the project would cause a substantial adverse change to a historical resource, herein referring to historic-age architectural resources or the built environment, including buildings, structures, and objects. A substantial adverse change includes the physical demolition, destruction, relocation, or alteration of the resource.

There are no historic-age buildings or structures on the project site, and therefore there is no potential that the project could directly affect historic architectural resources. The ballfield that currently occupies the site was constructed after 1974 and therefore, it is not age eligible (older than 50 years) for consideration as a historical resource eligible for listing in the California Register of Historical Resources (California Register).

To assess the potential for indirect effects on historic architectural resources in the vicinity, ESA completed a records search at the Northwest Information Center (NWIC) of the California Historical Resources Information System at Sonoma State University on July 27, 2020 (File No. 20-0118). Records were accessed by reviewing the U.S. Geological Survey (USGS) *San José East Quadrangle*, California 7.5-minute topographic base map. The NWIC records search indicates that no buildings or structures have been previously recorded as historical resources within the *project site*,[3] and that no buildings or structures listed in or eligible for listing in the National Register of Historic Places (National Register) and/or the California Register are within or adjacent to the project site. Additional review of historical topographic maps and aerial photographs indicates that no buildings or structures were located in the project site between 1876 and 1975, when the college opened. Maps and aerial photographs reviewed include: the 1876 Thompson and West Santa Clara County Atlas Map; the 1899 USGS *San José Quadrangle* topographic map; the 1953 USGS *San José East Quadrangle* 7.5-minute topographic map; the 1961 USGS *San José East Quadrangle* 7.5-minute map, as photo revised in 1968; and the 1974 USGS San Francisco Bay Frame 9-206 aerial photograph.

[3] For the purposed of cultural resources, the project site refers to the technical term, *area of potential affect*, which was studied by ESA and included in the NWIC records search.

The records search and all maps and aerial photographs of the project site indicate that there are no historic-age (i.e., 50 years old or older) architectural resources in the project site and therefore, the project would not cause a substantial adverse change in the significance of a historical resource and no mitigation is necessary.

b) **Less than Significant with Mitigation.** This section discusses archaeological resources, both as historical resources according to CEQA Guidelines Section 15064.5, as well as unique archaeological resources as defined in Public Resources Code (PRC) Section 21083.2(g). A significant impact would occur if the project would cause a substantial adverse change to an archaeological resource through physical demolition, destruction, relocation, or alteration of the resource.

As noted in section (a) above, ESA completed a records search at the NWIC of the California Historical Resources Information System at Sonoma State University on July 27, 2020 (File No. 20-0118). Records were accessed by reviewing the USGS *San José East Quadrangle*, California 7.5-minute topographic base map. Additional research was conducted using the files and literature at ESA. The records search reviewed the project site and a 0.5-mile radius in order to: (1) determine whether known cultural resources have been recorded within the vicinity of the proposed project; (2) assess the likelihood of unrecorded cultural resources based on historical references and the distribution of environmental settings of nearby sites; and (3) develop a context for identification and preliminary evaluation of cultural resources.

The records search indicated that there are no previously recorded cultural resources within the project site, although two archaeological resources, indigenous prehistoric sites CA-SCL-267 and CA-SCL-689, have been recorded approximately one-half mile away along Thompson Creek to the west. A geological based archaeological sensitivity analysis indicates that the project site is located in an area mapped as Holocene-age alluvium, which has a high potential to contain buried paleosols[4]. Numerous deeply buried sites have been uncovered in the Santa Clara Valley, at depths varying between 1 foot and more than 10 feet below the ground surface. More than 60 percent of recorded archaeological sites in this region have been found in a buried context (Meyer and Rosenthal, 2007). However, given the historic-era ground disturbance associated with construction of the existing ballfield, and the distance to the two recorded prehistoric sites discussed above, there is a low potential to encounter previously unknown buried archaeological resources in the area.

ESA completed an archaeological pedestrian surface survey of the project site on July 17, 2020. The survey resulted in the identification of no archaeological materials and no archaeological or historical resources eligible for listing in the California Register were observed in the project site. The pedestrian survey identified surface soils consistent with the geological sensitivity analysis.

4 Paleosols are defined here as buried soil surfaces that would have been available for human use and occupation in the past.

As discussed above, the cultural resources assessment completed for the proposed project indicates there is a low potential to adversely affect significant known archaeological resources and a low potential for unknown buried archaeological resources in or near the project site. Although unlikely, the inadvertent discovery of archaeological resources cannot be entirely discounted. Inadvertent damage to archaeological resources during construction would be a potentially significant impact. Implementation of **Mitigation Measure CUL-1** would reduce the impact to a less than significant level.

c) **Less than Significant with Mitigation.** Based on the records search and survey results, no human remains are known to exist within the project site. The project would involve ground-disturbing activities; therefore, it is possible that such actions could inadvertently unearth, expose, or disturb buried human remains, which would be a potentially significant impact. Implementation of **Mitigation Measure CUL-2** would reduce this impact to a less than significant level.

Mitigation Measures

Mitigation Measure CUL-1: Inadvertent Discovery of Archaeological Resources.

If prehistoric or historic-era archaeological resources are encountered by construction personnel during project implementation, all construction activities within 100 feet shall halt until a qualified archaeologist, defined as one meeting the Secretary of the Interior's Professional Qualification Standards for archaeology, can assess the significance of the find. Prehistoric archaeological materials might include obsidian and chert flaked-stone tools (e.g., projectile points, knives, scrapers) or toolmaking debris; culturally darkened soil ("midden") containing heat-affected rocks, artifacts, or shellfish remains; and stone milling equipment (e.g., mortars, pestles, hand stones, or milling slabs); battered stone tools, such as hammer stones and pitted stones. Historic-era materials might include stone, concrete, or adobe footings and walls; filled wells or privies; and deposits of metal, glass, and/or ceramic refuse.

If the find is determined to be potentially significant, the archaeologist, in consultation with the City of Santa Clara and the culturally-affiliated Native American group(s) shall determine whether preservation in place is feasible. Consistent with CEQA Guidelines Section 15126.4(b)(3), this may be accomplished through planning construction to avoid the resource; incorporating the resource within open space; capping and covering the resource; or deeding the site into a permanent conservation easement. If avoidance is not feasible, a qualified archaeologist, in consultation with the lead agency and the culturally-affiliated Native American group(s), shall prepare and implement a detailed treatment plan. Treatment of unique archaeological resources shall follow the applicable requirements of PRC Section 21083.2. Treatment for most resources would consist of (but would not be not limited to) sample excavation, artifact collection, site documentation, and historical research, with the aim to target the recovery of important scientific data contained in the portion(s) of the significant resource to be impacted by the project. The treatment plan shall include provisions for analysis of data in a regional context, reporting of results within a timely manner, curation of artifacts and data at an approved facility, and dissemination of reports to local and state repositories, libraries, and interested professionals.

Mitigation Measure CUL-2: Inadvertent Discovery of Human Remains.

If potential human remains are encountered, all work will halt within 100 feet of the find and the on-site construction crew will immediately contact the City of Santa Clara. The City of Santa Clara will contact the Santa Clara County coroner in accordance with PRC Section 5097.98 and Health and Safety Code Section 7050.5. If the coroner determines the remains are Native American, the coroner will contact the NAHC. As provided in PRC Section 5097.98, the NAHC will identify the person or persons believed most likely to be descended from the deceased Native American. The most likely descendent will make recommendations for means of treating, with appropriate dignity, the human remains and any associated grave goods as provided in PRC Section 5097.98.

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Energy

Issues (and Supporting Information Sources):		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
VI.	**ENERGY —** Would the project:				
a)	Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☒	☐
b)	Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☒	☐

Environmental Setting

This section identifies and evaluates issues related to energy use and conservation in the context of the proposed project. It includes information about the physical and regulatory setting and identifies the criteria used to evaluate the significance of potential impacts, the methods used in evaluating these impacts, and the results of the impact assessment.

State Energy Setting

Total energy usage in California was 7,881 trillion British Thermal Units (BTUs) in 2017 (the most recent year for which specific data are available), which equates to an average of 200 million BTUs per capita. These figures place California second among the nation's 50 states in total energy use and 48th in per capita consumption (EIA, 2020).

Electricity

In 2018, total system electric generation for California was 285,488 gigawatt-hours (GWh). California's in-state electricity use was derived from natural gas (35 percent); coal (3 percent); large hydroelectric resources (11 percent); nuclear sources (9 percent); renewable resources that include geothermal, biomass, small hydroelectric resources, wind, and solar (31 percent); and unspecified sources (11 percent) in 2018. Of the approximately 63,028 GWh generated from renewable sources in the state, solar-generated electricity made up the highest proportion (43 percent), followed by wind (22 percent), geothermal (18 percent), biomass (9 percent), and small hydroelectric (7 percent) (CEC, 2020a).

Transportation Fuels

According to the California Energy Commission (CEC), transportation accounted for nearly 41.1 percent of total energy consumption in California during 2017 (CEC, 2020). In 2018, 15.4 billion gallons of gasoline and 3.7 billion gallons of diesel fuel were consumed in California (CEC, 2019a). Petroleum-based fuels currently account for more than 90 percent of transportation fuel use in California (CEC, 2016).

Regional Energy Setting

Electricity

Electricity is provided to the EVC campus and the Project site by Pacific Gas and Electric Company (PG&E). PG&E provides electrical and natural gas services to approximately

16 million people throughout its 70,000-square-mile service area, across central, coastal, and Northern California, an area bounded by Humboldt County to the north and Kern County to the south (PG&E, n.d.a).

PG&E generates power from a variety of energy sources, including large hydropower (greater than 30 MW), small hydropower (less than 30 MW), natural gas, nuclear sources, and renewable resources, such as wind, solar, and geothermal sources. Approximately 39 percent of PG&E's 2018 electricity purchases were from renewable sources, which is 31 percent greater than the statewide percentage of electricity purchases from renewable sources (PG&E, 2019). In 2018, PG&E sold approximately 87,375,000 MWh to customers (PG&E, 2018). Refer to **Table 7** for a summary of state and PG&E electricity use.

TABLE 7
2018 ANNUAL STATE AND REGIONAL ENERGY USE

Source	Amount
Electricity (State/PG&E)[a]	284,436,262 MWh / 87,375,000 MWh
Natural Gas (State/PG&E)[b]	12,327,096,996 MMBtu / 1,016,713,000 MMBtu
Gasoline (Statewide/Santa Clara County)[c]	15,471,000,000 gallons / 643,000,000 gallons
Diesel (Statewide/Santa Clara County)[1,c]	3,702,083,333 gallons / 100,000,000 gallons

NOTES:
1 Diesel use is adjusted to account for retail (52 percent) and non-retail (48 percent) diesel sales. CEC-A15 results for diesel sales do not include non-retail diesel sales. For purposes of this analysis, the 48 percent of non-retail diesel sales were accounted, and therefore, reported statewide diesel sales are higher than reported in the A15 results. Refer to footnote in the CEC-A15 results; MMBtu = million British thermal units; MWh = megawatt-hours; PG&E = Pacific Gas and Electric Company

SOURCES:
a CEC, 2019b; PG&E, 2018.
b PG&E, n.d.b.
c CEC, 2019a.

PG&E provides electricity to the EVC campus from 21 kVA lines that feed into the campus Central Energy Plant. Power is then distributed to each building on the campus via direct-bury cable or through the campus utility tunnel system. The EVC campus also receives power from a 1.4-megawatt (MW) photovoltaic system that was recently installed on the campus. This system provides about one-third of the campus' power (SJECCD, 2013).

Natural Gas

PG&E provides natural gas conveyance services to "core" customers and to "non-core" customers (industrial, large commercial, and natural gas–fired electric generation facilities) that are connected to its gas system in its service territory. Core customers can purchase natural gas procurement service (natural gas supply) from either PG&E or non-utility third-party gas procurement service providers (referred to as "core transport agents"). When core customers purchase gas supply from a core transport agent, PG&E still provides gas delivery, metering, and billing services to those customers. When PG&E provides both transportation and procurement services, PG&E refers to the combined service as "bundled" natural gas service. Currently, more

than 95 percent of core customers, representing nearly 80 percent of the annual core market demand, receive bundled natural gas service from PG&E.

PG&E does not provide procurement service to non-core customers. Non-core customers must purchase their gas supplies from third-party suppliers. PG&E offers backbone gas transmission, gas delivery (local transmission and distribution), and gas storage services as separate and distinct services to its non-core customers. Access to PG&E's backbone gas transmission system is available for all natural gas marketers and shippers, as well as non-core customers. PG&E also delivers gas to off-system customers (i.e., outside of PG&E's service territory) and to third-party natural gas storage customers.

PG&E provides natural gas service to the EVC campus. Natural gas is fed to the campus Central Energy Plant from an existing off-site PG&E main and then distributed to each building on the campus via direct-bury piping or through the campus utility tunnel system (SJECCD, 2013).

Transportation Energy

According to fuel sales data from the CEC, fuel consumption in Santa Clara County was approximately 643 million gallons of gasoline and 100 million gallons of diesel fuel in 2018 (CEC, 2019a). Refer to Table 7 for a summary of transportation fossil fuel consumption in 2018.

Regulatory Setting

Energy conservation is embodied in many federal, State and local statutes and policies.

Federal

National Energy Conservation Policy Act

The National Energy Conservation Policy Act (NECPA, 42 U.S.C. §8201 et seq.) serves as the underlying authority for federal energy management goals and requirements and is the foundation of most federal energy requirements. NECPA established energy-efficiency standards for consumer projects and includes, among other things, energy-efficiency standards for new construction.

Corporate Average Fuel Economy Standards

Section 3.10, *Greenhouse Gas Emissions*, details federally established fuel economy standards by the U.S. Environmental Protection Agency (U.S. EPA) and National Highway Traffic Safety Administration (NHTSA). NHTSA's Corporate Average Fuel Economy (CAFE) standards regulate how far vehicles must travel on a gallon of fuel. NHTSA sets CAFE standards for passenger cars and for light trucks (collectively, "light-duty vehicles"), and separately sets fuel consumption standards for medium- and heavy-duty trucks and engines. In the course of more than 30 years, this regulatory program has resulted in improved fuel economy throughout the United States' vehicle fleet (NHTSA, 2014; 2019).

State

State of California Integrated Energy Policy

Public Resources Code Section 25301(a) requires the CEC to develop an integrated energy plan at least every 2 years for electricity, natural gas, and transportation fuels. The plan calls for the State to assist in the transformation of the transportation system to improve air quality, reduce congestion, and increase the efficient use of fuel supplies with the least environmental and energy costs. An overarching goal of the resulting Integrated Energy Policy Report (IEPR) is to achieve the statewide greenhouse gas emission reduction targets, while improving overall energy efficiency. For example, the CEC's 2019 Integrated Energy Policy Report Update includes integration of renewable energy, including wind, as a key component (CEC, 2020b).

Renewables Portfolio Standard

The State of California adopted standards to increase the percentage that retail sellers of electricity, including investor-owned utilities and community choice aggregators, must provide from renewable resources. The standards are referred to as the RPS. Qualifying renewables under the RPS include bioenergy such as biogas and biomass, small hydroelectric facilities (30 MW or less), wind, solar, and geothermal energy. The California Public Utilities Commission (CPUC) and the CEC jointly implement the RPS program. The CPUC's responsibilities include: (1) determining annual procurement targets and enforcing compliance; (2) reviewing and approving each investor-owned utility's renewable energy procurement plan; (3) reviewing contracts for RPS-eligible energy; and (4) establishing the standard terms and conditions used in contracts for eligible renewable energy (CPUC, 2020).

Executive Orders S-14-08 and S-21-09

In November 2008, Governor Schwarzenegger signed Executive Order S-14-08, which expanded the State's RPS to 33 percent renewable power by 2020. In September 2009, Governor Schwarzenegger continued California's commitment to the RPS by signing Executive Order S-21-09, which directed the California Air Resources Board under its Assembly Bill (AB) 32 authority to enact regulations to help the State meet its RPS goal of 33 percent renewable energy by 2020.

Senate Bill 350 – Clean Energy and Pollution Reduction Act of 2015

Senate Bill (SB) 350, known as the Clean Energy and Pollution Reduction Act of 2015, was enacted on October 7, 2015. It provides a new set of objectives in clean energy, clean air, and pollution reduction by 2030. The objectives include the following:

1. To increase from 33 percent to 50 percent by December 31, 2030, the procurement of electricity from renewable sources.
2. To double the energy efficiency savings in electricity and natural gas final end uses of retail customers through energy efficiency and conservation.

Senate Bill 100 and Executive Order B-55-18

On September 10, 2018, Governor Brown signed SB 100, establishing that 100 percent of all electricity in California must be obtained from renewable and zero-carbon energy resources by December 31, 2045. SB 100 also created new standards for the RPS goals that were established

by SB 350 in 2015. Specifically, the bill increases required energy from renewable sources for both investor-owned and publicly-owned utilities from 50 percent to 60 percent by 2030. Incrementally, these energy providers are also required to have a renewable energy supply of 33 percent by 2020, 44 percent by 2024, and 52 percent by 2027. The updated RPS goals are considered achievable, since many California energy providers are already meeting or exceeding the RPS goals established by SB 350.

On the same day that SB 100 was signed, Governor Brown signed Executive Order B-55-18 with a new statewide goal to achieve carbon neutrality (zero-net greenhouse gas emissions) by 2045 and to maintain net negative emissions thereafter.

Local

Envision San José 2040 General Plan

The *Envision San José 2040 General Plan* (General Plan) contains goals and policies related to the City's commitment to sustainability. The City's sustainability goals include improvements to energy efficiency, renewable energy generation, and building design aimed at overall energy reduction. General Plan goals, policies, and actions that would be applicable to the project include Goal MS-14: Reduce Consumption and Increase Energy Efficiency, and associated policies. Goal MS-14 sets the target of 50 percent reduction in per capita energy consumption compared to 2008 levels by 2022; and maintenance or reduction of net aggregate energy consumption levels equivalent to the 2022 (Green Vision) level through 2040 (City of San José, 2011).

Discussion

a) **Less than Significant Impact.** Project construction would consume energy in the form of diesel and gasoline fuels to power construction equipment and vehicles to transport workers and materials to and from the project site. Construction-related energy use was estimated for the project using the California Emissions Estimator Model (CalEEMod), Version 2016.3.2. Based on construction equipment and vehicle trip data provided for the project, it is estimated that construction of the project would use approximately 6,614 gallons of diesel fuel and 1,194 gallons of gasoline fuel over the six-month construction period. Operation and maintenance of the project would result in gasoline, diesel fuel and electricity use associated with seasonal landscaping activity, lighting, and vehicle use from users traveling to the project site. Annual operational energy consumption for the project, as estimated using CalEEMod, would be approximately 20,213 gallons of gasoline, 3,493 gallons of gasoline, and about 3 megawatt-hours of electricity per year. For a project of this scope and size, this increase in energy use would not represent a significant amount of fuel in comparison to the 643 million gallons of gasoline and 100 million gallons of diesel[5] that were used in Santa Clara County in 2018 (CEC, 2019a). Construction activity associated with the project would comply with all state and local requirements designed to minimize idling and associated emissions which

[5] Diesel use is adjusted to account for retail (52 percent) and non-retail (48 percent) diesel sales. CEC-A15 results for diesel sales do not include non-retail diesel sales. For purposes of this analysis, the 48 percent of non-retail diesel sales were accounted, and therefore, reported statewide diesel sales are higher than reported in the A15 results. Refer to footnote in the CEC-A15 results.

minimizes fuel use including Title 13, Section 2485 of the California Code of Regulations and Title 13, Section 2449 of the California Code of Regulations, which limits idling of commercial vehicles over 10,000 pounds and off-road equipment over 25 horsepower to two minutes. Furthermore, operational energy use associated with vehicle trips would not represent a significant regional net increase in fuel use. According to the traffic study prepared in support of this Initial Study, the project would not cause an increase in regional trips, but rather a change in trip-making, since users of the project would travel to the site rather than other nearby athletic facilities (see Appendix D); therefore, the project would not result in a considerable net increase in regional trips and associated energy use.

Overall, construction and operation of the project would result in a minimal increase in energy use which would not be wasteful, inefficient, or unnecessary for construction or operation of the project. Therefore, impacts associated with increase in energy consumption would be less than significant.

b) **Less than Significant Impact.** Construction of the project would be consistent with various state and regional plans and policies meant to reduce energy use and increase energy efficiency. As discussed above, equipment and vehicles used for construction of the project would be required to comply with all federal and state fuel efficiency standards. Energy use related to construction of the proposed scenario would comply with state and local requirements designed to minimize idling and subsequent fuel use; specifically, construction activities would comply with Title 13, Section 2485 of the California Code of Regulations and Title 13, Section 2449 of the California Code of Regulations, which limits idling of commercial vehicles over 10,000 pounds and off-road equipment over 25 horsepower to two minutes.

Operation of the project would also be consistent with state and regional plans and policies to reduce energy use and increase energy efficiency including the RPS and the City's General Plan. During project operation, energy would be provided to the project site by PG&E, which is required to comply with the renewable energy requirements set forth by the RPS. In addition, the project would be consistent with the City's General Plan policies aimed at reducing energy consumption. Transportation-related energy use associated with project-generated traffic would be required to comply with all federal and state fuel-efficiency standards, including the 2020 CAFE Standards discussed in the Regulatory Setting, above.

Construction and operation of the proposed project would include the implementation of measures to comply with energy-efficiency regulations and would therefore not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. The project would be consistent with state and local energy plans and would have a less-than-significant impact.

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Geology and Soils

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
VII. GEOLOGY AND SOILS — Would the project:				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☒	☐
ii) Strong seismic ground shaking?	☐	☐	☒	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv) Landslides?	☐	☐	☐	☒
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	☐	☒	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	☐	☐	☒	☐
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?	☐	☐	☐	☒
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐

Discussion

a.i) **Less than Significant Impact**. The proposed project is not located in an Earthquake Fault Zone (EFZ) as delineated on an Earthquake Zones of Required Investigation Map (EZRIM) published by the California Geological Survey (CGS) as required by the Alquist-Priolo Earthquake Fault Zoning Act. There are active faults in the surrounding area (i.e., the Hayward, Silver Creek, Coyote Creek, Arroyo Aguague, Calaveras, San José, and Shannon Monte Vista faults), the closest—and most significant—being the Southeast Extension section of the Hayward fault zone, approximately one-third miles to the east (AEC 2020). The Southeast Extension section of the Hayward fault zone is designated an EFZ (AEC 2020; CGS 2001).

The proposed project would not include the construction of any habitable structures, and construction and operation of the project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of

a known earthquake fault. Therefore, the proposed project would result in a less-than-significant impact related to this criterion.

a.ii) **Less than Significant Impact**. Strong seismic ground shaking could occur in the study area because there are active fault zones near the project site, notably the Hayward fault zone. While the proposed project would be located in a seismically active area, the project components would not be used for human occupancy, nor would any project component exacerbate the existing risk of seismic shaking or associated damage. All project components would be designed and constructed consistent with applicable sections of the California Building Code (CBC), which includes design requirements for achieving seismic safety. Additionally, the required Geotechnical Investigation performed by AEC (**Appendix C**) provides foundation design recommendations and seismic design requirements to be implemented during construction (AEC, 2020). The recommendations and parameters provided in the Geotechnical Investigation would be implemented to minimize any adverse effects associated with seismic ground shaking. Compliance with all the applicable design parameters within the CBC and the Geotechnical Investigation would reduce the impacts associated with seismic ground shaking to less than significant.

a.iii) **Less than Significant Impact**. As noted above, the project would be designed consistent with the applicable sections of the CBC and the seismic design parameters detailed in the geotechnical investigation (AEC, 2020), which would also reduce the risk from seismically-induced ground failures.

The Geotechnical Investigation by AEC and the EZRIM published by the CGS (which delineate liquefaction and earthquake-induced landslide zones, as well as EFZs) indicate the project site is not within a liquefaction zone, and has a low potential for liquefaction during a major earthquake (AEC, 2020; CGS, 2001).

Regardless, the Geotechnical Investigation provides foundation design recommendations and soil engineering parameters that would address the potential impacts related to liquefaction. Additionally, as discussed above in item a.ii), project components would be designed and constructed in accordance with all the requirements detailed in the CBC. Implementation of these geotechnical recommendations would reduce liquefaction related impacts at the project site to less than significant.

a.iv) **No Impact**. Due to the relatively flat terrain surrounding the area, the potential for landslides as a result of earthquakes is considered low. According to the Geotechnical Investigation by AEC, the project site is in an area classified as Class 0 – No Susceptibility (AEC, 2020). Additionally, geologic maps indicate the project site is not in an area that is mapped as having historic landslide movement, or where conditions indicate the potential for landslides (Dibblee & Minch, 2006; Wentworth et al., 1999). Therefore, the proposed project would result in no impact related to landslides.

b) **Less than Significant Impact**. Project construction would involve ground-disturbance including earthmoving, minor trenching, and grading. These activities would increase the

susceptibility of sediments on the project site to erosion by wind or water. If not controlled and managed, erosion and sedimentation caused by the project could be significant. However, as discussed in Section X, Hydrology and Water Quality, a Storm Water Pollution Prevention Plan (SWPPP) would be developed and implemented as part of the project in accordance with the NPDES General Permit for Stormwater Discharge Associated with Construction and Land Disturbance Activities. The SWPPP would include best management practices (BMPs) designed to control and reduce erosion. These measures would generally consist of silt fences, straw wattles, and gravel bags. The implementation of these erosion control measures would reduce construction impacts to less-than-significant levels.

Once operational, the project components would include mostly paved surfaces, which would not be subject to substantial erosion or topsoil loss, and there would be no excavation or grading associated with project operations. Therefore, operational impacts are considered less than significant.

c) **Less than Significant Impact**. The potential for seismic-related ground failure, including liquefaction and landslides for the project, are discussed above under a.iii) and a.iv). As discussed in Question a.i), the project area is not located in an area mapped as having historic landslide movement (Wentworth et al., 1999), or where conditions indicate a potential to experience landslides. Therefore, project activities would not result in any on- or off- site landslides. The Geotechnical Investigation by AEC and the EZRIM published by the CGS indicates the liquefaction risk at the project site is low. Nevertheless, the Geotechnical Investigation provides design recommendations and parameters to avoid damage related to liquefaction (AEC, 2020; CGS, 2001). Additionally, all project components would be designed and constructed consistent with applicable sections of the CBC, which includes requirements and guidelines to protect against liquefaction, lateral spreading, and soil collapse. Subsidence is generally associated with groundwater withdrawal; as the project would not include groundwater withdrawal, there would be little risk of subsidence as a result of project implementation. Lateral spreading could occur during construction excavation if a liquefiable layer is present in the subsurface; however, graded areas would be required to comply with California Occupational Safety and Health (Cal/OSHA) Excavation and Trenching standards regulations, which would limit the potential for lateral spreading by sloping and shoring excavated areas. There would be no excavation activity during project operations, and the project would not use groundwater during operations. Therefore, adherence to state standards and standard engineering and construction techniques and recommendations from the Geotechnical Investigation by AEC would reduce impacts related to unstable soils to less than significant.

d) **Less than Significant Impact**. As part of the Geotechnical Investigation by AEC, laboratory tests were performed to determine the expansion potential of the soils underlying the project site. The laboratory tests indicate the expansion index of the near-surface soils at the project site is 21 and 27, which is consistent with a low expansion potential (AEC, 2020). The Geotechnical Investigation further states that expansive soils

are not uncommon in the general area, and provides additional recommendations to avoid any potential damage as a result of soil expansion (AEC, 2020).

As stated above, the proposed project would be designed consistent with the applicable sections of the CBC, which include requirements that address the expansion potential of soils. Adherence to the design requirements provided by the CBC would ensure impacts related to expansive soils at the project site would be less than significant.

e) **No Impact**. The proposed project would not utilize septic systems or other alternative disposal systems for the disposal of wastewater. Therefore, no impact would occur.

f) **Less than Significant with Mitigation Incorporated**. A significant impact would occur if a project would destroy a unique paleontological resource or site, or a unique geologic feature. Paleontological resources are the fossilized evidence of past life found in the geologic record. Despite the tremendous volume of sedimentary rock deposits preserved worldwide, and the enormous number of organisms that have lived through time, preservation of plant or animal remains as fossils is an extremely rare occurrence. Because of the infrequency of fossil preservation, fossils—particularly vertebrate fossils—are considered to be nonrenewable resources. Because of their rarity, and the scientific information they can provide, fossils are highly significant records of ancient life.

Geologic Mapping by Wentworth et al. indicates Pleistocene-age alluvial fan deposits are mapped at the surface within the project site (Wentworth et al., 1999). While not mapped at the surface within the project site, Wentworth et al. indicates the Knoxville, Briones, and Claremont formations are present in proximity to the project site, and may be present at depth.

According to the University of California Museum of Paleontology's (UCMP) fossil localities online database, there have been 35 vertebrate fossil specimens recovered from Pleistocene-age deposits throughout Santa Clara County (UCMP, 2020a). Additionally, in 2016, Kaitlin Maguire and Patricia Holroyd documented three new vertebrate fossil localities in Santa Clara County that have yielded several specimens, including mammoth, horse, sloth, and bison fossils (Maguire & Holroyd, 2016). Due to the high occurrence of vertebrate fossils within Pleistocene-age deposits in the area, this unit is considered to have high paleontological potential.

The Briones Formation has yielded vertebrate fossils within Santa Clara County, as well as Alameda, Contra Costa, and Stanislaus counties (UCMP, 2020b). The Claremont and Knoxville formations have also yielded vertebrate fossils, however, according to the UCMP database, there is no record of vertebrate fossils recovered from Santa Clara County (UCMP, 2020c; UCMP, 2020d). Although the there is no record of vertebrate fossils recovered from the Claremont and Knoxville formations within Santa Clara County, these formations are still considered to have a high paleontological potential due to the presence of vertebrate fossils within these units in other parts of California.

As stated in the Project Description, excavation that would occur during construction of the project is expected to reach up to 10 feet below ground surface, and as a result, could potentially encounter paleontological resources during construction. Should paleontological resources be encountered during ground-disturbing activities, this would be a potentially significant impact.

Implementation of **Mitigation Measures GEO-1** would reduce the potential for significant impacts on paleontological resources by providing paleontological resources sensitivity training for construction workers; implementing a mitigation plan to ensure preservation of any paleontological resources encountered during construction; and salvaging and preparing significant fossil finds for curation. Because development of the Project would require implementation of Mitigation Measures GEO-1, the Project would not adversely affect paleontological resources, and this impact would be **less than significant with mitigation incorporated.**

Mitigation Measures

Mitigation Measure GEO-1: Preconstruction Training and Treatment, Salvage, and Curation of Paleontological Resources.

Prior to construction, a qualified paleontologist meeting the standards of the Society of Vertebrate Paleontology (SVP) (SVP, 2010) with expertise in California paleontology and on-site construction worker training shall complete an institutional record and literature search and shall develop a paleontological resources training program for all construction personnel and field personnel who are involved with earthmoving activities, including the site superintendent, regarding the possibility of encountering fossils, the appearance and types of fossils that are likely to be seen during construction, the proper notification procedures should fossils be encountered, and the laws and regulations protecting paleontological resources.

If paleontological resources, such as fossilized bone, teeth, shell, tracks, trails, casts, molds, or impressions are discovered during ground-disturbing activities, all earthwork or other types of ground disturbance within 25 feet of the find shall stop immediately and the monitor shall notify the Environmental Review Officer. Work shall not resume until a qualified professional paleontologist can assess the nature and importance of the find. Based on the scientific value or uniqueness of the find, the qualified paleontologist may record the find and allow work to continue, or recommend salvage and recovery of the fossil. The qualified paleontologist may also propose modifications to the stop-work radius and the monitoring level of effort based on the nature of the find, site geology, and the activities occurring on the site, and in consultation with the Environmental Review Officer.

If treatment and salvage is required, recommendations shall be consistent with the SVP 2010 Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources, and currently accepted scientific practice, and shall be subject to review and approval by the Environmental Review Officer. If required, treatment for fossil remains may include preparation and recovery of fossil materials so that they can be housed in an appropriate museum or university collection (e.g., the University of California Museum of Paleontology), and may also include preparation of a report for publication describing the finds. Upon receipt of the fossil collection, a signed repository receipt form shall be obtained and provided to the SJECCD. The qualified paleontologist

shall prepare a paleontological resources report documenting the treatment, salvage, and, if applicable, curation of the paleontological resources. The project sponsor shall be responsible for the costs necessary to prepare and identify collected fossils, and for any curation fees charged by the paleontological repository. The SJECCD shall ensure that information on the nature, location, and depth of all finds is readily available to the scientific community through university curation or other appropriate means.

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Greenhouse Gas Emissions

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
VIII. GREENHOUSE GAS EMISSIONS — Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

Environmental Setting

Greenhouse gases (GHGs) trap heat in the atmosphere by preventing some of the solar radiation that hits the earth from being reflected back into space. Some GHGs occur naturally and are needed to keep the earth's surface habitable. However, over the past 100 years, human activities have substantially increased the concentration of GHGs in our atmosphere. This has intensified the natural greenhouse effect, increasing average global temperatures.

Carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6) are the principal GHGs. When concentrations of these gases exceed historical concentrations of GHGs in the atmosphere, the greenhouse effect is intensified. CO_2, CH_4, and N_2O occur naturally but are also generated through human activity. Emissions of CO_2 are largely by-products of fossil fuel combustion, whereas CH_4 primarily results from off-gassing, natural gas leaks from pipelines and industrial processes, and incomplete combustion; it is associated with agricultural practices, landfills, energy providers, and other industrial facilities.[6] HFCs, PFCs, and SF_6 are specialty industrial gases that have been emitted only very recently in human history.

CO_2 is the reference gas for climate change because it is the predominant GHG emitted. The effect that each of the aforementioned gases can have on global warming is a combination of the mass of their emissions and their global warming potential (GWP). GWP indicates, on a volume basis, how much a gas contributes to global warming relative to how much warming would be predicted to be caused by the same mass of CO_2. CH_4 and N_2O are substantially more potent GHGs than CO_2, with 100-year GWPs of 25 and 298 times that of CO_2, respectively (California Air Resources Board [CARB], 2020).

In emissions inventories, GHG emissions are typically reported in metric tons of CO_2 equivalents ($MTCO_2e$). CO_2e is calculated as the product of the mass emitted of a given GHG and its specific GWP. While CH_4 and N_2O have much higher GWPs than CO_2, CO_2 is emitted in such vastly higher quantities that it accounts for the majority of GHG emissions in absolute terms.

6 Off-gassing is defined as the release of chemicals under normal conditions of temperature and pressure.

Regulatory Setting

State

Executive Order S-3-05

In June 2006, Governor Arnold Schwarzenegger signed Executive Order S-3-05, which established the following statewide emission-reduction targets through the year 2050:

- By 2010, reduce GHG emissions to 2000 levels;
- By 2020, reduce GHG emissions to 1990 levels; and
- By 2050, reduce GHG emissions to 80 percent below 1990 levels.

This executive order does not contain any requirements that directly pertain to the proposed project; however, future actions taken by the State of California and the Bay Area Air Quality Management District (BAAQMD) to implement these goals may affect the project, depending on the specific measures that are developed and their timeline of implementation.

Executive Order B-55-18

In September 2018, Governor Brown signed Executive Order B-55-18, committing California to total, economy-wide carbon neutrality[7] by 2045. Executive Order B-55-18 directs CARB to work with relevant state agencies to develop a framework to implement accounting to track progress toward this goal. The goal will be incorporated into future Scoping Plans, as policies and actions which affect major sectors of California's economy, including transportation, agriculture, development, industrial, and others.

Assembly Bill 32

California Assembly Bill (AB) 32, *the Global Warming Solutions Act of 2006*, required the CARB to establish a statewide GHG emissions cap for 2020 based on 1990 emission levels. AB 32 required CARB to adopt regulations that identify and require selected sectors or categories of emitters of GHGs to report and verify their statewide GHG emissions, and CARB is authorized to enforce compliance with the program. Under AB 32, CARB also was required to adopt a statewide GHG emissions limit equivalent to the statewide GHG emissions levels in 1990, which must be achieved by 2020. CARB established this limit in December 2007 at 427 million $MTCO_2e$. This is approximately 30 percent below forecasted "business-as-usual" emissions of 596 million $MTCO_2e$ in 2020, and about 10 percent below average annual GHG emissions during the period of 2002 through 2004 (CARB, 2009). In the interest of achieving the maximum technologically feasible and cost-effective GHG emission reductions, AB 32 permits the use of market-based compliance mechanisms and requires CARB to monitor compliance with and enforce any rule, regulation, order, emission limitation, emissions reduction measure, or market-based compliance mechanism that it adopts.

7 Having a net zero carbon footprint, refers to achieving net zero carbon dioxide emissions by balancing carbon emissions with carbon removal (often through carbon offsetting) or simply eliminating carbon emissions altogether (the transition to the "post-carbon economy").

Climate Change Scoping Plan (AB 32 Scoping Plan)

A specific requirement of AB 32 was to prepare a Climate Change Scoping Plan for achieving the maximum technologically feasible and cost-effective GHG emission reduction by 2020. CARB developed and approved the initial Scoping Plan in 2008. The Scoping Plan outlines the regulations, market-based approaches, voluntary measures, policies, and other emission reduction programs that would be needed to meet the 2020 statewide GHG emission limit and initiate the clean energy transformation needed to achieve the State's long-range climate objectives (CARB, 2009). The first update to the Scoping Plan was approved by CARB in May 2014 and built upon the initial Scoping Plan with new strategies and recommendations (CARB, 2014).

Executive Order B-30-15 and SB 32

In April 2015, Governor Brown issued an Executive Order B-30-15 to establish a California GHG reduction target of 40 percent below 1990 levels by 2030. Reaching this emission reduction target will facilitate California in reaching its ultimate goal of reducing emissions 80 percent under 1990 levels by 2050, as identified in Executive Order S-3-05.

Executive Order B-30-15 required CARB to update the AB 32 Climate Change Scoping Plan to incorporate the 2030 target. Subsequently, SB 32, which codifies the Executive Order's 2030 emissions reduction target, was approved by the Governor on September 8, 2016. SB 32 requires CARB to adopt rules and regulations to achieve the maximum technologically feasible and cost-effective GHG emissions to ensure that statewide GHG emissions are reduced to at least 40 percent below the 1990 statewide GHG emissions limit no later than December 31, 2030.

CARB adopted the 2017 Scoping Plan for achieving this goal, which takes into account the key programs associated with implementation of the AB 32 Scoping Plan—such as GHG reduction programs for cars, trucks, fuels, industry, and electrical generation. The 2017 Scoping Plan builds upon, in particular, existing programs related to the Cap-and-Trade Regulation; the Low Carbon Fuel Standard; cleaner cars, trucks, and freight movement; power generation for the State using cleaner renewable energy; and strategies to reduce methane emissions from agricultural and other wastes by repurposing it for energy use. The 2017 Scoping Plan also addresses, for the first time, GHG emissions from natural and working lands, including the agriculture and forestry sectors (CARB, 2017). The cornerstone of the 2017 Scoping Plan Update is an expansion of the cap-and-trade program to meet the aggressive 2030 GHG emissions goal and ensure achievement of the 2030 limit set forth by Executive Order B-30-15. CARB designed and adopted the California Cap-and-Trade Program to reduce GHG emissions from large industrial facilities that emit more than 25,000 $MTCO_2e$ per year such as electricity generation, petroleum refining, cement production, and would therefore not apply to the project.

Local

BAAQMD is the regional government agency that regulates stationary sources of air pollution in the nine San Francisco Bay Area counties. BAAQMD regulates GHG emissions through various plans, programs, and guidelines and is attempting to broadly expand their jurisdiction over GHGs with proposed Regulation 13 which is currently in the rulemaking process.

BAAQMD Clean Air Plan

BAAQMD and other air districts prepare clean air plans in accordance with the federal and state Clean Air Acts. On April 19, 2017, the BAAQMD Board of Directors adopted the 2017 *Clean Air Plan: Spare the Air, Cool the Climate*, an update to the 2010 Clean Air Plan (BAAQMD, 2017a). The Clean Air Plan is a comprehensive plan that focuses on the closely related goals of protecting public health and protecting the climate. Consistent with the state's GHG reduction targets, the plan lays the groundwork for a long-term effort to reduce Bay Area GHG emissions 40 percent below 1990 levels by 2030 and 80 percent below 1990 levels by 2050.

BAAQMD Climate Protection Program

BAAQMD established a climate protection program to reduce pollutants that contribute to global climate change and affect air quality in the SFBAAB. The climate protection program includes measures that promote energy efficiency, reduce VMT, and develop alternative sources of energy, all of which assist in reducing GHG emissions and reducing air pollutants that affect the health of residents. BAAQMD also seeks to support current climate protection programs in the region and to stimulate additional efforts through public education and outreach, technical assistance to local governments and other interested parties, and promotion of collaborative efforts among stakeholders.

BAAQMD CEQA Air Quality Guidelines

The BAAQMD CEQA Air Quality Guidelines were prepared to assist in the evaluation of air quality impacts of projects and plans proposed in the Bay Area. The guidelines also include recommended assessment methodologies for air toxics, odors, and greenhouse gas emissions. In June 2010, BAAQMD's Board of Directors adopted CEQA thresholds of significance and an update of the BAAQMD CEQA Guidelines, which included significance thresholds for GHG emissions based on the emission reduction goals for 2020 articulated in AB 32. The first threshold, 1,100 $MTCO_2e$ per year, is a numeric emissions level below which a project's contribution to global climate change would be less than cumulatively considerable. For larger and mixed-use projects, the guidelines state that emissions would be less than cumulatively significant if the project as a whole would result in an efficiency of 4.6 $MTCO_2e$ per service population or better.

Under the current BAAQMD Air Quality Guidelines, a local government may prepare a qualified GHG reduction strategy that is consistent with AB 32 goals. If a project is consistent with an adopted qualified GHG reduction strategy and general plan that addresses the project's GHG emissions, it can be presumed that the project will not have significant GHG emissions under CEQA (BAAQMD, 2017b).

Envision San José 2040 General Plan

The City of San José adopted *Envision San José 2040 General Plan* (General Plan) in 2011, and identifies a variety of goals and policies that reflect the City's commitment to sustainability, including GHG emission reductions (City of San José, 2011). Applicable General Plan control measures to minimize GHG emissions are discussed further under the analysis of criterion a), below.

City of San José Greenhouse Gas Reduction Strategy

The City prepared the *Greenhouse Gas Reduction Strategy* in conjunction with the General Plan (City of San José, 2015a). The strategy was prepared in accordance with AB 32 and CEQA Guidelines Section 15183.5. One of the strategy's five purposes is to "achieve General Plan–level environmental clearance for future development activities (through the year 2020)." In response to SB 32's 2030 goal, the City is currently working to update its GHG Reduction Strategy and will build on the policies set forth in *Climate Smart San José* (2018).

Climate Smart San José

The City adopted its *Climate Smart San José* plan in 2018 (City of San José, 2018). The plan builds upon the foundational goals and policies identified in the General Plan, and provides additional analysis, recommendations, and corresponding metrics. The plan creates a measurable pathway to meeting the City's GHG emissions reduction targets. See Table 3.6-12 for the three pillars and nine strategies identified in the plan. As discussed above, the City's GHG Reduction Strategy is currently being updated and will expand on the policies included in the *Climate Smart San José* plan. The updated GHG Reduction Strategy will then serve as a Qualified Climate Action Plan for the purposes of tiering under CEQA.

City of San José Municipal Code

The City's Municipal Code includes regulations to reduce GHG emissions. Chapter 15.11 – Water Efficient Landscape Standards for New and Rehabilitated Landscaping would be applicable to the project.

Discussion

a) **Less than Significant Impact.** The proposed project has the potential to generate GHG emissions during both construction and operational phases. Project-related GHG emissions were estimated using CalEEMod, version 2016.3.2. Assumptions associated with anticipated construction activity and Project operation were provided by the project applicant and can be found in Appendix A. CalEEMod defaults were used when project-specific data was not available.

Construction of the proposed project would generate GHG emissions from the use of heavy-duty construction equipment and from vehicle trips associated with construction workers and vendors traveling to and from the project site. The project is estimated to generate approximately 78 $MTCO_2e$ over the six-month construction period. The BAAQMD has neither adopted nor recommended GHG thresholds for construction emissions in their CEQA Air Quality Guidelines. Instead it recommends that a determination of the significance of a project's construction emission impacts be made in relation to meeting the State's GHG reduction goals, as described further below. For comparison, total construction emissions for the project would be less than the 1,100 $MTCO_2e$ per year threshold recommended by the BAAQMD for operational GHG emissions.

As the project would not construct any buildings that would require heating, ventilation and air conditioning, the project's operational GHG emissions would be primarily from the increase in moto vehicle trips to the project site. Based on the CalEEMod output, the

project is estimated to generate approximately 223 $MTCO_2e$ per year. This is well below the BAAQMD's operational GHG threshold of 1,100 $MTCO_2e$ per year. Therefore, the project would not be considered to generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment.

b) **Less than Significant Impact.** The GHG Reduction Strategy adopted by the City as a part of the 2040 General Plan meets the recommended considerations outlined in CEQA Guidelines Section 15064.4 and the recent standards for "qualified plans" as set forth by the BAAQMD. The GHG Reduction Strategy includes policies and measures to reduce GHG emissions consistent with the reduction targets set by AB 32 (City of San José, 2015a). Adoption of a GHG Reduction Strategy provides environmental clearance for GHG impacts of proposed development as per the BAAQMD CEQA Guidelines and CEQA Guidelines Section 15183.5. Project evaluation for City requirements is conducted by evaluating project conformance with the City's GHG Reduction Strategy and in turn the GHG Reduction Strategy's implementation of the AB 32 GHG reduction goals.

The Final EIR for the 2040 General Plan estimated the City's 2020 GHG emissions to be below the average carbon-efficiency standard necessary to meet the statewide 2020 goals as established by AB 32. The Final EIR determined that implementation of the 2040 General Plan through 2020 would not constitute a cumulatively considerable contribution to global climate change. However, beyond 2020, was found to constitute a cumulatively considerable contribution to global climate change and lead to a significant and unavoidable impact (City of San José, 2015b). This finding was concluded even though the City's GHG Reduction Strategy includes adaptive management measures in the form of voluntary and mandatory measures to incorporate additional GHG reduction measures in the future. Due to uncertainties about the feasibility of achieving the sizable emissions reductions needed to meet California's long-term goal of an 80 percent reduction in GHG emissions compared to 1990 levels, the City's projected 2035 GHG emissions were found to be cumulatively considerable.

In order to conform to the GHG Reduction Strategy, projects must be consistent with the Land Use/Transportation assumptions in the 2040 General Plan and incorporate applicable features into the project that meet the mandatory implementation policies. The proposed project would not involve changes in land uses nor would it change population and vehicle travel assumptions as envisioned under the 2040 General Plan, and therefore, would be consistent with the Land Use/Transportation assumptions. The project does not involve construction of any structures that would be subject to the City's Green Building Ordinance consistent with the GHG Reduction Strategy. Therefore, the proposed project would be considered to be consistent with the current GHG Reduction Strategy.

The City is currently working to update its GHG Reduction Strategy in response to the interim goal set by SB 32 for 2030 and has not yet provided direction for the evaluation of project consistency with the goals of SB 32. Therefore, the analysis below discusses the potential for the project to conflict with the 2017 Scoping Plan update prepared in response to SB 32 goals.

The 2017 Scoping Plan Update does not include any specific measures that can be implemented at the project-level. Rather, it identifies potential sectors where reductions are needed to achieve the 2030 target such as increasing the Renewable Portfolio Standards to 50 percent of the State's electricity by 2030, increasing the fuel economy of vehicles and the number of zero-emission or hybrid vehicles, reducing the rate of growth in VMT, supporting high speed rail and other alternative transportation options, and increasing the use of high efficiency appliances, water heaters, and HVAC systems. The project would not impede implementation of these potential reduction strategies identified by CARB, and would benefit from statewide efforts towards increasing the fuel economy standards of vehicles and reducing the carbon content of fuels. Therefore, the project would not be considered to conflict with the objectives of the 2017 Scoping Plan Update and the State's SB 32 goals for 2030. This impact would be less than significant.

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Hazards and Hazardous Materials

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
IX. HAZARDS AND HAZARDOUS MATERIALS — Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
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?	☐	☐	☒	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☒	☐
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☐	☒
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	☐	☐	☐	☒

Discussion

The entire EVC campus is developed and is situated within a developed suburban/rural setting in east-central San José. A site-specific investigation for the presence of hazardous materials has not been conducted for the project site. Existing and prior uses on and adjacent to the project site may include or have included the use of hazardous materials, substances, or waste.

Hazardous Materials

Materials and waste may be considered hazardous if they are poisonous (toxicity), can be ignited by open flame (ignitability), corrode other materials (corrosivity), or react violently, explode, or generate vapors when mixed with water (reactivity). The term "hazardous material" is defined in Section 25501(n) of the California Health and Safety Code as any material "that, because of its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment." In some cases, past uses can result in spills or leaks of hazardous materials to the ground, resulting in soil and groundwater contamination. The use, storage, transportation, and disposal of hazardous materials are subject to numerous federal, State, and local laws and regulations.

To evaluate the potential presence of hazardous materials in soil and groundwater, a regulatory database search of sites within 0.5 mile of the project site was conducted to identify the documented use, storage, generation, and/or release of hazardous materials and/or petroleum products. In addition, active contaminated sites that are currently undergoing monitoring and remediation were identified. A search of the EnviroStor and GeoTracker databases, maintained by the California Department of Toxic Substances Control (DTSC) and the State Water Resources Control Board (State Water Board), respectively, revealed no known active/open hazardous materials sites within 0.5 mile of the project site (DTSC, 2020a; State Water Board, 2020).

DTSC is also responsible for updating the Hazardous Waste and Substances Site List (Cortese List). The list is a planning document used by agencies and developers to comply with CEQA requirements, and includes data resources that provide information regarding the facilities or sites identified as meeting the Cortese List requirements. The Cortese List is updated at least annually, in compliance with California regulations (California Government Code Section 65964.6[a][4]), and includes federal Superfund sites, State response sites, nonoperating hazardous waste sites, voluntary cleanup sites, and school cleanup sites. Based on a review of the Cortese List conducted in July 2020, no listed sites are located within 0.5 mile of the project area (DTSC, 2020b).

Discussion

a-b) **Less than Significant Impact.** Project construction activities would likely require the use of limited quantities of hazardous materials such as fuels, oils, lubricants, paint, and solvents. The improper use, storage, handling, transport, or disposal of hazardous materials during construction or an accidental release could expose construction workers, the public, and the environment, including soil and/or groundwater or surface water, to adverse effects. Generally, the proposed project would not be expected to pose a risk of accidental release of hazardous materials or wastes, as these materials would not be used or stored on-site in significant quantities.

The California Occupational Safety and Health Administration is responsible for developing and enforcing workplace safety standards, including standards for handling and using hazardous materials during operations. The U.S. Department of Transportation and California Department of Transportation regulate transportation of hazardous materials. Any contractor that would handle hazardous materials during construction must prepare and implement a hazardous materials management plan for review and approval by the local Certified Unified Program Agency. The hazardous materials management plan must identify the hazardous materials to be used, training provided to workers on the proper handling of the materials, and procedures for responding to any spills. Compliance with relevant regulations would limit exposure to hazardous building materials. These regulations include the Resource Conservation and Recovery Act and the Interim Final Rule in Title 29, Part 1926.62 of the Code of Federal Regulations (lead and lead-based paint).

The proposed project's required compliance with all applicable federal, State, and local regulations would minimize the risk of accidental release and exposure. Therefore, the transport, use, storage, handling, and disposal of hazardous materials for the proposed

project would be adequately controlled through compliance with existing regulatory requirements during construction and operation. This impact would be less than significant.

c) **Less than Significant Impact.** The project site is located within the EVC campus. As stated above, the proposed project would comply with all required applicable federal, State, and local regulations relating to the storage, handling, transportation, and disposal of hazardous materials, including hazardous building materials. Therefore, emissions and hazardous materials handling at the project site during construction and operation would not pose a significant health risk to the EVC campus or surrounding areas. This impact would be less than significant.

d) **No Impact.** As discussed above, the project site is not included in GeoTracker, EnviroStor, or the Cortese List, the environmental databases maintained by the State Water Board (2020) and DTSC (2020a, 2020b). Therefore, the proposed project would not cause a significant hazard to the public or the environment related to being located on a known hazardous materials site. No impact would occur.

e) **No Impact.** Reid Hillview Airport is the closest airport to the project site and is located approximately 3.5 miles northwest of the project site. Accordingly, the proposed project is not located within two miles of an airport, airstrip, or airport land use plan and would not result in a safety hazard for people residing or working in the project area or expose people residing or working in the project area to excessive noise. There would be no impact related to safety hazards or the exposure of excessive noise due to proximity of the proposed project to an airport or airstrip, as the proposed project is not proximal to either an airport or airstrip. Furthermore, the proposed project would only develop structures that would not be low-scale in terms of height.

f) **Less than Significant Impact.** The City of San José Emergency Operations Plan does not include any specific evacuation routes; these would be identified and coordinated by local law enforcement and emergency service responders as needed during an emergency situation (City of San José, 2018). Interstates 280, 680, and 880 are the closest major highways to the project area; the project area is located off of Yerba Buena Road and is not near these major interstate highways. Therefore, the likelihood that project construction and operations activities would impair or physically interfere with emergency response teams or an evacuation plan is low. This impact would be less than significant.

g) **No Impact.** The project site is within a fully urbanized area in the City of San José that is not adjacent to or intermixed with wildlands. The proposed project would result in no impact related to exposure of people or structures to risk of loss, injury, or death involving wildland fires.

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City of San José, 2018. City of San José Emergency Operations Plan. Available: https://www.sanjoseca.gov/home/showdocument?id=42015. Accessed July 30, 2020.

Hydrology and Water Quality

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
X. HYDROLOGY AND WATER QUALITY — Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☐	☒	☐
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☒	☐
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
i) result in substantial erosion or siltation on- or off-site;	☐	☐	☒	☐
ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	☐	☐	☒	☐
iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	☒	☐
iv) impede or redirect flood flows?	☐	☐	☒	☐
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☐	☒
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☒	☐

Discussion

Environmental Setting

The EVC campus is adjacent to or near three creek channels: Evergreen Creek on the northern boundary of the campus, approximately1,600 feet north of the project site; Yerba Buena Creek to the south of the campus across Yerba Buena Road, located approximately 470 feet south from the project site; and Thompson Creek to the west of the campus across San Felipe Road, located approximately 2,200 feet west from the project site. The San Francisco Bay is distant from the EVC campus, located approximately 19 miles northwest of the campus.

The EVC campus is within the Santa Clara Groundwater Basin, Santa Clara Subbasin (Basin 2.9-02), which has been identified as a high-priority basin under the Sustainable Groundwater Management Act (SGMA) (DWR, 2019). Groundwater in the Santa Clara Subbasin is of generally good quality. Key issues of concern in the subbasin are land subsidence caused by past groundwater overdraft, and saline intrusion into groundwater through tidal channels near southern portions of San Francisco Bay (Santa Clara Valley Water District [SCVWD], 2016). The *2016 Groundwater Management Plan for the Santa Clara and Llagas Subbasins* (GWMP) was

adopted on November 22, 2016, and was submitted to the California Department of Water Resources as an alternative to a groundwater sustainability plan on December 21, 2016 (SCVWD, 2016). The GWMP identifies groundwater recharge areas, water budgets, and sustainability goals, and describes programs and activities to maintain a reliable groundwater supply and protect groundwater quality.

According to Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRMs), the project site is located in Zone D, classified by FEMA as an "area of undetermined but possible flood hazards." Storm-related flooding (from the overtopping of creeks and storm drains) is the type of flooding most likely to affect the project site (FEMA, 2009). According to the map, the project site is adjacent to mapped 100-year flood plains. The Yerba Buena Creek channel (to the south across Yerba Buena Road) and the Thompson Creek channel (to the west across San Felipe Road) are depicted on the FEMA map as 100-year flood areas. The flood boundary of concern surrounding Thompson Creek is completely contained in the channel. The Yerba Buena Creek flood area appears not to extend past the banks of the channel, but it is not channel-contained.

a) **Less than Significant Impact.** During construction, as turf and pavement are removed, exposing soils, there is a potential for increased erosion, sedimentation, and discharge of polluted runoff from the site. The District and/or contractor would be required to comply with the National Pollutant Discharge Elimination System (NPDES) General Construction Activity Permit for Discharges of Storm Water Runoff Associated with Construction Activity (Construction General Permit) through development and implementation of a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP would identify site-specific best management practices (BMPs) designed to control stormwater at the project site and limit the amount of runoff leaving the construction site. In addition, as described in the Project Description and shown on Figure 12, the project would include an erosion control plan during construction, with such measures as fiber rolls deployed around the project site perimeter. Implementation of the BMPs and the erosion control plan would minimize the discharge of potential water quality pollutants associated with construction activities and reduce water quality impacts during construction such that impacts would be less than significant.

   During construction, fuels and oils, paints and thinners, and cleaning solvents would be used that could affect water quality if inadvertently spilled. Impacts related to the use of chemicals during construction are addressed above in Section IX, *Hazards and Hazardous Materials*, which concluded that compliance with existing regulations would reduce the impact from construction of the proposed project to less than significant.

   The development of the proposed sports complex would increase the amount of impervious surfaces on the EVC campus by more than 10,000 square feet, and would increase the amount of runoff generated on the campus. Therefore, the project would be required to comply with the Municipal Regional Stormwater Permit (MRP; also referred to as the MS4 permit), and implement site design, source control, and Low Impact Development (LID)–based stormwater treatment controls to treat post-construction

stormwater runoff. Drainage infrastructure would be constructed to direct stormwater flows to on-site bioretention areas, providing onsite treatment, per LID standards. Where flows are not directed to existing or proposed bioretention areas, site drainage would be routed to the City's storm drain system, which would then discharge the flow to Thompson Creek. With implementation of LID measures, impacts related to the degradation of receiving waters due to project operations would be less than significant.

b) **Less than Significant Impact.** The proposed project would be located in the Santa Clara Valley Groundwater Basin, which is identified as a high priority basin, although not one subject to conditions of critical overdraft (SCVWD, 2016). Salt water intrusion and subsidence have been identified as key issues associated with the basin (SCVWD, 2016).

The EVC campus obtains its potable water supply from surface water supplies provided through San José Municipal Water System (SJMWS). Therefore, any increase in potable water use on the campus from implementation of the proposed sports complex would not impact groundwater supplies. The project is designed to include green infrastructure elements, including a bioretention areas, consistent with the MRP requirements for stormwater. Thus, the project would not interfere with recharge and would be consistent with the sustainable management of groundwater resources in the Santa Clara Groundwater Basin. Impacts would be less than significant.

c) **Less than Significant Impact.** Demolition and removal activities could result in exposure of soil to runoff, potentially causing erosion and entrainment of sediment in the runoff. If graded areas are not managed properly and protected against stormwater flows, high sediment loads in stormwater runoff could clog drainage pipes or otherwise decrease the carrying capacity of drainage channels, potentially resulting in increases in localized ponding or flooding. However, as discussed above in item a), the District or its contractor would be required to comply with the Construction General Permit through development and implementation of a SWPPP. The SWPPP would include measures to reduce the mobilization and migration of sediment on- and off-site. The project would also include an erosion control plan during construction. By implementing BMPs required as part of the SWPPP, as well as the erosion control plan, the effects of project construction activity on drainage patterns, flooding, and stormwater drainage facilities would be less than significant.

Once the sports complex is constructed, the project site would be under impervious surfaces or would be landscaped. This would minimize the potential for erosion and sedimentation in the long term. Drainage infrastructure would also be constructed to direct stormwater flows to on-site bioretention areas, reducing the potential for exceedance of the carrying capacity of drainage channels, or increases in localized ponding or flooding. The impacts would be less than significant.

Construction activities associated with development of the proposed project would be temporary and would not be anticipated to impede or redirect flood flows. The EVC campus is not located within a designated 100-year flood zone. The project site is located in

Zone D, classified by FEMA as an "area of undetermined but possible flood hazards." The flood boundary of concern surrounding Thompson Creek is completely contained in the channel, and the Yerba Buena Creek flood area appears not to extend past the banks of the channel. Because the project site is not located within a flood zone, and the flood area of the adjacent creeks do not extend past the channels, the sports campus would not place structures within an area at risk of flood flows. Impacts would be less than significant.

d) **No Impact.** As indicated above, the EVC campus is not located within a 100-year flood zone. The EVC campus is also located well inland from the San Francisco Bay and no large bodies of water susceptible to seiche are located near the campus. Thus, there is no risk of release of pollutants as a result of these hazards.

e) **Less than Significant Impact.** Adherence to the regulatory terms of the Construction General Permit and implementation of the BMPs in the project-specific SWPPP would reduce the risk of water quality violations attributable to the project's construction activity. Compliance with the MRP and LID requirements would reduce the risk of water quality violations during operations. As described in criterion b), construction and operation of the project would not require the use of groundwater resources. In addition, the project would be implemented in a manner that would not affect recharge or groundwater contamination. Therefore, the proposed project would not conflict with the objectives of the Water Quality Control Plan for the San Francisco Bay Basin (Basin Plan) or the Santa Clara Valley Groundwater Sustainability Plan, and the impact would be less than significant.

References

California Department of Water Resources (DWR), 2020. *Sustainable Groundwater Management Act 2019 Basin Prioritization: Process and Results*, May 2020. Available: https://water.ca.gov/Programs/Groundwater-Management/Basin-Prioritization Accessed July 21, 2020.

Impact Sciences, Inc., 2013. *San José-Evergreen Community College District, Evergreen Valley College 2025 Updated Facilities Master Plan Final Environmental Impact Report*. 2013.

Federal Emergency Management Agency (FEMA), *National Flood Insurance Program Flood Insurance Rate Map, Santa Clara County, California, and Incorporated Areas*, Panel 267, Map Number 06085C0267H, effective May 18, 2009.

Santa Clara Valley Water District (SCVWD), 2016. *2016 Groundwater Management Plan for the Santa Clara and Llagas Subbasins* (GWMP), November 22, 2016.

Land Use and Planning

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
XI. LAND USE AND PLANNING — Would the project:				
a) Physically divide an established community?	☐	☐	☐	☒
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☒	☐

Discussion

a) **No Impact.** As the proposed project would represent the construction of new sports facilities, within the existing campus footprint, and would not impede any existing travel within and through the campus or restrict connection to the surrounding neighborhoods, implementation of the proposed project would not divide an established community.

b) **Less than Significant Impact.** Per Title 5, Division 6 of the California Administrative Code, the SJECCD is not subject to local plans, policies, or regulations, such as land use controls of the Envision San José 2040 General Plan or City's zoning ordinance. There are no SJECCD planning documents for which the proposed project would be considered incompatible with. The EVC campus is located within an urban setting, and is surrounded by commercial uses, medical uses, single- and multi-family residential uses, recreational uses, and public service uses. The proposed EVC Sports Complex would be developed entirely within existing campus boundaries, and would be of type, scale and use compatible with other EVC campus land uses. As demonstrated in this Initial Study, all potential significant environmental impacts of the proposed project are determined to be less than significant with implementation of project controls and best management practices, and/or with implementation of identified feasible mitigation measures. Given these considerations, the proposed project would result in a less-than-significant impact for this criterion.

Mineral Resources

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
XII. MINERAL RESOURCES — Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
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?	☐	☐	☐	☒

Discussion

a) **No Impact.** The only portion of the City of San José which has been designated as a known mineral resource area of region-wide or state-wide importance by the State Mining and Geology Board under the Surface Mining and Reclamation Act of 1975 (SMARA) is an area of Communications Hill, located approximately 4.2 miles to the west of the project site (California Department of Conservation 2020). The EVC campus is neither designated as a mineral resource area nor located in immediate proximity to Communications Hill. Regardless, the proposed project consists of a sports complex, and would not involve the extraction of any potential mineral resources. Implementation of the proposed project would therefore not result in the loss of availability of a known mineral resource of regional or state-wide importance.

b) **No Impact.** As the proposed project site does not contain important mineral resources as designated under SMARA and the site is not considered an important mineral resource recovery site in local land use plans, implementation of the proposed project would not result in the loss of any local important mineral resource recovery sites.

References

California Department of Conservation, 2020. *Statutes and Regulations*. Published January 2020.

Impact Sciences, Inc., 2013. *Evergreen Valley College 2025 Updated Facilities Master Plan Final Environmental Impact Report, SCH No. 20000112004.* Published 2013.

Noise

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
XIII. NOISE — Would the project result in:				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐
b) Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

Discussion

Noise

Noise is generally defined as unwanted sound that annoys or disturbs people and potentially causes an adverse psychological or physiological effect on human health. Some land uses are more tolerant of noise than others. For example, schools, hospitals, churches, hotels, and residences are considered to be more sensitive to noise intrusion than are commercial or industrial activities.

Sound is characterized by various parameters that include the frequency, the speed of propagation, and the pressure level (amplitude). The sound pressure level is the most common descriptor used to characterize the loudness of an ambient sound level. The decibel (dB) scale, a logarithmic scale, is used to quantify sound intensity. Noise measurements are weighted more heavily for frequencies to which humans are sensitive in a process called A-weighting, written as dBA and referred to as A-weighted decibels, which has become the standard metric of environmental noise assessment.

Noise-Sensitive Receptors

Noise sensitive receptors include residences, hotels, schools, senior care facilities, daycare facilities, and hospitals. There are various residential receptors located across Yerba Buena Road along Park Estates Way, located approximately 650 feet south of the project site. In addition to residential receptors, three schools are located in the vicinity of the project site including:

- Pinnacle Learning Center, located at 2995 Yerba Buena Road, is approximately 180 feet south of the project site;
- Parkside School, located at 2995 Yerba Buena Road, is approximately 300 feet south of the project site; and
- Empire Montessori Preschool, located at 3095 Yerba Buena Road, is approximately 750 feet southeast of the project site.

Vibration

Vibration is an oscillatory motion through a solid medium in which the motion's amplitude can be described in terms of displacement, velocity, or acceleration. Several different methods are used to quantify vibration. The peak particle velocity (PPV) is defined as the maximum instantaneous peak of the vibration signal. The PPV is most frequently used to describe physical vibration impacts on buildings. Typical groundborne vibration generated by human activities attenuates rapidly with distance from the source of the vibration. Sensitive receptors to vibration include people (especially residents, the elderly, and sick people), structures (especially older masonry structures), and vibration-sensitive equipment. (FTA, 2018).

Existing Noise Levels

Ambient noise levels in the project vicinity are typical of noise levels found in suburban San José, which are dominated by vehicular traffic. At the time of this analysis, statewide shelter-in-place mandates due to the COVID-19 pandemic have substantially reduced existing noise levels Consequently, since monitoring of noise during this time would not be representative of typical noise conditions typically experienced in the area, no new field noise monitoring was conducted in support of this Initial Study. However, the Final EIR for Evergreen Valley College 2025 Updated Facilities Master Plan included CNEL noise data in the campus vicinity, which can be considered to be reasonably representative of typical background conditions, and reported roadside noise levels of 63 CNEL dBA along Yerba Buena Road east of San Felipe Road. (Evergreen Valley College, 2013).

Discussion

a) **Construction**

Less than Significant Impact. The City of San José Municipal Code Section 20.100.450 establishes noise exposure limits for stationary noise sources (non-transportation sources) but specifies hours for project construction. The Municipal Code restricts construction within 500 feet of a residential unit to 7 a.m. to 7 p.m. Monday through Friday, with no construction on weekends; however, overnight and weekend construction is permitted if expressly allowed in a development permit or other planning approval. The Municipal Code does not establish quantitative noise limits for demolition or construction activities occurring in the City.

As discussed above, residential receptors would be located more than 500 feet from the project construction site. As discussed in the Project Description, construction of the proposed project is anticipated to begin in approximately December of 2020, with an overall duration of approximately 6 months. All construction activities would be completed between 7:00 a.m. and 7:00 p.m., Monday through Friday, in accordance with Section 20.100.450 of the City of San José's Municipal Code. Work would begin following approval of environmental documents and acquisition of applicable permits and easements. Therefore, the proposed project construction would be consistent with the restrictions of City of San José Municipal Code Section 20.100.450 and project construction would have a less than significant impact with respect to exposure of

persons to, or generation of, noise levels in excess of standards established in the applicable noise ordinance.

Operation

Less than Significant Impact. With implementation of the Project, land use activities on the site would shift from softball to pickle ball, a racquet sport, and basketball/futsal. There are also existing tennis courts between the nearest residential areas and the proposed pickle ball courts that would remain. Consequently, the project would not introduce a new type of substantial permanent noise.

Noise from Court Activities

Less than Significant Impact. Based on data measured during pickle ball matches, pickle ball sounds primarily consist of players' and spectators' voices and laughter, clapping and cheering, the squeaking of players' tennis shoes, and the sound produced by the racquet when a player strikes the ball (City of Novato, 2018). The pickle ball noise data collected in 15-minute intervals at a distance of 120 feet from the center of the pickle ball courts produced noise levels of 67 dBA L_{max}. The nearest sensitive receptors would be the school uses 180 feet away and residences 650 feet to the south. At these distances, exterior noise levels produced by activities on the pickle ball courts would be attenuated to 63 dBA L_{max} and 52 dBA L_{max}, respectively.

Policy EC-1.9 of the Envision San José 2040 General Plan requires land use proposals that include known or suspected loud intermittent noise sources that may affect adjacent existing or planned land uses to prepare a noise study and provide mitigation such that recurring maximum instantaneous noise levels would not exceed 50 dBA L_{max} in bedrooms and 55 dBA L_{max} in other rooms.

Assuming a 15 dBA reduction from standard building construction with open windows (U.S. EPA, 1974), interior noise levels at these nearest school and residential receptors would be 48 dBA L_{max} and 37 dBA L_{max}, respectively. Noise levels at the nearest residential receptors would likely be even less than that estimated when considering intervening vegetative buffers that would serve to further reduce generated noise. These predicted noise levels are below the interior noise standards established by Policy EC-1.9 of the Envision San José 2040 General Plan.

Transportation Noise

Less than Significant Impact. A significant noise impact would occur if the traffic generated by the project would substantially increase noise levels at sensitive receptors in the project vicinity. Based on Policy EC-1.2 of the Envision San José 2040 General Plan a substantial increase would occur if: a) the noise level increase is 5 dBA Ldn or greater, with a future noise level of less than 60 dBA Ldn, or b) the noise level increase is 3 dBA Ldn or greater, with a future noise level of 60 dBA Ldn or greater.

Vehicles would access the project site via Yerba Buena Road. As discussed above the representative existing traffic noise levels at noise-sensitive receptors to the south of this roadway are 63 dBA CNEL (generally equivalent to Ldn where vehicle traffic noise predominates) which results from an average daily traffic volume of 9,230 vehicles. Therefore, a significant impact would occur if project-generated traffic would permanently increase noise levels by 3 dBA Ldn.

Traffic volumes would have to double for noise levels to increase by 3 dBA Ldn. The transportation report conservatively estimates that the proposed Project would result in 311 additional daily trips (Hexagon, 2020). This 3 percent increase of daily traffic volumes along Yerba Buena Road would result in a less than 1 dBA increase and would not be perceptible to the nearest receptors.

Based on the above analysis, the proposed project would not cause a substantial permanent noise level increase at the nearby noise-sensitive receptors and project operations would have a less than significant impact with respect to exposure of persons to, or generation of, noise levels in excess of standards established in the applicable noise ordinance.

b) **Less than Significant Impact.** Groundborne vibration from construction activities that involve impact activities, drilling and compaction, could produce detectable vibration at nearby sensitive buildings and sensitive receptors unless proper precaution is followed.

The existing residential uses located in the immediate vicinity of the project site could be exposed to the generation of some degree of groundborne vibration or groundborne noise levels related to construction activities. The results from vibration can range from no perceptible effects at the lowest vibration levels, to low rumbling sounds and perceptible vibrations at moderate levels, to structural damage at the highest levels. Site ground vibrations from construction activities rarely reach the levels that can damage structures, but they may be perceived in buildings very close to a construction site.

The nearest off-site structures to the project site work areas would be Pinnacle Learning Center, located approximately 180 feet to the south. These structures are of recent construction and would be considered conventional, not historic, structures. Policy EC-2.3 of the Envision San José 2040 General Plan requires new development to minimize continuous vibration impacts to adjacent uses during demolition and construction. A continuous vibration limit of 0.20 in/sec PPV is used as a criterion to minimize the potential for cosmetic damage at buildings of normal conventional construction. Equipment or activities typical of generating continuous vibration include but are not limited to excavation equipment; static compaction equipment; vibratory pile drivers; pile-extraction equipment; and vibratory compaction equipment. Pile driving is not a method of construction proposed for the project.

The various PPV levels for the types of construction equipment that may operate during construction of the proposed project are identified in **Table 8, Vibration Levels from Construction Equipment**. This table presents the reference vibration level at a distance

of 25 feet as published by FTA as well as at each of the three receptor structure locations. As shown in Table 8, vibration velocities would be less than 0.20 in/sec PPV at all receptor locations. Therefore, the project would have a less than significant impact with respect to generation of excessive groundborne vibration levels from construction.

TABLE 8
VIBRATION LEVELS FROM CONSTRUCTION EQUIPMENT

Equipment	Approximate PPV (in/sec)			
	25 Feet (Reference Vibration Level)	180 Feet (Pinnacle Learning Center)	300 Feet (Parkside School)	650 Feet (Park Estates Way Residences)
Vibratory Roller	0.21	0.024	0.014	0.006
Large Bulldozer	0.089	0.010	0.0065	0.002
Loaded Truck	0.076	0.009	0.005	0.002

NOTES:
Vibration exceeding threshold levels are in bold.

Sources: FTA, 2018; ESA, 2020

c) **No Impact.** The project site is not located within an airport land use plan area, within two miles of a public airport, or within the vicinity of a private airstrip. Reid-Hillview Airport is located 3 miles to the southwest and San José International Airport is located over 8 miles to the northwest. The proposed project does not propose and noise-sensitive land uses. Therefore, topic (c) is not applicable to the proposed project and there would be no impact with respect to the project exposing people residing or working in the project area to excessive noise levels from aircraft.

References

City of Novato, *Hill Recreational Area Master Plan Project Initial Study/Proposed Negative Declaration*, December 13, 2018. Available: http://www.novato.org/home/showdocument?id=28199. Accessed July 27, 2020.

City of San José, Envision San José 2040 General Plan, Adopted November 1, 2011, Amended March 16, 2020.

Evergreen Valley College, 2025 Updated Facilities Master Plan Draft Environmental Impact Report, February, 2013.

Federal Transit Administration, *Transit Noise and Vibration Impact Assessment Manual*, California Department of Toxic Substances Control.

U.S. Environmental Protection Agency, *Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety*, March 1974. Available: https://nepis.epa.gov/Exe/ZyPDF.cgi/2000L3LN.PDF?Dockey=2000L3LN.PDF. Accessed July 27, 2020.

Population and Housing

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
XIV. POPULATION AND HOUSING — Would the project:				
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

Discussion

a) **No Impact.** The EVC campus does not currently support housing for students, faculty, or staff, and the implementation of the proposed sports complex would not result in an increase in population growth or result in the addition of on-site housing. Furthermore, any proposed minor utility improvements that would occur at the project site are intended to only serve the proposed project. Consequently, the proposed project would not induce substantial unplanned growth either directly or indirectly.

b) **No Impact.** The EVC campus is not currently developed with residential uses, and no housing is present on the campus. As such, the proposed project would not displace existing housing or people such that the construction of replacement housing would be required.

Public Services

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
XV. PUBLIC SERVICES —				
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the following public services:				
i) Fire protection?	☐	☐	☒	☐
ii) Police protection?	☐	☐	☒	☐
iii) Schools?	☐	☐	☒	☐
iv) Parks?	☐	☐	☒	☐
v) Other public facilities?	☐	☐	☒	☐

Discussion

a.i) **Less than Significant Impact.** Fire protection services within the City of San José, including the EVC campus, are provided by the San José Fire Department (SJFD). The primary response unit for the campus is SJFD Station No. 11, located at 2840 The Villages Parkway, approximately 0.70 miles south of the project site. This station responds to all campus fire- and rescue-related emergencies. Implementation of the proposed sports facilities on the EVC campus would generate an incremental increase in student and public visitation at this use, and associated traffic. However, the proposed project would not in and of itself result in the growth of the campus population. When considering this, and the nature of the project proposed, it would be served by the same SJFD station that already serves the EVC campus, the proposed project is unlikely to result in an increased demand for fire protection services beyond that already experienced by the SJFD and would not require the construction of new or expanded SJFD facilities. The impact of the proposed project on fire protection services would be less than significant.

a.ii) **Less than Significant Impact.** Police protection services on the EVC campus are provided by the SJECCD Police Department, with additional support provided by the San José Police Department (SJPD) when needed through a Memorandum of Understanding (MOU) between the two departments. The SJECCD Police Department has an on-campus police station located in the southeastern portion of the campus. Implementation of the proposed sports facilities on the EVC campus would generate an incremental increase in in student and public visitation at this use, and associated traffic. However, the proposed project would not in and of itself result in the growth of the campus population. When considering this, the nature of the project proposed, and the existing availability of on-campus police services, it is unlikely to result in an increased demand for police protection services, and would not require the construction of new or expanded law

enforcement facilities for either the SJECCD Police Department or the SJPD. The impact of the proposed project on police protection services would be less than significant.

a.iii) **Less than Significant Impact.** Implementation of the proposed project would not include any residential uses; as a result, the proposed project would not result in an increased residential population leading to a direct impact on schools. As the creation of the EVC Sports Complex would not result in an increased population of new students, faculty, and staff such that a substantial number of school-age students would join a particular local community and result in the construction or expansion of public school facilities.

a.iv) **Less than Significant.** Three parks – Montgomery Hill Park, Evergreen Park Playground, and Fowler Creek Park – are located within one mile of the proposed project site. Given their proximities to the site, it is possible that one or more of these sites may be utilized by EVC students, faculty, or staff. However, the project would not increase population of new students, faculty, and staff, or involve development of residential uses. As a result, there would be no direct impact from the project on parks. Furthermore, existing recreational facilities which would remain in use following implementation of the proposed project, as well as those added to the campus through the creation of the EVC Sports Complex, would be available for the use of the campus population and local community members. Therefore, use of public parks in the surrounding area by the campus population is expected to be minimal, and the effect of the proposed project on parks would be less than significant.

a.v) **Less than Significant Impact.** The proposed project is intended to provide exercise and recreational uses to EVC campus students, staff, and faculty and community members from the surrounding vicinity. However, the proposed project would not result in an increased population of new students, faculty, and staff or involve development of residential uses. Consequently, the implementation of the EVC Sports Complex would not result in a direct impact on other public facilities, such as libraries, community centers, and youth centers. The impact on other public facilities would therefore be less than significant.

References

City of San José, 2020. *Envision San José 2040 General Plan.* Amended on March 16, 2020.

Impact Sciences, Inc., 2013. *Evergreen Valley College 2025 Updated Facilities Master Plan Draft Environmental Impact Report, SCH No. 20000112004.* Published February 2013.

The Maas Companies, Inc., 2011. *San José City College Facilities Master Plan Update 2011 Revised Draft Subsequent EIR, SCH No. 1999122011.* Published May 2010.

Recreation

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
XVI. RECREATION —				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☒	☐

Discussion

a) **No Impact.** The proposed project would not result in an increased population of new students, faculty, and staff, or include any residential uses; as a result, implementation of the proposed project would not result in a direct increased use of existing neighborhood and regional parks or recreational facilities resulting in substantial physical deterioration of those facilities. As the proposed project would create additional recreational facilities which would be available for use by the Evergreen Valley College (EVC) campus population and local community members, the proposed EVC Sports Complex would have no impact on the physical deterioration of existing parks and recreational facilities.

b) **Less than Significant.** The proposed project would entail the construction of recreational and sports facilities for use by the EVC students, staff, faculty, and surrounding community. The proposed project would be constructed entirely within the boundaries of the existing EVC campus, and would be surrounded by a variety of developed land uses, including adjacent existing sports and recreational facilities. Compliance with mitigation measures and other construction-related regulatory requirements discussed in other sections of this Initial Study would reduce construction-related effects of new recreational facilities to less than significant levels.

Transportation

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

This section describes the transportation and circulation conditions surrounding the project site and identified transportation impacts that may occur as a result of the proposed project. The analysis in this section is primarily based on a traffic study memorandum prepared for the proposed project by Hexagon Transportation Consultants (see **Appendix D**).

Environmental Setting

Existing Roadway Facilities

The project site is located in the EVC campus, located in east-central San José, California. The campus is located near the eastern border of the City. Major roadways that provide access to the project site include Yerba Buena Road, which provides access to the campus from U.S. Highway 101 to the west, and San Felipe Road, which provides access to the campus from communities to the north and south of the campus.

Highway 101

U.S. Highway 101 (US 101) is a north-south freeway, which runs through the City of San José to the west of the EVC campus. US 101 connects interstate travel from southern California through the State of Washington. US 101 provides three lanes and one high-occupancy vehicle (HOV) lane in each direction near the EVC campus. The nearest connection to the EVC campus is the US 101 Yerba Buena Boulevard interchange, located approximately 2.3 miles to the west of the EVC campus.

Yerba Buena Road

Yerba Buena Road is a four-lane arterial roadway that runs east-west along the southern edge of the EVC campus, extending from just east of the campus to US 101 and Senter Road to the west.

San Felipe Road

San Felipe is a four-lane arterial roadway, in the vicinity of the EVC campus, that runs north-south along the western edge of the campus. San Felipe Road extends north to Aborn Road, where it becomes South White Road, and to the south into a rural area beyond the City limit.

Internal Circulation

Vehicle access to the project site would take place via a two driveways along Yerba Buena Road, which provide access to a parking area, immediately southeast of the project site.

Existing Pedestrian, Bicycle, and Transit facilities

The EVC Campus has an extensive network of pedestrian and bicycle pathways, providing access to the project site from areas throughout the campus, transit stops, and links to the surrounding community. There are paved walkways within and adjacent to the project site that provide connectivity to other areas of the EVC campus, as shown in Figures 2 and 3 in the Project Description.

Regulatory Setting

Federal

There are no applicable federal transportation regulations that apply directly to the proposed project.

State

Senate Bill 743

Senate Bill (SB) 743, passed in 2013, requires the California Governor's Office of Planning and Research (OPR) to develop new CEQA guidelines that address traffic metrics under CEQA. As stated in the legislation, upon adoption of the new guidelines, "automobile delay, as described solely by level of service or similar measures of vehicular capacity or traffic congestion shall not be considered a significant impact on the environment pursuant to this division, except in locations specifically identified in the guidelines, if any." OPR submitted updated CEQA Guidelines to the State Natural Resources Agency for formal rulemaking to implement SB 743, and the proposed changes were certified by the State Natural Resources Agency in December 2018.

Caltrans

Caltrans issued interim guidance on incorporating SB 743 into its policies and procedures in *Local Development – Intergovernmental Review Program* (CalTrans, 2016). The high-level interim guidance document for District staff refocuses Caltrans' attention on local development project's VMT, appropriate transportation demand measures (TDM), and determining how to address multimodal operational issues.

Local

Envision San José 2040 General Plan

The project site is located on land owned and operated by the SJECCD. However, the surrounding transportation facilities are managed by the City of San José, and subject to the City's goals and policies. Policies related to transportation, from the Envision San José 2040 General Plan (2011, as amended), are provided below.

Vehicular Circulation and Vehicle Miles Travelled

> **Goal TR-5 – Vehicular Circulation.** Maintain the City's street network to promote safe and efficient movement of automobile and truck traffic while also providing for the safe and efficient movement of bicyclists, pedestrian, and transit vehicles.

TR-5.3: Development projects' effects on the transportation network will be evaluated during the entitlement process and will be required to fund or construct improvements in proportion to their impacts on the transportation system. Improvements will prioritize multimodal improvements that reduce VMT over automobile network improvements.

Methodology and Assumptions

Trip Generation

Trip generation rates resulting from new development proposed within the City of San José typically are estimated using trip rates published in the Institute of Transportation Engineers' (ITE) *Trip Generation Manual*, 10th Edition. Trips that would be generated by the proposed development were estimated using the ITE trip rates for "Tennis Courts" (Land use 490) and "Soccer Complex" (Land Use 488). Pickleball is a paddleball sport that combines elements of tennis, badminton, and table tennis. Thus, the "Tennis Courts" ITE land use category is the most similar. The "Soccer Complex" ITE land use is an acceptable land use for the futsal/basketball court because it refers to an outdoor facility that is used for non-professional soccer games. Futsal is described as a ball sport, played on a hard court, between two teams of five players each. Futsal teams have fewer players than soccer teams; thus, the trip generation presented provides a more conservative number of trips. The trip generation estimate is also conservative as it does not account for any decrease in vehicle trip reduction that may be associated with existing use of the athletic field that the project would be developed on.

As shown in the **Table 8**, the proposed project is estimated to generate approximately 311 daily trips and 50 PM peak hour trips. Because the new fields would be closed to the public during school hours, trips would not be generated during the AM peak hour. Daily trips were estimated using the Urban Land Institute (ULI) Shared Parking Calculation Model (Version 1.1, March 2020). The land use "Health Club" was used to determine typical sports facility usage throughout the day. The pattern was used to determine the proportion of daily trips that would occur between 3:00 PM and 10:00 PM. This proportion was used to determine the number of daily trips.

TABLE 8
PROJECT VEHICLE TRIP GENERATION ESTIMATES

Land Use	Size	Daily [1]	PM Peak Hour [2]	
		Vehicle Trips	Rate/Court	Vehicle Trips
Pickleball Court	8 Courts	210	4.210	34
Futsal Court	1 Court	101	16.430	16
Total Project Trips		**311**		**50**

NOTES:
1 Urban Land Institute (ULI) Shared Parking Calculation Model (Version 1.1, March 2020) used to factor ITE daily trips to represent 3-10 pm.
2 Average rates from the ITE Trip Generation Manual, 10th Edition 2017 used for PM peak hour trips. Land Use 490 used for Pickleball court and Land Use 488 used for Futsal courts.

SOURCE: Hexagon, 2020. Trip Generation Study, VMT Analysis, and Site Plan Review for the Evergreen Valley College Sports Complex Project in San José, California Memorandum. July 13, 2020.

With the trips spread throughout the afternoon and evening periods and on weekends, the project is not expected to affect the traffic operations at the nearby intersections.

Vehicle Miles Traveled

The new courts would not be anticipated to cause an increase in regional trips, but rather result in a change in trip making because some people would come to the proposed courts instead of other nearby courts. There are various pickleball and futsal courts within the south Bay Area region. The addition of the proposed pickleball and futsal courts would potentially result in a change in travel patterns for players attending these existing courts. It was assumed that some players would utilize the new courts, rather than the existing courts. Therefore, shorter trips would result as players who live closer to the EVC courts would choose to travel the shorter distance compared to the next closest court.

Site Access

Vehicle access to the parking lot would be provided via two existing full-access driveways on Yerba Buena Road. The driveways provide access to an existing surface parking lot, located next to the proposed courts. The existing parking lot generally has vacant parking spaces during the evenings, once student activities begin to decline at 3 PM; and during the weekends. The proposed project would create a new pedestrian walkway between the existing surface parking lot and the proposed courts (see Figure 3 in the Project Description). The proposed project would also create a new pedestrian walkway surrounding the western and northern edges of the court.

Discussion

a) **Less than Significant.** Under the proposed project, the existing pedestrian walkways, and related infrastructure, within the project footprint would be improved or remain in place, with new pedestrian and bicycle facilities linked to, and integrated into the existing network of pedestrian and bicycle facilities. The proposed project would not eliminate or substantially alter transportation infrastructure. The proposed project would not eliminate or conflict with the implementation of programs, plans, ordinances, or policies addressing the circulation system, transit, roadway, bicycle or pedestrian facilities.

As described in the traffic study prepared for the proposed project, project operations would result in the generation of approximately 311 average daily vehicle trips. These trips would be anticipated to be distributed throughout the afternoon and early evening with up to 50 vehicle trips occurring during the PM peak hour.

b) **Less than Significant.** As described above, the proposed project is expected to generate 311 daily vehicle trips, 50 PM peak hour vehicle trips, and no AM peak hour vehicle trips, as the courts would be closed to the public during peak school hours. The daily trips would be spread out throughout the afternoon, beginning at 3:00 PM, and into the evening. The project is not expected to increase VMT as the new courts would allow users to make shorter trips by visiting the proposed courts as opposed to existing courts farther away. Therefore, the proposed project would be anticipated to have a net negative VMT, resulting in a reduction of VMT relative to existing conditions.

c) **No Impact.** The proposed project would be integrated into the existing transportation facilities in the EVC campus. No new transportation facilities are proposed. Therefore, the proposed project would have no impact related to a substantial increase in hazards related to a geometric design feature or incompatible use.

d) **No Impact.** As described above, the proposed project would be constructed around and integrated into the existing transportation infrastructure within the EVC campus. The proposed project would not generate obstacles or impediments to existing emergency access to campus area within and surrounding the project site. For this reason, the proposed project would result in no impact related to inadequate emergency access.

References

City of San José, 2011. Envision San José 2040 General Plan. Adopted November 1, 2011; As Amended March 16, 2020. Available: https://www.sanjoseca.gov/home/showdocument?id=22359. Accessed July 27, 2020. Chapter 6, Pages 43-44.

Hexagon Transportation Consultants, 2020. Memorandum: Trip Generation Study, VMT Analysis, and Site Plan Review for the Evergreen Valley College Sports Complex Project in San José, California. July 13, 2020.

Tribal Cultural Resources

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
XVIII. TRIBAL CULTURAL RESOURCES —				
a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
i) 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	☐	☒	☐	☐
ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☒	☐	☐

Discussion

a.i, ii) **Less than Significant with Mitigation.** CEQA requires the lead agency to consider the effects of a project on tribal cultural resources. As defined in PRC Section 21074, tribal cultural resources are sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are listed, or determined to be eligible for listing, on the national, state, or local register of historical resources.

ESA contacted the California State Native American Heritage Commission (NAHC) on July 15, 2020 to request a search of the NAHC's Sacred Lands File and a list of Native American representatives who may have knowledge of tribal cultural resources in the project site or interest in the project. The NAHC replied to ESA by email on July 16, 2020 with the statement that the Sacred Lands File has no record of any sacred sites within the project site. The NAHC response included a list of seven Native American representatives from six tribal groups who may have knowledge of tribal cultural resources in or in the vicinity of the project site, or who may be interested in the project.

On July 24, 2020 the District sent letters to the Native American representatives identified by the NAHC as potentially having knowledge of or interest in the project site or vicinity. No responses to outreach letters have been received. If responses are received following publication of this draft, the section will be updated. Based on the Northwest Information Center (NWIC) records search and the NAHC SLF negative search results, there are no known tribal cultural resources listed or determined eligible for listing in the California Register, or included in a local register of historical resources as defined in PRC

Section 5020.1(k), pursuant to PRC Section 21074(a)(1), that would be affected by the project. To date, no new tribal cultural resources have been identified by Native American representatives, and surface survey of the project site identified no potential tribal cultural resources. In addition, the District did not determine any resource that could potentially be affected by the project to be a significant tribal cultural resource pursuant to criteria set forth in PRC Section 5024.1(c). Therefore, the project would cause no impact to known tribal cultural resources and no separate mitigation measure is necessary. In the unlikely event that a previously unrecorded buried archaeological resource determined to be a tribal cultural resource is identified during project construction, Mitigation Measure CUL-1 would apply.

References

Northwest Information Center (NWIC), Record Search results on file at ESA. File No. 20-0118. July 16, 2020.

Utilities and Service Systems

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
XIX. UTILITIES AND SERVICE SYSTEMS — Would the project:				
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☒	☐
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☒	☐
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☒
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☒	☐
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☒	☐

Discussion

a) **Less than Significant Impact.** The proposed project would not include the generation of wastewater or the use of natural gas or telecommunication activities, and would therefore not require the construction or relocation of these facilities. Water supply to the proposed project would be provided through the extension of a local recycled water irrigation line to the existing mainline infrastructure southeast of the project site, as well as a second local connection to an existing mainline south of the proposed project site. New stormwater drainage infrastructure would be constructed to direct stormwater flows to existing or proposed on-site bioretention areas for on-site treatment per low impact development (LID) standards, or to direct flows to existing drainage infrastructure in the proximity of the EVC campus. Electrical infrastructure to serve the proposed project would be extended from existing infrastructure; however, no new substantial infrastructure would be required to serve the project. These connections to existing infrastructure would not represent substantial changes to utilities infrastructure which would result in a significant environmental effect. Compliance with mitigation measures and other construction-related regulatory requirements discussed in other sections of this Initial Study would ensure construction-related effects associated with utility improvements would be reduced to less than significant levels.

b) **Less than Significant Impact.** As discussed above, recycled water would be used to irrigate landscaping at the project site. As such, the proposed project would not require any potable water supply. The proposed project would also replace turf areas requiring

irrigation with a hardscaped sports complex, which would have substantially less water demand. Given these factors, the proposed project would therefore have a less-than-significant impact on water supply.

c) **No Impact.** The proposed project would not include the construction of facilities which would generate wastewater; the project would therefore not require the use of wastewater treatment services. There would therefore be no impact related to this criterion as a result of the proposed project.

d) **Less than Significant.** Solid waste generated through implementation of the proposed project would involve two components: short-term construction-related solid waste, and long-term operational solid waste. Construction would involve demolition of existing facilities within the footprint of the proposed project site, and would include the removal or clearing of existing surface materials, existing irrigation and drainage infrastructure, the existing fencing at the softball diamond, and the existing landscape between the walkway and the existing tennis courts. Operation of the proposed project would also entail the generation of solid waste on a small scale, resulting from the day-to-day use of the proposed recreational facilities by campus students, staff, and faculty, and local community members. The generation of solid waste associated with operation of the proposed project would likely be negligible. The EVC would be adequately served by a landfill with sufficient remaining capacity to accommodate the short-term generation of construction debris, and minor on-going operational-generated solid waste. Impacts related to solid waste generation and disposal would be less than significant.

e) **Less than Significant.** The proposed project would comply with applicable federal, State, and local management and reduction statues and regulations related to solid waste, including Assembly Bill 939, the California Universal Waste Law, and policies IN-5.1 and IN-5.3 of the Envision San José 2040 General Plan. Therefore, the proposed project would result in a less-than-significant impact regarding this criterion.

References

City of San José, 2020. Envision San José 2040 General Plan. Amended on March 16, 2020.

Impact Sciences, Inc., 2013. *Evergreen Valley College 2025 Updated Facilities Master Plan Draft Environmental Impact Report*, SCH No. 20000112004. Published February 2013.

The Maas Companies, Inc., 2011. San José City College Facilities Master Plan Update 2011 Revised Draft Subsequent EIR, SCH No. 1999122011. Published May 2010.

Wildfire

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

Discussion

a) **No Impact.** The proposed project site is situated within a local responsibility area, rather than a state responsibility area, and is not itself located within a fire hazard severity zone. However, an area of very high fire hazard severity exists southeast of the project site within a local responsibility area, and state responsibility areas of moderate and high fire hazard severity zones are located near the proposed project site, to the east (California State Geoportal 2020) (FRAP 2008). However, the proposed project would be constructed entirely within the boundaries of the already-developed EVC campus, and would not conflict with or impair either the SJECCD Emergency Guidelines or the City of San José Emergency Operations Plan.

b) **Less than Significant Impact.** The proposed project site is situated within a developed, urban area, is not located within a state responsibility area, and does not include any residential uses. The site is also not considered a property or structure within a very high, high, or moderate fire hazard area per the Santa Clara County Operational Area Hazard Mitigation Plan (OES 2017). As such, the proposed project is unlikely to expose occupants to pollutant concentrations from wildfires or the uncontrolled spread of wildfires.

c) **Less than Significant Impact.** The proposed project site would be constructed within the existing boundaries of the developed EVC campus, and would not require the installation of infrastructure which would exacerbate fire risk. The proposed project would not entail the construction of roadways or other transit facilities, fuel breaks, power lines, emergency water sources, or other infrastructure which may exacerbate fire risk. Utilities infrastructure which would be created as a result of the proposed project, such as drainage, irrigation, and electrical infrastructure, would be provided by or connected to

existing infrastructure in the vicinity of the project site, within the EVC campus. Further, the EVC campus is not located within a fire hazard severity zone, and maintenance of infrastructure associated with the project is unlikely to exacerbate fire risk in the proposed project vicinity. The impact of this criterion is therefore less than significant.

d) **Less than Significant Impact.** The proposed project site is located in a developed, urban area within the boundaries of the developed EVC campus, which is not subject to flooding hazards. The campus is also not located within an identified geological hazard area which might be exacerbated by wildfire events, nor is it located within a wildfire hazard severity zone (The Maas Companies, Inc. 2011). The proposed project is therefore unlikely to expose people or structures to significant wildfire-related risks, and the impact to this criterion is less than significant.

References

California State Geoportal, 2020. "Fire Hazard Severity Zone Viewer." Available: https://gis.data.ca.gov/app/CALFIRE-Forestry::california-fire-hazard-severity-zone-viewer. Accessed July 23, 2020.

City of San José, 2019. Memorandum: Emergency Operations Plan, Base Plan. Approved January 24, 2019.

Fire and Resource Assessment Program (FRAP), 2008. Very High Fire Hazard Severity Zones in LRA, as Recommended by CAL FIRE; San José. Published October 8, 2008.

Office of Emergency Services, County of Santa Clara and Santa Clara County Fire, 2017. *Santa Clara County Operational Area Hazard Mitigation Plan: Volume 1*. Published October 15, 2017.

The Maas Companies, Inc., 2011. *San José City College Facilities Master Plan Update 2011* Revised Draft Subsequent EIR, SCH No. 1999122011. Published May 2010.

San José Evergreen Community College District (SJECCD), 2019. "Emergency Guidelines." Available: https://www.sjeccd.edu/district-services/district-police/emergency-preparedness. Accessed July 23, 2020.

Mandatory Findings of Significance

Issues (and Supporting Information Sources):	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
XXI. MANDATORY FINDINGS OF SIGNIFICANCE —				
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☐	☒	☐
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☒	☐	☐
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

Discussion

a) **Less than Significant Impact.** The proposed project site is situated within an urban environment, surrounded by a variety of land uses, including commercial, medical, single- and multi-family residential, and public/quasi-public uses. The project site is located on the developed EVC campus, on land currently occupied by turf, landscaped areas, and portions of sports fields, adjacent to academic and recreational facilities and paved parking and driveway areas. As such, there is little potential for occurrence of suitable habitat for fish or wildlife species, particularly rare or endangered plant or animal species on the project site, and the proposed project would have a less-than-significant impact on the potential degradation, reduction, or elimination of fish or wildlife habitats or populations.

b) **Less than Significant with Mitigation Incorporated.** In accordance with CEQA Guidelines Section 15183, the environmental analysis in this Initial Study was conducted to determine if there were any project-specific effects that are peculiar to the project or its site. No project-specific significant effects peculiar to the project or its site were identified that could not be mitigated to a less-than-significant level. The proposed project would contribute to potentially significant environmental effects in the areas of biological resources, cultural resources, and air quality. However, mitigation measures incorporated herein mitigate any potential contribution to cumulative impacts associated with these environmental issues to a less-than-significant level, and would preclude the project from making a substantial contribution to cumulative impacts. Therefore, the proposed project does not have impacts that are individually limited, but cumulatively considerable.

c) **Less than Significant with Mitigation Incorporated.** The environmental resource areas considered within this Initial Study result in findings of no impact, a less-than-significant impact, or a less-than-significant impact with mitigation incorporated, and would therefore not result in environmental effects which would directly or indirectly have substantial adverse effects on human beings.

References

The Maas Companies, Inc., 2011. *San José City College Facilities Master Plan Update 2011 Revised Draft Subsequent EIR, SCH No. 1999122011.* Published May 2010.

Appendix A
Air Quality

Appendix A

Emissions Calculations and Health Risk Assessment

ESA

A-1 CalEEMod Output and Emissions Calculations

LVC Sports Complex - CalEEMod Assumptions Analysis

PROJECT CHARACTERISTICS

Location	Santa Clara County		
Climate Zone	4		
Start of Construction	1/1/2021		
Operational Year	2022		
Utility Company	PG&E		
CO2Intensity	210	PG&E GHG EF based on <http://www.pgecorp.com/corp_responsibility/reports/2019/assets/PGE_CRSR_2019.pdf>	

LAND USE

Land Use	Land Use Subtype	Unit Amt	Size Metric	Lot Ac	SF
Parking	Other Asphalt Surfaces	78.15	1000 sf	1.762781955	78150
Recreational	Arena	1.65	1000 sf	0.037	1650
	Totals	79.8	1000 sf	1.800	79800

CONSTRUCTION

Construction Phasing

Construction Phase	Start Date	End Date	Days/wk	Total Days
Demolition	1/1/2021	1/28/2021	5	20
Site Preparation	1/29/2021	2/1/2021	5	2
Grading	2/2/2021	2/5/2021	5	4
Building Construction	2/6/2021	6/2/2021	5	83
Paving	6/3/2021	6/16/2021	5	10
Architectural Coating	6/17/2021	6/30/2021	5	10

Offroad Equipment

Equipment Type	Unit Amt	Hours/Day	HP	LF
Demolition				
Rubber Tired Dozer	*1*	*8*	*default*	*default*
Tractors/Loaders/Backho	*3*	*8*	*default*	*default*
Site Prep				
Grader	*1*	*8*	*default*	*default*
Rubber Tired Dozer	*1*	*7*	*default*	*default*
Tractors/Loaders/Backho	*1*	*8*	*default*	*default*
Scrapers	*1*	*8*	*default*	*default*
Grading				
Grader	*1*	*6*	*default*	*default*
Rubber Tired Dozer	*1*	*6*	*default*	*default*
Tractors/Loaders/Backho	*1*	*7*	*default*	*default*
Building Construction				
Cranes	*1*	*8*	*default*	*default*
Tractors/Loaders/Backho	*1*	*8*	*default*	*default*
Paving				
Rollers	*1*	*7*	*default*	*default*

Tractors/Loaders/Backho	*1*	*8*	*default*	*default*	
Architectural Coating					
Air Compressors	1	6	default	default	

Dust from Material Movement

Phase	Material Import	Material Export	Size Metric	Acres Graded
Site Prep	0	0	NA	3
Grading	0	0	NA	1.5

Demo

Size Metric	Unit Amt
SF	0

Trips & VMT

Phase Name	# of worker trips/day	# vendor trips/day	# haul trips (total per phase)	Trip length worker (mi)	trip length vendor (mi)	Trip length haul (mi)
Demo	10	2.9	20	*defaults*	*defaults*	*defaults*
Site prep	10	2	0			
Grading	8	2	0			
Building Construction	34	15	0			
Paving	5	2	0			
Arch Coating	7	3.8	0			

Architectural Coating

Phase	VOC for Parking Lot Paint	Parking Area
Arch Coating	*defaults*	*defaults*

OPERATIONAL

MOBILE

Vehicle Trips

LU	Wkday Trip Rate/size/day	Sat Trip Rate	Sun Trip Rate
Other Asphalt Surfaces	0	0	0
Arena	182	182	182

Weekday trip rate from traffic report

301 / day

Fleet Mix

LU	
Other Asphalt Surfaces	*default*
Arena	*default*

AREA

Hearths

none

Consumer Prods

defaults

Arch Coatings

defaults

Landscape Equip

defaults

ENERGY USE

defaults

WATER AND WASTEWATER

defaults

SOLID WASTE

defaults

OFFROAD EQUIP

none

STATIONARY SOURCES

Emergency Generators

Equip Type	# Equipment	Fuel Type	HP	LF	Hours/Day	Hours/Year

none

Boilers

Equip Type	# Equipment	Fuel Type

none

EVC Sports Complex - Emissions Calculations

Construction Schedule

	Start Date	End Date	# work days
Demo	1/1/2021	1/28/2021	20
Site Prep	1/29/2021	2/1/2021	2
Grading	2/2/2021	2/5/2021	4
Bldg Cons	2/6/2021	6/2/2021	83
Paving	6/3/2021	6/16/2021	10
Arch Coating	6/17/2021	6/30/2021	10
		Total	129

# construction work days per year	
2021	129

total days per year
365

Tons	Pounds
1	2000

BAAQMD Thresholds of Signficance (Criteria Air Pollutants)

BAAQMD Thresholds						
	NOx	ROG	PM10 (exhaust)	PM10 (fugitive dust)	PM2.5 (exhaust)	PM2.5 (fugitive dust)
Construction (ppd)	54	54	82	BMPs	54	BMPs
Operation (ppd)	54	54	82		54	
Operation (tpy)	10	10	15		10	

BAAQMD Thresholds of Significance (GHG)

BAAQMD Thresholds	
	CO2e (MT/yr)
Construction	None
Operation	GHG Reduction Strategy OR 1,100 MTCO2e/yr

Construction Emissions

UNMITIGATED Emissions (CalEEMod Output)

Construction Criteria Air Pollutant Emissions (tpy)				
	ROG	NOx	Exhaust PM10	Exhaust PM2.5
2021	0.08	0.54	0.02	0.02

GHG Emissions (MT)
CO2e
78.42

Construction Criteria Air Pollutant Emisisons (avg pounds per work day)				
	ROG	NOx	Exhaust PM10	Exhaust PM2.5
2021	1.20	8.31	0.35	0.32

Operational Emissions

UNMITIGATED Emissions *CalEEMod output

Operational Criteria Air Pollutant Emissions (tpy)				
	ROG	NOx	Total PM10	Total PM2.5
Area	0.0141	0.0000	0.0000	0.0000
Energy	0.0002	0.0021	0.0002	0.0002
Mobile	0.0659	0.2698	0.2189	0.0600
Waste	0.0000	0.0000	0.0000	0.0000
Water	0.0000	0.0000	0.0000	0.0000
Total	**0.08**	**0.27**	**0.22**	**0.06**

GHG Emissions (MT/yr)
CO2e
0.00
3.65
218.38
0.03
1.35
223.41

Operational Criteria Air Pollutant Emissions (ppd)				
	ROG	NOx	Total PM10	Total PM2.5
Area	0.0773	0.0001	0.0000	0.0000
Energy	0.0013	0.0117	0.0009	0.0009
Mobile	0.3611	1.4784	1.1995	0.3288
Waste	0.0000	0.0000	0.0000	0.0000
Water	0.0000	0.0000	0.0000	0.0000
Total	**0.44**	**1.49**	**1.20**	**0.33**

EVC Sports Complex

Santa Clara County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	78.15	1000sqft	1.76	78,150.00	0
Arena	1.65	1000sqft	0.04	1,650.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	58
Climate Zone	4			**Operational Year**	2022
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	210	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - PG&E GHG emission factor based on <http://www.pgecorp.com/corp_responsibility/reports/2019/assets/PGE_CRSR_2019.pdf>

Land Use - Lot size = 1.8ac (PD). Acreage allocated to land uses based on distribution of sf.

Construction Phase - Construction schedule to take 6 months. Minimal structures/buildings; therefore, building construction scaled down to fit schedule.

Off-road Equipment -

Off-road Equipment - Forklifts, generator sets, and welders not included in client-provided equipment list.

Off-road Equipment - Concrete/industrial saws not on construction list from client.

Off-road Equipment -

Off-road Equipment - Cement & mortar mixers, pavers, paving equipment not included in client-provided equipment list

Off-road Equipment - Added scrapers from clients construction equipment list.

Trips and VMT - Mobilization on first and last day of construction. Assume 2 1-way vendor trips for water truck throughout. CalEEMod default included 13 trips during construction. Assume 2 1-way haul trips per day of demo.

Demolition -

Grading -

Vehicle Trips - trip rate from traffic consultants = 301/day. 301 trips per day/1.65 size = 182 trip rate

Energy Use -

Construction Off-road Equipment Mitigation - Quantification of BAAQMD BMPs based on SMAQMD CEQA Guidance for construction emission control quantification

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	200.00	83.00
tblLandUse	LotAcreage	1.79	1.76
tblLandUse	LotAcreage	0.53	0.04
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	210
tblTripsAndVMT	HaulingTripNumber	0.00	20.00
tblTripsAndVMT	VendorTripNumber	0.00	3.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	13.00	15.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblVehicleTrips	ST_TR	10.71	182.00
tblVehicleTrips	SU_TR	10.71	182.00
tblVehicleTrips	WD_TR	10.71	182.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.0771	0.5357	0.3520	8.7000e-004	0.0341	0.0225	0.0566	0.0128	0.0208	0.0336	0.0000	78.0100	78.0100	0.0166	0.0000	78.4238
Maximum	**0.0771**	**0.5357**	**0.3520**	**8.7000e-004**	**0.0341**	**0.0225**	**0.0566**	**0.0128**	**0.0208**	**0.0336**	**0.0000**	**78.0100**	**78.0100**	**0.0166**	**0.0000**	**78.4238**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.0771	0.5357	0.3520	8.7000e-004	0.0236	0.0225	0.0461	8.0600e-003	0.0208	0.0288	0.0000	78.0100	78.0100	0.0166	0.0000	78.4238
Maximum	**0.0771**	**0.5357**	**0.3520**	**8.7000e-004**	**0.0236**	**0.0225**	**0.0461**	**8.0600e-003**	**0.0208**	**0.0288**	**0.0000**	**78.0100**	**78.0100**	**0.0166**	**0.0000**	**78.4238**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**30.72**	**0.00**	**18.49**	**37.23**	**0.00**	**14.22**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-1-2021	3-31-2021	0.3966	0.3966
2	4-1-2021	6-30-2021	0.2223	0.2223
		Highest	0.3966	0.3966

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0141	1.0000e-005	7.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.4300e-003	1.4300e-003	0.0000	0.0000	1.5200e-003
Energy	2.3000e-004	2.1300e-003	1.7900e-003	1.0000e-005		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004	0.0000	3.6210	3.6210	2.2000e-004	8.0000e-005	3.6503
Mobile	0.0659	0.2698	0.7145	2.3800e-003	0.2169	2.0500e-003	0.2189	0.0581	1.9100e-003	0.0600	0.0000	218.1919	218.1919	7.6500e-003	0.0000	218.3832
Waste						0.0000	0.0000		0.0000	0.0000	0.0102	0.0000	0.0102	6.0000e-004	0.0000	0.0252
Water						0.0000	0.0000		0.0000	0.0000	0.2255	0.3815	0.6070	0.0232	5.6000e-004	1.3535
Total	**0.0802**	**0.2720**	**0.7170**	**2.3900e-003**	**0.2169**	**2.2100e-003**	**0.2191**	**0.0581**	**2.0700e-003**	**0.0601**	**0.2356**	**222.1958**	**222.4315**	**0.0317**	**6.4000e-004**	**223.4137**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0141	1.0000e-005	7.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.4300e-003	1.4300e-003	0.0000	0.0000	1.5200e-003
Energy	2.3000e-004	2.1300e-003	1.7900e-003	1.0000e-005		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004	0.0000	3.6210	3.6210	2.2000e-004	8.0000e-005	3.6503
Mobile	0.0659	0.2698	0.7145	2.3800e-003	0.2169	2.0500e-003	0.2189	0.0581	1.9100e-003	0.0600	0.0000	218.1919	218.1919	7.6500e-003	0.0000	218.3832
Waste						0.0000	0.0000		0.0000	0.0000	0.0102	0.0000	0.0102	6.0000e-004	0.0000	0.0252
Water						0.0000	0.0000		0.0000	0.0000	0.2255	0.3815	0.6070	0.0232	5.6000e-004	1.3535
Total	**0.0802**	**0.2720**	**0.7170**	**2.3900e-003**	**0.2169**	**2.2100e-003**	**0.2191**	**0.0581**	**2.0700e-003**	**0.0601**	**0.2356**	**222.1958**	**222.4315**	**0.0317**	**6.4000e-004**	**223.4137**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2021	1/28/2021	5	20	
2	Site Preparation	Site Preparation	1/29/2021	2/1/2021	5	2	
3	Grading	Grading	2/2/2021	2/5/2021	5	4	
4	Building Construction	Building Construction	2/6/2021	6/2/2021	5	83	
5	Paving	Paving	6/3/2021	6/16/2021	5	10	
6	Architectural Coating	Architectural Coating	6/17/2021	6/30/2021	5	10	

Acres of Grading (Site Preparation Phase): 3

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 1.76

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 2,475; Non-Residential Outdoor: 825; Striped Parking Area: 4,689 (Architectural Coating – sqft)

OffRoad Equipment

EVC Sports Complex - Santa Clara County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Site Preparation	Scrapers	1	8.00	367	0.48
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	0	6.00	89	0.20
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	0	8.00	46	0.45
Paving	Cement and Mortar Mixers	0	6.00	9	0.56
Paving	Pavers	0	6.00	130	0.42
Paving	Paving Equipment	0	8.00	132	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	4	10.00	3.00	20.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	4	10.00	2.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	2.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	2	34.00	15.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	2	5.00	2.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	7.00	4.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0161	0.1666	0.1082	1.8000e-004		8.6800e-003	8.6800e-003		7.9800e-003	7.9800e-003	0.0000	15.6948	15.6948	5.0800e-003	0.0000	15.8217
Total	**0.0161**	**0.1666**	**0.1082**	**1.8000e-004**		**8.6800e-003**	**8.6800e-003**		**7.9800e-003**	**7.9800e-003**	**0.0000**	**15.6948**	**15.6948**	**5.0800e-003**	**0.0000**	**15.8217**

3.2 Demolition - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	8.0000e-005	2.6700e-003	5.8000e-004	1.0000e-005	1.7000e-004	1.0000e-005	1.8000e-004	5.0000e-005	1.0000e-005	5.0000e-005	0.0000	0.7530	0.7530	3.0000e-005	0.0000	0.7539
Vendor	1.0000e-004	3.0800e-003	8.2000e-004	1.0000e-005	2.0000e-004	1.0000e-005	2.0000e-004	6.0000e-005	1.0000e-005	6.0000e-005	0.0000	0.7771	0.7771	3.0000e-005	0.0000	0.7779
Worker	3.1000e-004	2.1000e-004	2.2900e-003	1.0000e-005	7.9000e-004	0.0000	8.0000e-004	2.1000e-004	0.0000	2.2000e-004	0.0000	0.6565	0.6565	1.0000e-005	0.0000	0.6569
Total	**4.9000e-004**	**5.9600e-003**	**3.6900e-003**	**3.0000e-005**	**1.1600e-003**	**2.0000e-005**	**1.1800e-003**	**3.2000e-004**	**2.0000e-005**	**3.3000e-004**	**0.0000**	**2.1867**	**2.1867**	**7.0000e-005**	**0.0000**	**2.1887**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0161	0.1666	0.1082	1.8000e-004		8.6800e-003	8.6800e-003		7.9800e-003	7.9800e-003	0.0000	15.6948	15.6948	5.0800e-003	0.0000	15.8217
Total	**0.0161**	**0.1666**	**0.1082**	**1.8000e-004**		**8.6800e-003**	**8.6800e-003**		**7.9800e-003**	**7.9800e-003**	**0.0000**	**15.6948**	**15.6948**	**5.0800e-003**	**0.0000**	**15.8217**

3.2 Demolition - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	8.0000e-005	2.6700e-003	5.8000e-004	1.0000e-005	1.6000e-004	1.0000e-005	1.7000e-004	4.0000e-005	1.0000e-005	5.0000e-005	0.0000	0.7530	0.7530	3.0000e-005	0.0000	0.7539
Vendor	1.0000e-004	3.0800e-003	8.2000e-004	1.0000e-005	1.8000e-004	1.0000e-005	1.9000e-004	5.0000e-005	1.0000e-005	6.0000e-005	0.0000	0.7771	0.7771	3.0000e-005	0.0000	0.7779
Worker	3.1000e-004	2.1000e-004	2.2900e-003	1.0000e-005	7.3000e-004	0.0000	7.4000e-004	2.0000e-004	0.0000	2.0000e-004	0.0000	0.6565	0.6565	1.0000e-005	0.0000	0.6569
Total	**4.9000e-004**	**5.9600e-003**	**3.6900e-003**	**3.0000e-005**	**1.0700e-003**	**2.0000e-005**	**1.1000e-003**	**2.9000e-004**	**2.0000e-005**	**3.1000e-004**	**0.0000**	**2.1867**	**2.1867**	**7.0000e-005**	**0.0000**	**2.1887**

3.3 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					6.8600e-003	0.0000	6.8600e-003	3.0700e-003	0.0000	3.0700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.4900e-003	0.0281	0.0146	3.0000e-005		1.1800e-003	1.1800e-003		1.0900e-003	1.0900e-003	0.0000	2.8435	2.8435	9.2000e-004	0.0000	2.8665
Total	**2.4900e-003**	**0.0281**	**0.0146**	**3.0000e-005**	**6.8600e-003**	**1.1800e-003**	**8.0400e-003**	**3.0700e-003**	**1.0900e-003**	**4.1600e-003**	**0.0000**	**2.8435**	**2.8435**	**9.2000e-004**	**0.0000**	**2.8665**

3.3 Site Preparation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.0000e-005	2.1000e-004	5.0000e-005	0.0000	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0518	0.0518	0.0000	0.0000	0.0519
Worker	3.0000e-005	2.0000e-005	2.3000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0657	0.0657	0.0000	0.0000	0.0657
Total	**4.0000e-005**	**2.3000e-004**	**2.8000e-004**	**0.0000**	**9.0000e-005**	**0.0000**	**9.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.1175**	**0.1175**	**0.0000**	**0.0000**	**0.1176**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					3.0900e-003	0.0000	3.0900e-003	1.3800e-003	0.0000	1.3800e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.4900e-003	0.0281	0.0146	3.0000e-005		1.1800e-003	1.1800e-003		1.0900e-003	1.0900e-003	0.0000	2.8435	2.8435	9.2000e-004	0.0000	2.8665
Total	**2.4900e-003**	**0.0281**	**0.0146**	**3.0000e-005**	**3.0900e-003**	**1.1800e-003**	**4.2700e-003**	**1.3800e-003**	**1.0900e-003**	**2.4700e-003**	**0.0000**	**2.8435**	**2.8435**	**9.2000e-004**	**0.0000**	**2.8665**

3.3 Site Preparation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.0000e-005	2.1000e-004	5.0000e-005	0.0000	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0518	0.0518	0.0000	0.0000	0.0519
Worker	3.0000e-005	2.0000e-005	2.3000e-004	0.0000	7.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0657	0.0657	0.0000	0.0000	0.0657
Total	**4.0000e-005**	**2.3000e-004**	**2.8000e-004**	**0.0000**	**8.0000e-005**	**0.0000**	**8.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.1175**	**0.1175**	**0.0000**	**0.0000**	**0.1176**

3.4 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					9.8300e-003	0.0000	9.8300e-003	5.0500e-003	0.0000	5.0500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.5800e-003	0.0287	0.0127	3.0000e-005		1.2800e-003	1.2800e-003		1.1700e-003	1.1700e-003	0.0000	2.4767	2.4767	8.0000e-004	0.0000	2.4968
Total	**2.5800e-003**	**0.0287**	**0.0127**	**3.0000e-005**	**9.8300e-003**	**1.2800e-003**	**0.0111**	**5.0500e-003**	**1.1700e-003**	**6.2200e-003**	**0.0000**	**2.4767**	**2.4767**	**8.0000e-004**	**0.0000**	**2.4968**

3.4 Grading - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.0000e-005	4.1000e-004	1.1000e-004	0.0000	3.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.1036	0.1036	0.0000	0.0000	0.1037
Worker	5.0000e-005	3.0000e-005	3.7000e-004	0.0000	1.3000e-004	0.0000	1.3000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.1051	0.1051	0.0000	0.0000	0.1051
Total	**6.0000e-005**	**4.4000e-004**	**4.8000e-004**	**0.0000**	**1.6000e-004**	**0.0000**	**1.6000e-004**	**4.0000e-005**	**0.0000**	**4.0000e-005**	**0.0000**	**0.2087**	**0.2087**	**0.0000**	**0.0000**	**0.2088**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					4.4200e-003	0.0000	4.4200e-003	2.2700e-003	0.0000	2.2700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.5800e-003	0.0287	0.0127	3.0000e-005		1.2800e-003	1.2800e-003		1.1700e-003	1.1700e-003	0.0000	2.4767	2.4767	8.0000e-004	0.0000	2.4968
Total	**2.5800e-003**	**0.0287**	**0.0127**	**3.0000e-005**	**4.4200e-003**	**1.2800e-003**	**5.7000e-003**	**2.2700e-003**	**1.1700e-003**	**3.4400e-003**	**0.0000**	**2.4767**	**2.4767**	**8.0000e-004**	**0.0000**	**2.4968**

3.4 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.0000e-005	4.1000e-004	1.1000e-004	0.0000	2.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.1036	0.1036	0.0000	0.0000	0.1037
Worker	5.0000e-005	3.0000e-005	3.7000e-004	0.0000	1.2000e-004	0.0000	1.2000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.1051	0.1051	0.0000	0.0000	0.1051
Total	**6.0000e-005**	**4.4000e-004**	**4.8000e-004**	**0.0000**	**1.4000e-004**	**0.0000**	**1.5000e-004**	**4.0000e-005**	**0.0000**	**4.0000e-005**	**0.0000**	**0.2087**	**0.2087**	**0.0000**	**0.0000**	**0.2088**

3.5 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0187	0.2099	0.1321	2.8000e-004		9.6100e-003	9.6100e-003		8.8400e-003	8.8400e-003	0.0000	24.2729	24.2729	7.8500e-003	0.0000	24.4691
Total	**0.0187**	**0.2099**	**0.1321**	**2.8000e-004**		**9.6100e-003**	**9.6100e-003**		**8.8400e-003**	**8.8400e-003**	**0.0000**	**24.2729**	**24.2729**	**7.8500e-003**	**0.0000**	**24.4691**

3.5 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.0300e-003	0.0640	0.0170	1.7000e-004	4.1000e-003	1.4000e-004	4.2400e-003	1.1800e-003	1.4000e-004	1.3200e-003	0.0000	16.1246	16.1246	7.0000e-004	0.0000	16.1422
Worker	4.3500e-003	3.0100e-003	0.0323	1.0000e-004	0.0112	7.0000e-005	0.0113	2.9800e-003	6.0000e-005	3.0400e-003	0.0000	9.2638	9.2638	2.1000e-004	0.0000	9.2691
Total	**6.3800e-003**	**0.0670**	**0.0493**	**2.7000e-004**	**0.0153**	**2.1000e-004**	**0.0155**	**4.1600e-003**	**2.0000e-004**	**4.3600e-003**	**0.0000**	**25.3884**	**25.3884**	**9.1000e-004**	**0.0000**	**25.4112**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0187	0.2099	0.1321	2.8000e-004		9.6100e-003	9.6100e-003		8.8400e-003	8.8400e-003	0.0000	24.2728	24.2728	7.8500e-003	0.0000	24.4691
Total	**0.0187**	**0.2099**	**0.1321**	**2.8000e-004**		**9.6100e-003**	**9.6100e-003**		**8.8400e-003**	**8.8400e-003**	**0.0000**	**24.2728**	**24.2728**	**7.8500e-003**	**0.0000**	**24.4691**

3.5 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.0300e-003	0.0640	0.0170	1.7000e-004	3.8400e-003	1.4000e-004	3.9800e-003	1.1200e-003	1.4000e-004	1.2600e-003	0.0000	16.1246	16.1246	7.0000e-004	0.0000	16.1422
Worker	4.3500e-003	3.0100e-003	0.0323	1.0000e-004	0.0103	7.0000e-005	0.0104	2.7600e-003	6.0000e-005	2.8300e-003	0.0000	9.2638	9.2638	2.1000e-004	0.0000	9.2691
Total	**6.3800e-003**	**0.0670**	**0.0493**	**2.7000e-004**	**0.0142**	**2.1000e-004**	**0.0144**	**3.8800e-003**	**2.0000e-004**	**4.0900e-003**	**0.0000**	**25.3884**	**25.3884**	**9.1000e-004**	**0.0000**	**25.4112**

3.6 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.7700e-003	0.0179	0.0195	3.0000e-005		1.0700e-003	1.0700e-003		9.9000e-004	9.9000e-004	0.0000	2.3733	2.3733	7.7000e-004	0.0000	2.3925
Paving	2.3100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**4.0800e-003**	**0.0179**	**0.0195**	**3.0000e-005**		**1.0700e-003**	**1.0700e-003**		**9.9000e-004**	**9.9000e-004**	**0.0000**	**2.3733**	**2.3733**	**7.7000e-004**	**0.0000**	**2.3925**

3.6 Paving - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.0000e-005	1.0300e-003	2.7000e-004	0.0000	7.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.2590	0.2590	1.0000e-005	0.0000	0.2593
Worker	8.0000e-005	5.0000e-005	5.7000e-004	0.0000	2.0000e-004	0.0000	2.0000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1641	0.1641	0.0000	0.0000	0.1642
Total	**1.1000e-004**	**1.0800e-003**	**8.4000e-004**	**0.0000**	**2.7000e-004**	**0.0000**	**2.7000e-004**	**7.0000e-005**	**0.0000**	**7.0000e-005**	**0.0000**	**0.4232**	**0.4232**	**1.0000e-005**	**0.0000**	**0.4235**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.7700e-003	0.0179	0.0195	3.0000e-005		1.0700e-003	1.0700e-003		9.9000e-004	9.9000e-004	0.0000	2.3733	2.3733	7.7000e-004	0.0000	2.3925
Paving	2.3100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**4.0800e-003**	**0.0179**	**0.0195**	**3.0000e-005**		**1.0700e-003**	**1.0700e-003**		**9.9000e-004**	**9.9000e-004**	**0.0000**	**2.3733**	**2.3733**	**7.7000e-004**	**0.0000**	**2.3925**

3.6 Paving - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.0000e-005	1.0300e-003	2.7000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.2590	0.2590	1.0000e-005	0.0000	0.2593
Worker	8.0000e-005	5.0000e-005	5.7000e-004	0.0000	1.8000e-004	0.0000	1.8000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1641	0.1641	0.0000	0.0000	0.1642
Total	**1.1000e-004**	**1.0800e-003**	**8.4000e-004**	**0.0000**	**2.4000e-004**	**0.0000**	**2.4000e-004**	**7.0000e-005**	**0.0000**	**7.0000e-005**	**0.0000**	**0.4232**	**0.4232**	**1.0000e-005**	**0.0000**	**0.4235**

3.7 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0249					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.0900e-003	7.6300e-003	9.0900e-003	1.0000e-005		4.7000e-004	4.7000e-004		4.7000e-004	4.7000e-004	0.0000	1.2766	1.2766	9.0000e-005	0.0000	1.2788
Total	**0.0260**	**7.6300e-003**	**9.0900e-003**	**1.0000e-005**		**4.7000e-004**	**4.7000e-004**		**4.7000e-004**	**4.7000e-004**	**0.0000**	**1.2766**	**1.2766**	**9.0000e-005**	**0.0000**	**1.2788**

3.7 Architectural Coating - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.0000e-005	2.0600e-003	5.5000e-004	1.0000e-005	1.3000e-004	0.0000	1.4000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.5181	0.5181	2.0000e-005	0.0000	0.5186
Worker	1.1000e-004	7.0000e-005	8.0000e-004	0.0000	2.8000e-004	0.0000	2.8000e-004	7.0000e-005	0.0000	8.0000e-005	0.0000	0.2298	0.2298	1.0000e-005	0.0000	0.2299
Total	**1.8000e-004**	**2.1300e-003**	**1.3500e-003**	**1.0000e-005**	**4.1000e-004**	**0.0000**	**4.2000e-004**	**1.1000e-004**	**0.0000**	**1.2000e-004**	**0.0000**	**0.7479**	**0.7479**	**3.0000e-005**	**0.0000**	**0.7485**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0249					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.0900e-003	7.6300e-003	9.0900e-003	1.0000e-005		4.7000e-004	4.7000e-004		4.7000e-004	4.7000e-004	0.0000	1.2766	1.2766	9.0000e-005	0.0000	1.2788
Total	**0.0260**	**7.6300e-003**	**9.0900e-003**	**1.0000e-005**		**4.7000e-004**	**4.7000e-004**		**4.7000e-004**	**4.7000e-004**	**0.0000**	**1.2766**	**1.2766**	**9.0000e-005**	**0.0000**	**1.2788**

3.7 Architectural Coating - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.0000e-005	2.0600e-003	5.5000e-004	1.0000e-005	1.2000e-004	0.0000	1.3000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.5181	0.5181	2.0000e-005	0.0000	0.5186
Worker	1.1000e-004	7.0000e-005	8.0000e-004	0.0000	2.6000e-004	0.0000	2.6000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.2298	0.2298	1.0000e-005	0.0000	0.2299
Total	**1.8000e-004**	**2.1300e-003**	**1.3500e-003**	**1.0000e-005**	**3.8000e-004**	**0.0000**	**3.9000e-004**	**1.1000e-004**	**0.0000**	**1.1000e-004**	**0.0000**	**0.7479**	**0.7479**	**3.0000e-005**	**0.0000**	**0.7485**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0659	0.2698	0.7145	2.3800e-003	0.2169	2.0500e-003	0.2189	0.0581	1.9100e-003	0.0600	0.0000	218.1919	218.1919	7.6500e-003	0.0000	218.3832
Unmitigated	0.0659	0.2698	0.7145	2.3800e-003	0.2169	2.0500e-003	0.2189	0.0581	1.9100e-003	0.0600	0.0000	218.1919	218.1919	7.6500e-003	0.0000	218.3832

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Arena	300.30	300.30	300.30	583,165	583,165
Other Asphalt Surfaces	0.00	0.00	0.00		
Total	300.30	300.30	300.30	583,165	583,165

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Arena	9.50	7.30	7.30	0.00	81.00	19.00	66	28	6
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Arena	0.610498	0.036775	0.183084	0.106123	0.014413	0.005007	0.012610	0.021118	0.002144	0.001548	0.005312	0.000627	0.000740
Other Asphalt Surfaces	0.610498	0.036775	0.183084	0.106123	0.014413	0.005007	0.012610	0.021118	0.002144	0.001548	0.005312	0.000627	0.000740

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1.2982	1.2982	1.8000e-004	4.0000e-005	1.3138
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1.2982	1.2982	1.8000e-004	4.0000e-005	1.3138
NaturalGas Mitigated	2.3000e-004	2.1300e-003	1.7900e-003	1.0000e-005		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004	0.0000	2.3228	2.3228	4.0000e-005	4.0000e-005	2.3366
NaturalGas Unmitigated	2.3000e-004	2.1300e-003	1.7900e-003	1.0000e-005		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004	0.0000	2.3228	2.3228	4.0000e-005	4.0000e-005	2.3366

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Arena	43527	2.3000e-004	2.1300e-003	1.7900e-003	1.0000e-005		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004	0.0000	2.3228	2.3228	4.0000e-005	4.0000e-005	2.3366
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**2.3000e-004**	**2.1300e-003**	**1.7900e-003**	**1.0000e-005**		**1.6000e-004**	**1.6000e-004**		**1.6000e-004**	**1.6000e-004**	**0.0000**	**2.3228**	**2.3228**	**4.0000e-005**	**4.0000e-005**	**2.3366**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Arena	43527	2.3000e-004	2.1300e-003	1.7900e-003	1.0000e-005		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004	0.0000	2.3228	2.3228	4.0000e-005	4.0000e-005	2.3366
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**2.3000e-004**	**2.1300e-003**	**1.7900e-003**	**1.0000e-005**		**1.6000e-004**	**1.6000e-004**		**1.6000e-004**	**1.6000e-004**	**0.0000**	**2.3228**	**2.3228**	**4.0000e-005**	**4.0000e-005**	**2.3366**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Arena	13629	1.2982	1.8000e-004	4.0000e-005	1.3138
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**1.2982**	**1.8000e-004**	**4.0000e-005**	**1.3138**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Arena	13629	1.2982	1.8000e-004	4.0000e-005	1.3138
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**1.2982**	**1.8000e-004**	**4.0000e-005**	**1.3138**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0141	1.0000e-005	7.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.4300e-003	1.4300e-003	0.0000	0.0000	1.5200e-003
Unmitigated	0.0141	1.0000e-005	7.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.4300e-003	1.4300e-003	0.0000	0.0000	1.5200e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	2.4900e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0115					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	7.0000e-005	1.0000e-005	7.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.4300e-003	1.4300e-003	0.0000	0.0000	1.5200e-003
Total	**0.0141**	**1.0000e-005**	**7.3000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**1.4300e-003**	**1.4300e-003**	**0.0000**	**0.0000**	**1.5200e-003**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	2.4900e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0115					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	7.0000e-005	1.0000e-005	7.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.4300e-003	1.4300e-003	0.0000	0.0000	1.5200e-003
Total	**0.0141**	**1.0000e-005**	**7.3000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**1.4300e-003**	**1.4300e-003**	**0.0000**	**0.0000**	**1.5200e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.6070	0.0232	5.6000e-004	1.3535
Unmitigated	0.6070	0.0232	5.6000e-004	1.3535

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Arena	0.710771 / 0.0453683	0.6070	0.0232	5.6000e-004	1.3535
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.6070**	**0.0232**	**5.6000e-004**	**1.3535**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Arena	0.710771 / 0.0453683	0.6070	0.0232	5.6000e-004	1.3535
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.6070**	**0.0232**	**5.6000e-004**	**1.3535**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0102	6.0000e-004	0.0000	0.0252
Unmitigated	0.0102	6.0000e-004	0.0000	0.0252

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Arena	0.05	0.0102	6.0000e-004	0.0000	0.0252
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0102**	**6.0000e-004**	**0.0000**	**0.0252**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Arena	0.05	0.0102	6.0000e-004	0.0000	0.0252
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0102**	**6.0000e-004**	**0.0000**	**0.0252**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

A-2 Health Risk Assessment

Evergreen Valley Sports Complex Screening HRA

For Nearest Residential Receptors

	Distance to Resident		AERSCREEN OUT [ug/m^3]/[g/s]	
	(ft)	(m)	max	annual
Construction Area Source	650.0	198.1	390.26	39.03

	Construction Year	PM_{10} Exhaust (tons/yr)	Start Date	End Date	Duration
		Unmitigated			Days
Construction Area Source	2021	0.0223	1/1/2021	6/30/2021	180

	REL ($\mu g/m^3$)
DPM	5

		DPM Exhaust (g/s)	Exposure Duration (days)			C_{AIR} ($\mu g/m^3$)
		Unmitigated	3rd Trimester	Age 0<2	Age 2<9	Unmitigated
Construction Area Source	2021	0.0013	90	90	0	0.051

Cancer Risk = Dose inhalation × Inhalation CPF × ASF × ED/AT × FAH **(Equation 8.2.4 A)**

Where:

Cancer Risk = residential inhalation cancer risk

Dose inhalation (mg/kg-day) = C_{AIR} × DBR × A × EF × 10^{-6} **(Equation 5.4.1.1)**

Inhalation CPF = inhalation cancer potency factor ([mg/kg/day]$^{-1}$)
ASF = age sensitivity factor for a specified age group (unitless)
ED = exposure duration for a specified age group (years)
AT = averaging time period over which exposure is averaged in days (years)
FAH = fraction of time at home (unitless)

Where:

C_{AIR} = concentration of compound in air in micrograms per cubic meter ($\mu g/m^3$)
DBR = daily breathing rate in liter per kilogram of body weight per day (L/kg-body weight/day)
A = inhalation absorption factor (1 for DPM, unitless)
EF = exposure frequency in days per year (unitless, days/365 days)
10^{-6} = micrograms to milligrams conversion, liters to cubic meters conversion

Hazard Quotient = C_{air} / REL **(Section 8.3.1)**

Where:

Hazard Quotient = chronic non-cancer hazard
C_{AIR} = concentration of compound in air in micrograms per cubic meter ($\mu g/m^3$)
REL = Chronic non-cancer Reference Exposure Level for substance ($\mu g/m^3$)

Dose Inhalation Inputs

Receptor Type	Exposure Scenario	Receptor Group Age	Project Year	C_{AIR} ($\mu g/m^3$) Unmitigated	DBR (L/kg-day)	A (unitless)	EF (days/year)
Off-Site Child Resident	Construction	3rd Trimester	2021	5.08E-02	361	1	0.96
		Age 0<2	2021	5.08E-02	1090	1	0.96

Dose Inhalation Outputs

Receptor Type	Exposure Scenario	Receptor Group Age	Project Year	Unmitigated Dose inhalation (mg/kg-day)
Off-Site Child Resident	Construction	3rd Trimester	2021	1.76E-05
		Age 0<2	2021	5.31E-05

Risk Inputs

Receptor Type	Exposure Scenario	Receptor Group Age	Project Year	CPF ($mg/kg\text{-}day^{-1}$)	ASF (unitless)	ED (years)	AT (years)	FAH (unitless)
Off-Site Child Resident	Construction	3rd Trimester	2021	1.1	10	0.25	70.00	1
		Age 0<2	2021	1.1	10	0.25	70.00	1

Risk Outputs

Receptor Type	Exposure Scenario	Receptor Group Age	Project Year	Unmitigated Cancer Risk (per million)	Chronic Non-Cancer Risk	$PM_{2.5}$ Annual Average
Off-Site Child Resident	Construction	3rd Trimester	2021	6.81E-07		
		Age 0<2	2021	2.06E-06		
		Total Health Risk		2.7	0.01	0.07

$PM_{2.5}$ Annual Average

Total tons over construction period	Emission rate over construction period	Annual Ave. $PM_{2.5}$ Concentration
0.03	0.0017	0.066

SOURCE: Office of Environmental Health Hazard Assessment, 2015. *Air Toxics Hot Spots Program Guidance Manual for the Preparation of Health Risk Assessments*. February, 2015.
Per OEHHA Table 8.4, FAH value of 1 used for residential since the nearest school unmitigated cancer risk is >1 per million.
Inhalation cancer potency factor from Table 7.1

Evergreen Valley Sports Complex Screening HRA

For Schools & Preschools

Year	Unmitigated Onsite DPM Emissions per Year (tons)	Unmitigated Emission Rate (g/s)
2021	0.0223	0.0013

AERSCREEN Out [ug/m^3]/[g/s]

Annual Average	Pinnacle Learning Center - Afterschool	118.70
	Parkside Preschool	118.70

Emission Impact - (ug/m^3)

Unmitigated

Year	Pinnacle Learning Center - Afterschool	Parkside Preschool
2021	1.54E-01	1.54E-01

	Pinnacle Learning Center - Afterschool	Parkside Preschool
Age Group	Age 2<16	Age 2<9
Exposure Duration	180	180
2021	0.50	0.50

Cancer Risk = Dose inhalation × Inhalation CPF × ASF × ED/AT × FAH **(Equation 8.2.4 A)**

Where:

Cancer Risk = residential inhalation cancer risk

Dose inhalation (mg/kg-day) = C_{AIR} × DBR × A × EF × 10^{-6} **(Equation 2)**

Inhalation CPF = inhalation cancer potency factor ([mg/kg/day]$^{-1}$)
ASF = age sensitivity factor for a specified age group (unitless)
ED = exposure duration for a specified age group (years)
AT = averaging time period over which exposure is averaged in days (years)
FAH = fraction of time at home (unitless)

Where:

C_{AIR} = concentration of compound in air in micrograms per cubic meter (µg/m^3)
DBR = daily breathing rate in liter per kilogram of body weight per day (L/kg-body weight/day)
A = inhalation absorption factor (1 for DPM, unitless)
EF = exposure frequency in days per year (unitless, days/365 days)
10^{-6} = micrograms to milligrams conversion, liters to cubic meters conversion

Dose Inhalation Inputs

Receptor Type	Exposure Scenario	Receptor Group Age	Unmitigated C_{AIR} (µg/m^3)	8hr-DBR (L/kg-day)	A (unitless)	EF (days/year)
Pinnacle Learning Center - Afterschool	Construction	Age 2<16	7.72E-02	520	1	0.49
Parkside Preschool	Construction	Age 2<9	7.72E-02	640	1	0.68

Dose Inhalation Outputs

Receptor Type	Exposure Scenario	Receptor Group Age	Unmitigated Dose inhalation (mg/kg-day)
Pinnacle Learning Center - Afterschool	Construction	Age 2<16	1.97E-05
Parkside Preschool	Construction	Age 2<9	3.36E-05

Risk Inputs

Receptor Type	Exposure Scenario	Receptor Group Age	CPF (mg/kg-day^{-1})	ASF (unitless)	ED (years)	AT (years)	FAH (unitless)	REL (µg/m^3)	MAF
Pinnacle Learning Center - Afterschool	Construction	Age 2<16	1.1	3	0.50	70.00	0.375	5	4.2
Parkside Preschool	Construction	Age 2<9	1.1	3	0.50	70.00	1	5	4.2

Risk Outputs

Receptor Type	Exposure Scenario	Receptor Group Age	Unmitigated		
			Cancer Risk	**Chronic Non-Cancer Risk**	**Annual Ave. $PM_{2.5}$ Concentration**
Pinnacle Learning Center - Afterschool	Construction	Age 2<16	7.30E-07	0.02	0.20
Parkside Preschool	Construction	Age 2<9	3.33E-06	0.02	0.20
		Total Risk (per million)			
		Pinnacle Learning Center - Afterschool	0.73	0.02	0.20
		Parkside Preschool	3.33	0.02	0.20

$PM_{2.5}$ Annual Average

Total tons over construction period	Emission rate over construction period
0.03	0.0017

SOURCE: Office of Environmental Health Hazard Assessment, 2015. *Air Toxics Hot Spots Program Guidance Manual for the Preparation of Health Risk Assessments* . February 2015.
Daily breathing rate for school and preschool receptors is based on the OEHHA 95th percentile 8-hour moderate intensity breathing rates (Table 5.8).
Inhalation cancer potency factor from Table 7.1
Model Adjustment Factor (MAF) of 4.2 used for both preschool and after-school receptors as Project construction emissions would take place for only 8 hrs/day but AERSCREEN models it as it continuous emissions throughout the day.

AERSCREEN Inputs and Outputs

Notes
Concentrations modeled using AERSCREEN worst-case 1-hr, scaled to annual

Input

	Construction Off-Road Equip	Notes
Title	EVCC-cons	Includes 10% of on-road DPM emissions
Units	M	
Source Type	A	
DPM emission rate (g/s)	1	Unit emission rate for scaling
Release Height above ground OR stack height (meters)	5	Off -road construction equipment and on-road operational mobile sources from the CRRP-HRA (BAAQMD, SF DPH & SF Planning, 2012).
Maximum horizontal dimension of area source (meters)	235	Project plans
Minimum horizontal dimension of area source (meters)	90	""
Initial Vertical Dimension (meters)	1.4	Initial vertical dimension for off-road construction equipment from the CRRP-HRA (BAAQMD, SF DPH & SF Planning, 2012).
rural/urban	Urban	
population of urban area	*1,021,795*	https://www.census.gov/quickfacts/fact/table/sanjosecitycalifornia/PST045219
min distance to ambient air (meters)	default	
NO2 chemistry	1	
max distance to probe	default	
include discrete receptors	no	
use flagpole receptors	yes	
flagpole receptor height (meters)	1.8	1.8 m based on BAAQMD 2012, Recommended Methods for Screening and Modeling Local Risks and Hazards
source elevation	default	
min ambient temperature (F)	*43*	https://weatherspark.com/y/1098/Average-Weather-in-San-Jose-California-United-States-Year-Round
max ambient temperature (F)	*82*	https://weatherspark.com/y/1098/Average-Weather-in-San-Jose-California-United-States-Year-Round
min ambient temperature (K)	279	
max ambient temperature (K)	301	
min wind speed (m/s)	default	
anemometer height (m)	default	
surface characteristics	2	

Dominant surface profile	7
dominant climate profile	1
adjust	no
debug	no
Output file name	EVCC-cons.out

Outputs

	Construction Off-Road Equip
Closest Receptors	
Distance (m)	
Residential - south of Park Estates Way	198
Pinnacle Learning Center - Afterschool	29
Parkside Preschool	64
Concentrations - Maximum 1-hr (ug/m3)	
Residential - south of Park Estates Way	390.3
Pinnacle Learning Center - Afterschool	1187.0
Parkside Preschool	1187.0
Concentrations - Average Annual (ug/m3)	
Residential - south of Park Estates Way	39.0
Pinnacle Learning Center - Afterschool	118.7
Parkside Preschool	118.7

AERSCREEN 16216 / AERMOD 19191 07/29/20
16:03:22
TITLE: EVCC-cons

********** AREA PARAMETERS **********

SOURCE EMISSION RATE: 1.0000 g/s 7.937 lb/hr

AREA EMISSION RATE: 0.473E-04 g/(s-m2) 0.375E-03 lb/(hr-m2)
AREA HEIGHT: 5.00 meters 16.40 feet
AREA SOURCE LONG SIDE: 235.00 meters 771.00 feet
AREA SOURCE SHORT SIDE: 90.00 meters 295.28 feet
INITIAL VERTICAL DIMENSION: 1.40 meters 4.59 feet
RURAL OR URBAN: URBAN
POPULATION: 1021795

FLAGPOLE RECEPTOR HEIGHT: 1.80 meters 5.91 feet

INITIAL PROBE DISTANCE = 5000. meters 16404. feet

********** BUILDING DOWNWASH PARAMETERS **********

BUILDING DOWNWASH NOT USED FOR NON-POINT SOURCES

********** FLOW SECTOR ANALYSIS **********
25 meter receptor spacing: 1. meters - 5000. meters

MAXIMUM IMPACT RECEPTOR

Zo SECTOR	SURFACE ROUGHNESS	1-HR CONC (ug/m3)	RADIAL (deg)	DIST (m)	TEMPORAL PERIOD
1*	1.000	1187.	0	100.0	WIN

* = worst case diagonal

********** MAKEMET METEOROLOGY PARAMETERS **********

MIN/MAX TEMPERATURE: 279.0 / 301.0 (K)

MINIMUM WIND SPEED: 0.5 m/s

ANEMOMETER HEIGHT: 10.000 meters

SURFACE CHARACTERISTICS INPUT: AERMET SEASONAL TABLES

DOMINANT SURFACE PROFILE: Urban
DOMINANT CLIMATE TYPE: Average Moisture
DOMINANT SEASON: Winter

ALBEDO: 0.35
BOWEN RATIO: 1.50
ROUGHNESS LENGTH: 1.000 (meters)

SURFACE FRICTION VELOCITY (U*) NOT ADUSTED

METEOROLOGY CONDITIONS USED TO PREDICT OVERALL MAXIMUM IMPACT

YR	MO	DY	JDY	HR
10	01	10	10	01

H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O LEN	Z0	BOWEN	ALBEDO	REF WS
-1.28	0.043	-9.000	0.020	-999.	21.	5.9	1.000	1.50	0.35	0.50

HT REF TA	HT
10.0	301.0	2.0

********** AERSCREEN AUTOMATED DISTANCES **********

OVERALL MAXIMUM CONCENTRATIONS BY DISTANCE

DIST (m)	MAXIMUM 1-HR CONC (ug/m3)	DIST (m)	MAXIMUM 1-HR CONC (ug/m3)
1.00	957.2	2525.00	13.98
25.00	1031.	2550.00	13.80
50.00	1092.	2575.00	13.61
75.00	1144.	2600.00	13.43
100.00	1187.	2625.00	13.26
125.00	1160.	2650.00	13.09
150.00	834.5	2675.00	12.92
175.00	616.5	2700.00	12.76
200.00	497.7	2725.00	12.60
225.00	414.2	2750.00	12.44
250.00	352.9	2775.00	12.29
275.00	306.2	2800.00	12.14
300.00	269.1	2825.00	11.99
325.00	239.6	2850.00	11.85
350.00	215.2	2875.00	11.71
375.00	194.9	2900.00	11.57
400.00	177.9	2925.00	11.43

425.00	163.1	2950.00	11.30
450.00	150.4	2975.00	11.17
475.00	139.4	3000.00	11.05
500.00	129.7	3025.00	10.92
525.00	121.2	3050.00	10.80
550.00	113.5	3075.00	10.68
575.00	106.7	3100.00	10.56
600.00	100.6	3125.00	10.45
625.00	95.01	3150.00	10.33
650.00	89.97	3174.99	10.22
675.00	85.38	3200.00	10.11
700.00	81.18	3225.00	10.00
725.00	77.34	3250.00	9.900
750.00	73.81	3275.00	9.796
775.00	70.54	3300.00	9.695
800.00	67.50	3325.00	9.595
825.00	64.69	3350.00	9.497
850.00	62.08	3375.00	9.401
875.00	59.65	3400.00	9.307
900.00	57.38	3425.00	9.214
925.00	55.25	3450.00	9.123
950.00	53.26	3475.00	9.033
975.00	51.40	3500.00	8.945
1000.00	49.64	3525.00	8.858
1025.00	47.99	3550.00	8.773
1050.00	46.43	3575.00	8.689
1075.00	44.96	3600.00	8.607
1100.00	43.57	3625.00	8.526
1125.00	42.25	3650.00	8.446
1150.00	41.00	3675.00	8.367
1175.00	39.81	3700.00	8.290
1200.00	38.68	3724.99	8.214
1225.00	37.60	3750.00	8.139
1250.00	36.57	3775.00	8.066
1275.00	35.60	3800.00	7.993

1300.00	34.66	3825.00	7.922
1325.00	33.77	3849.99	7.852
1350.00	32.91	3875.00	7.782
1375.00	32.09	3900.00	7.714
1400.00	31.30	3925.00	7.647
1425.00	30.55	3950.00	7.581
1450.00	29.83	3975.00	7.516
1475.00	29.14	4000.00	7.452
1500.00	28.47	4025.00	7.388
1525.00	27.83	4050.00	7.326
1550.00	27.22	4075.00	7.265
1575.00	26.63	4100.00	7.204
1600.00	26.06	4125.00	7.144
1625.00	25.51	4149.99	7.086
1650.00	24.98	4175.00	7.028
1675.00	24.47	4200.00	6.971
1700.00	23.98	4225.00	6.914
1725.00	23.50	4250.00	6.859
1750.00	23.10	4275.00	6.804
1775.00	22.66	4300.00	6.750
1800.00	22.23	4325.00	6.696
1825.00	21.81	4350.00	6.644
1850.00	21.41	4375.00	6.592
1875.00	21.02	4400.00	6.541
1900.00	20.64	4425.00	6.490
1925.00	20.28	4449.99	6.440
1950.00	19.92	4475.00	6.391
1975.00	19.58	4500.00	6.343
2000.00	19.24	4525.00	6.295
2025.00	18.92	4550.00	6.248
2050.00	18.60	4575.00	6.201
2075.00	18.30	4600.00	6.155
2100.00	18.00	4625.00	6.110
2125.00	17.71	4650.00	6.065
2150.00	17.43	4675.00	6.020

2175.00	17.15	4700.00	5.977
2200.00	16.89	4725.00	5.933
2225.00	16.63	4750.00	5.891
2250.00	16.38	4775.00	5.849
2275.00	16.13	4800.00	5.807
2300.00	15.89	4825.00	5.766
2325.00	15.66	4850.00	5.725
2350.00	15.43	4875.00	5.685
2375.00	15.21	4900.00	5.646
2400.00	14.99	4924.99	5.606
2425.00	14.78	4950.00	5.568
2450.00	14.57	4975.00	5.529
2475.00	14.37	5000.00	5.492
2500.00	14.18		

********** AERSCREEN MAXIMUM IMPACT SUMMARY **********

3-hour, 8-hour, and 24-hour scaled
concentrations are equal to the 1-hour concentration as referenced in
SCREENING PROCEDURES FOR ESTIMATING THE AIR QUALITY
IMPACT OF STATIONARY SOURCES, REVISED (Section 4.5.4)
Report number EPA-454/R-92-019
http://www.epa.gov/scram001/guidance_permit.htm
under Screening Guidance

CALCULATION PROCEDURE	MAXIMUM 1-HOUR CONC (ug/m3)	SCALED 3-HOUR CONC (ug/m3)	SCALED 8-HOUR CONC (ug/m3)	SCALED 24-HOUR CONC (ug/m3)	SCALED ANNUAL CONC (ug/m3)
FLAT TERRAIN	1215.	1215.	1215.	1215.	N/A

DISTANCE FROM SOURCE 118.00 meters

IMPACT AT THE AMBIENT BOUNDARY	957.2	957.2	957.2	957.2	N/A

DISTANCE FROM SOURCE 1.00 meters

Appendix B
Biological Resources

CALIFORNIA DEPARTMENT OF FISH and WILDLIFE **RareFind**

Query Summary:
Quad IS (San Jose East (3712137) OR Lick Observatory (3712136) OR Santa Teresa Hills (3712127) OR Morgan Hill (3712126))

Print Close

CNDDB Element Query Results

Scientific Name	Common Name	Taxonomic Group	Element Code	Total Occs	Returned Occs	Federal Status	State Status	Global Rank	State Rank	CA Rare Plant Rank	Other Status	Habitats
Adela oplerella	Opler's longhorn moth	Insects	IILEE0G040	14	7	None	None	G2	S2	null	null	Ultramafic, Valley & foothill grassland
Agelaius tricolor	tricolored blackbird	Birds	ABPBXB0020	955	5	None	Threatened	G2G3	S1S2	null	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_EN-Endangered, NABCI_RWL-Red Watch List, USFWS_BCC-Birds of Conservation Concern	Freshwater marsh, Marsh & swamp, Swamp, Wetland
Ambystoma californiense	California tiger salamander	Amphibians	AAAAA01180	1263	77	Threatened	Threatened	G2G3	S2S3	null	CDFW_WL-Watch List, IUCN_VU-Vulnerable	Cismontane woodland, Meadow & seep, Riparian woodland, Valley & foothill grassland, Vernal pool, Wetland
Ammodramus savannarum	grasshopper sparrow	Birds	ABPBXA0020	27	1	None	None	G5	S3	null	CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern	Valley & foothill grassland
Amsinckia lunaris	bent-flowered fiddleneck	Dicots	PDBOR01070	93	1	None	None	G3	S3	1B.2	BLM_S-Sensitive, SB_UCBG-UC Botanical Garden at Berkeley, SB_UCSC-UC Santa Cruz	Cismontane woodland, Coastal bluff scrub, Valley & foothill grassland
Aneides niger	Santa Cruz black salamander	Amphibians	AAAAD01070	78	5	None	None	G3	S3	null	CDFW_SSC-Species of Special Concern	null
Anniella pulchra	northern California legless lizard	Reptiles	ARACC01020	375	1	None	None	G3	S3	null	CDFW_SSC-Species of Special Concern, USFS_S-Sensitive	Chaparral, Coastal dunes, Coastal scrub
Anodonta californiensis	California floater	Mollusks	IMBIV04020	6	1	None	None	G3Q	S2?	null	USFS_S-Sensitive	Aquatic
Antrozous pallidus	pallid bat	Mammals	AMACC10010	420	6	None	None	G5	S3	null	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern, USFS_S-Sensitive, WBWG_H-High Priority	Chaparral, Coastal scrub, Desert wash, Great Basin grassland, Great Basin scrub, Mojavean desert scrub, Riparian woodland, Sonoran desert scrub, Upper montane coniferous forest, Valley & foothill grassland
Aquila chrysaetos	golden eagle	Birds	ABNKC22010	321	6	None	None	G5	S3	null	BLM_S-Sensitive, CDF_S-Sensitive, CDFW_FP-Fully Protected, CDFW_WL-Watch List, IUCN_LC-Least Concern, USFWS_BCC-Birds of Conservation Concern	Broadleaved upland forest, Cismontane woodland, Coastal prairie, Great Basin grassland, Great Basin scrub, Lower montane coniferous forest, Pinon & juniper woodlands, Upper montane

												coniferous forest, Valley & foothill grassland
Ardea alba	great egret	Birds	ABNGA04040	43	1	None	None	G5	S4	null	CDF_S-Sensitive, IUCN_LC-Least Concern	Brackish marsh, Estuary, Freshwater marsh, Marsh & swamp, Riparian forest, Wetland
Ardea herodias	great blue heron	Birds	ABNGA04010	156	4	None	None	G5	S4	null	CDF_S-Sensitive, IUCN_LC-Least Concern	Brackish marsh, Estuary, Freshwater marsh, Marsh & swamp, Riparian forest, Wetland
Athene cunicularia	burrowing owl	Birds	ABNSB10010	1989	22	None	None	G4	S3	null	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern, USFWS_BCC-Birds of Conservation Concern	Coastal prairie, Coastal scrub, Great Basin grassland, Great Basin scrub, Mojavean desert scrub, Sonoran desert scrub, Valley & foothill grassland
Balsamorhiza macrolepis	big-scale balsamroot	Dicots	PDAST11061	51	1	None	None	G2	S2	1B.2	BLM_S-Sensitive, USFS_S-Sensitive	Chaparral, Cismontane woodland, Ultramafic, Valley & foothill grassland
Bombus caliginosus	obscure bumble bee	Insects	IIHYM24380	181	2	None	None	G4?	S1S2	null	IUCN_VU-Vulnerable	null
Bombus crotchii	Crotch bumble bee	Insects	IIHYM24480	276	2	None	Candidate Endangered	G3G4	S1S2	null	null	null
Bombus occidentalis	western bumble bee	Insects	IIHYM24250	279	4	None	Candidate Endangered	G2G3	S1	null	USFS_S-Sensitive	null
Buteo swainsoni	Swainson's hawk	Birds	ABNKC19070	2518	1	None	Threatened	G5	S3	null	BLM_S-Sensitive, IUCN_LC-Least Concern, USFWS_BCC-Birds of Conservation Concern	Great Basin grassland, Riparian forest, Riparian woodland, Valley & foothill grassland
Calyptridium parryi var. hesseae	Santa Cruz Mountains pussypaws	Dicots	PDPOR09052	11	2	None	None	G3G4T2	S2	1B.1	BLM_S-Sensitive	Chaparral, Cismontane woodland
Campanula exigua	chaparral harebell	Dicots	PDCAM020A0	50	3	None	None	G2	S2	1B.2	BLM_S-Sensitive, SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	Chaparral, Ultramafic
Castilleja affinis var. neglecta	Tiburon paintbrush	Dicots	PDSCR0D013	7	2	Endangered	Threatened	G4G5T1T2	S1S2	1B.2	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, SB_UCBG-UC Botanical Garden at Berkeley	Ultramafic, Valley & foothill grassland
Castilleja rubicundula var. rubicundula	pink creamsacs	Dicots	PDSCR0D482	38	1	None	None	G5T2	S2	1B.2	BLM_S-Sensitive	Chaparral, Cismontane woodland, Meadow & seep, Ultramafic, Valley & foothill grassland
Ceanothus ferrisiae	Coyote ceanothus	Dicots	PDRHA041N0	4	3	Endangered	None	G1	S1	1B.1	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, SB_SBBG-Santa Barbara Botanic Garden	Chaparral, Coastal scrub, Ultramafic, Valley & foothill grassland
Centromadia parryi ssp. congdonii	Congdon's tarplant	Dicots	PDAST4R0P1	98	1	None	None	G3T1T2	S1S2	1B.1	BLM_S-Sensitive, SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	Valley & foothill grassland
Chlorogalum pomeridianum var. minus	dwarf soaproot	Monocots	PMLIL0G042	31	1	None	None	G5T3	S3	1B.2	BLM_S-Sensitive, SB_SBBG-Santa Barbara Botanic Garden, USFS_S-Sensitive	Chaparral, Ultramafic
Chorizanthe robusta var. robusta	robust spineflower	Dicots	PDPGN040Q2	20	1	Endangered	None	G2T1	S1	1B.1	null	Chaparral, Cismontane woodland, Coastal bluff

												scrub, Coastal dunes
Cirsium fontinale var. campylon	Mt. Hamilton thistle	Dicots	PDAST2E163	36	23	None	None	G2T2	S2	1B.2	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	Chaparral, Cismontane woodland, Ultramafic, Valley & foothill grassland
Clarkia concinna ssp. automixa	Santa Clara red ribbons	Dicots	PDONA050A1	20	3	None	None	G5?T3	S3	4.3	null	Chaparral, Cismontane woodland
Collinsia multicolor	San Francisco collinsia	Dicots	PDSCR0H0B0	36	2	None	None	G2	S2	1B.2	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, SB_UCSC-UC Santa Cruz	Closed-cone coniferous forest, Coastal scrub, Ultramafic
Corynorhinus townsendii	Townsend's big-eared bat	Mammals	AMACC08010	635	5	None	None	G3G4	S2	null	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern, USFS_S-Sensitive, WBWG_H-High Priority	Broadleaved upland forest, Chaparral, Chenopod scrub, Great Basin grassland, Great Basin scrub, Joshua tree woodland, Lower montane coniferous forest, Meadow & seep, Mojavean desert scrub, Riparian forest, Riparian woodland, Sonoran desert scrub, Sonoran thorn woodland, Upper montane coniferous forest, Valley & foothill grassland
Coturnicops noveboracensis	yellow rail	Birds	ABNME01010	45	1	None	None	G4	S1S2	null	CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern, NABCI_RWL-Red Watch List, USFS_S-Sensitive, USFWS_BCC-Birds of Conservation Concern	Freshwater marsh, Meadow & seep
Cypseloides niger	black swift	Birds	ABNUA01010	46	1	None	None	G4	S2	null	CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern, NABCI_YWL-Yellow Watch List, USFWS_BCC-Birds of Conservation Concern	null
Dicamptodon ensatus	California giant salamander	Amphibians	AAAAH01020	234	2	None	None	G3	S2S3	null	CDFW_SSC-Species of Special Concern, IUCN_NT-Near Threatened	Aquatic, Meadow & seep, North coast coniferous forest, Riparian forest
Dudleya abramsii ssp. setchellii	Santa Clara Valley dudleya	Dicots	PDCRA040Z0	58	39	Endangered	None	G4T2	S2	1B.1	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	Cismontane woodland, Ultramafic, Valley & foothill grassland
Egretta thula	snowy egret	Birds	ABNGA06030	20	1	None	None	G5	S4	null	IUCN_LC-Least Concern	Marsh & swamp, Meadow & seep, Riparian forest, Riparian woodland, Wetland
Elanus leucurus	white-tailed kite	Birds	ABNKC06010	180	8	None	None	G5	S3S4	null	BLM_S-Sensitive, CDFW_FP-Fully Protected, IUCN_LC-Least Concern	Cismontane woodland, Marsh & swamp, Riparian woodland, Valley & foothill grassland, Wetland
Emys marmorata	western pond turtle	Reptiles	ARAAD02030	1385	34	None	None	G3G4	S3	null	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_VU-	Aquatic, Artificial flowing waters, Klamath/North coast flowing waters,

											Vulnerable, USFS_S-Sensitive	Klamath/North coast standing waters, Marsh & swamp, Sacramento/San Joaquin flowing waters, Sacramento/San Joaquin standing waters, South coast flowing waters, South coast standing waters, Wetland
Euphydryas editha bayensis	Bay checkerspot butterfly	Insects	IILEPK4055	30	15	Threatened	None	G5T1	S1	null	null	Coastal dunes, Ultramafic, Valley & foothill grassland
Fritillaria liliacea	fragrant fritillary	Monocots	PMLIL0V0C0	82	8	None	None	G2	S2	1B.2	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, USFS_S-Sensitive	Cismontane woodland, Coastal prairie, Coastal scrub, Ultramafic, Valley & foothill grassland
Hoita strobilina	Loma Prieta hoita	Dicots	PDFAB5Z030	34	16	None	None	G2?	S2?	1B.1	null	Chaparral, Cismontane woodland, Riparian woodland, Ultramafic
Icteria virens	yellow-breasted chat	Birds	ABPBX24010	100	1	None	None	G5	S3	null	CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern	Riparian forest, Riparian scrub, Riparian woodland
Lanius ludovicianus	loggerhead shrike	Birds	ABPBR01030	110	1	None	None	G4	S4	null	CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern, USFWS_BCC-Birds of Conservation Concern	Broadleaved upland forest, Desert wash, Joshua tree woodland, Mojavean desert scrub, Pinon & juniper woodlands, Riparian woodland, Sonoran desert scrub
Lasiurus cinereus	hoary bat	Mammals	AMACC05030	238	1	None	None	G5	S4	null	IUCN_LC-Least Concern, WBWG_M-Medium Priority	Broadleaved upland forest, Cismontane woodland, Lower montane coniferous forest, North coast coniferous forest
Lasthenia conjugens	Contra Costa goldfields	Dicots	PDAST5L040	36	2	Endangered	None	G1	S1	1B.1	SB_UCBG-UC Botanical Garden at Berkeley	Alkali playa, Cismontane woodland, Valley & foothill grassland, Vernal pool, Wetland
Lavinia symmetricus subditus	Monterey roach	Fish	AFCJB19026	6	1	None	None	G4T2T3	S2S3	null	CDFW_SSC-Species of Special Concern	Aquatic, Sacramento/San Joaquin flowing waters, South coast flowing waters
Leptosyne hamiltonii	Mt. Hamilton coreopsis	Dicots	PDAST2L0C0	21	1	None	None	G2	S2	1B.2	BLM_S-Sensitive, SB_UCBG-UC Botanical Garden at Berkeley	Cismontane woodland
Lessingia micradenia var. glabrata	smooth lessingia	Dicots	PDAST5S062	44	28	None	None	G2T2	S2	1B.2	SB_BerrySB-Berry Seed Bank, SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	Chaparral, Cismontane woodland, Ultramafic, Valley & foothill grassland
Lomatium observatorium	Mt. Hamilton lomatium	Dicots	PDAPI1B2J0	4	2	None	None	G1	S1	1B.2	SB_UCSC-UC Santa Cruz	Cismontane woodland
Malacothamnus arcuatus	arcuate bush-mallow	Dicots	PDMAL0Q0E0	30	7	None	None	G2Q	S2	1B.2	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	Chaparral, Cismontane woodland
Malacothamnus hallii	Hall's bush-mallow	Dicots	PDMAL0Q0F0	36	16	None	None	G2	S2	1B.2	BLM_S-Sensitive, SB_CalBG/RSABG-	Chaparral, Coastal scrub,

											California/Rancho Santa Ana Botanic Garden	Ultramafic
Microcina homi	Hom's micro-blind harvestman	Arachnids	ILARA47020	5	5	None	None	G1	S1	null	null	Ultramafic, Valley & foothill grassland
Microcina jungi	Jung's micro-blind harvestman	Arachnids	ILARA47030	1	1	None	None	G1	S1	null	null	Ultramafic, Valley & foothill grassland
Monolopia gracilens	woodland woollythreads	Dicots	PDAST6G010	68	15	None	None	G3	S3	1B.2	null	Broadleaved upland forest, Chaparral, Cismontane woodland, North coast coniferous forest, Ultramafic, Valley & foothill grassland
Myotis evotis	long-eared myotis	Mammals	AMACC01070	139	1	None	None	G5	S3	null	BLM_S-Sensitive, IUCN_LC-Least Concern, WBWG_M-Medium Priority	null
Myotis yumanensis	Yuma myotis	Mammals	AMACC01020	265	1	None	None	G5	S4	null	BLM_S-Sensitive, IUCN_LC-Least Concern, WBWG_LM-Low-Medium Priority	Lower montane coniferous forest, Riparian forest, Riparian woodland, Upper montane coniferous forest
Neotoma fuscipes annectens	San Francisco dusky-footed woodrat	Mammals	AMAFF08082	42	15	None	None	G5T2T3	S2S3	null	CDFW_SSC-Species of Special Concern	Chaparral, Redwood
Nycticorax nycticorax	black-crowned night heron	Birds	ABNGA11010	37	1	None	None	G5	S4	null	IUCN_LC-Least Concern	Marsh & swamp, Riparian forest, Riparian woodland, Wetland
Oncorhynchus mykiss irideus pop. 8	steelhead - central California coast DPS	Fish	AFCHA0209G	44	1	Threatened	None	G5T2T3Q	S2S3	null	AFS_TH-Threatened	Aquatic, Sacramento/San Joaquin flowing waters
Penstemon rattanii var. kleei	Santa Cruz Mountains beardtongue	Dicots	PDSCR1L5B1	5	1	None	None	G4T2	S2	1B.2	null	Chaparral, Lower montane coniferous forest, North coast coniferous forest
Phacelia phacelioides	Mt. Diablo phacelia	Dicots	PDHYD0C3Q0	16	1	None	None	G2	S2	1B.2	BLM_S-Sensitive	Chaparral, Cismontane woodland, Ultramafic
Phrynosoma blainvillii	coast horned lizard	Reptiles	ARACF12100	784	5	None	None	G3G4	S3S4	null	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern	Chaparral, Cismontane woodland, Coastal bluff scrub, Coastal scrub, Desert wash, Pinon & juniper woodlands, Riparian scrub, Riparian woodland, Valley & foothill grassland
Plagiobothrys glaber	hairless popcornflower	Dicots	PDBOR0V0B0	9	1	None	None	GX	SX	1A	null	Marsh & swamp, Salt marsh, Vernal pool, Wetland
Rana boylii	foothill yellow-legged frog	Amphibians	AAABH01050	2468	14	None	Endangered	G3	S3	null	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_NT-Near Threatened, USFS_S-Sensitive	Aquatic, Chaparral, Cismontane woodland, Coastal scrub, Klamath/North coast flowing waters, Lower montane coniferous forest, Meadow & seep, Riparian forest, Riparian woodland, Sacramento/San Joaquin flowing waters

Rana draytonii	California red-legged frog	Amphibians	AAABH01022	1543	52	Threatened	None	G2G3	S2S3	null	CDFW_SSC-Species of Special Concern, IUCN_VU-Vulnerable	Aquatic, Artificial flowing waters, Artificial standing waters, Freshwater marsh, Marsh & swamp, Riparian forest, Riparian scrub, Riparian woodland, Sacramento/San Joaquin flowing waters, Sacramento/San Joaquin standing waters, South coast flowing waters, South coast standing waters, Wetland
Sanicula saxatilis	rock sanicle	Dicots	PDAPI1Z0H0	9	2	None	Rare	G2	S2	1B.2	null	Broadleaved upland forest, Chaparral, Valley & foothill grassland
Senecio aphanactis	chaparral ragwort	Dicots	PDAST8H060	98	1	None	None	G3	S2	2B.2	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, SB_CRES-San Diego Zoo CRES Native Gene Seed Bank	Chaparral, Cismontane woodland, Coastal scrub
Serpentine Bunchgrass	Serpentine Bunchgrass	Herbaceous	CTT42130CA	22	4	None	None	G2	S2.2	null	null	Valley & foothill grassland
Streptanthus albidus ssp. albidus	Metcalf Canyon jewelflower	Dicots	PDBRA2G011	13	13	Endangered	None	G2T1	S1	1B.1	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, SB_UCBG-UC Botanical Garden at Berkeley	Ultramafic, Valley & foothill grassland
Streptanthus albidus ssp. peramoenus	most beautiful jewelflower	Dicots	PDBRA2G012	103	31	None	None	G2T2	S2	1B.2	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden, SB_UCBG-UC Botanical Garden at Berkeley, USFS_S-Sensitive	Chaparral, Cismontane woodland, Ultramafic, Valley & foothill grassland
Sycamore Alluvial Woodland	Sycamore Alluvial Woodland	Riparian	CTT62100CA	17	1	None	None	G1	S1.1	null	null	Riparian woodland
Taxidea taxus	American badger	Mammals	AMAJF04010	592	16	None	None	G5	S3	null	CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern	Alkali marsh, Alkali playa, Alpine, Alpine dwarf scrub, Bog & fen, Brackish marsh, Broadleaved upland forest, Chaparral, Chenopod scrub, Cismontane woodland, Closed-cone coniferous forest, Coastal bluff scrub, Coastal dunes, Coastal prairie, Coastal scrub, Desert dunes, Desert wash, Freshwater marsh, Great Basin grassland, Great Basin scrub, Interior dunes, Ione formation, Joshua tree woodland, Limestone, Lower montane coniferous forest, Marsh & swamp, Meadow & seep, Mojavean desert

												scrub, Montane dwarf scrub, North coast coniferous forest, Oldgrowth, Pavement plain, Redwood, Riparian forest, Riparian scrub, Riparian woodland, Salt marsh, Sonoran desert scrub, Sonoran thorn woodland, Ultramafic, Upper montane coniferous forest, Upper Sonoran scrub, Valley & foothill grassland
Vulpes macrotis mutica	San Joaquin kit fox	Mammals	AMAJA03041	1018	1	Endangered	Threatened	G4T2	S2	null	null	Chenopod scrub, Valley & foothill grassland

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Sacramento Fish And Wildlife Office
Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846
Phone: (916) 414-6600 Fax: (916) 414-6713

In Reply Refer To: July 24, 2020
Consultation Code: 08ESMF00-2020-SLI-2449
Event Code: 08ESMF00-2020-E-07546
Project Name: Evergreen Valley College Sports Complex

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, under the jurisdiction of the U.S. Fish and Wildlife Service (Service) that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the Service under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

Please follow the link below to see if your proposed project has the potential to affect other species or their habitats under the jurisdiction of the National Marine Fisheries Service:

http://www.nwr.noaa.gov/protected_species/species_list/species_lists.html

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (http://www.fws.gov/windenergy/) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm; http://www.towerkill.com; and http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Sacramento Fish And Wildlife Office
Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846
(916) 414-6600

Project Summary

Consultation Code: 08ESMF00-2020-SLI-2449

Event Code: 08ESMF00-2020-E-07546

Project Name: Evergreen Valley College Sports Complex

Project Type: RECREATION CONSTRUCTION / MAINTENANCE

Project Description: The San Jose Evergreen Community College District proposes to construct a sports complex at the Evergreen Valley College (EVC), that will provide exercise and recreational use for EVC students, faculty, and users from the surrounding community. The project site located in the southern portion of the EVC Campus, adjacent to existing sports and recreational facilities. The approximately 1.8-acre project site is currently occupied by turf and landscaped areas, part of a soccer field, and part of a softball field.

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/place/37.29961243017523N121.76432885874016W

Counties: Santa Clara, CA

Endangered Species Act Species

There is a total of 10 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

---

1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Mammals

NAME	STATUS
San Joaquin Kit Fox *Vulpes macrotis mutica* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/2873	Endangered

Birds

NAME	STATUS
California Least Tern *Sterna antillarum browni* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/8104	Endangered

Amphibians

NAME	STATUS
California Red-legged Frog *Rana draytonii* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/2891 Species survey guidelines: https://ecos.fws.gov/ipac/guideline/survey/population/205/office/11420.pdf	Threatened
California Tiger Salamander *Ambystoma californiense* Population: U.S.A. (Central CA DPS) There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/2076	Threatened

Fishes

NAME	STATUS
Delta Smelt *Hypomesus transpacificus* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/321	Threatened

Insects

NAME	STATUS
Bay Checkerspot Butterfly *Euphydryas editha bayensis* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/2320	Threatened

Flowering Plants

NAME	STATUS
Contra Costa Goldfields *Lasthenia conjugens* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/7058	Endangered
Metcalf Canyon Jewelflower *Streptanthus albidus ssp. albidus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4186	Endangered
Robust Spineflower *Chorizanthe robusta var. robusta* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/9287	Endangered
Santa Clara Valley Dudleya *Dudleya setchellii* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/3207	Endangered

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

CNPS California Native Plant Society

*The database used to provide updates to the Online Inventory is under construction. View updates and changes made since May 2019 here.

Plant List

39 matches found. *Click on scientific name for details*

Search Criteria

Found in Quads 3712137, 3712136 3712127 and 3712126;

Modify Search Criteria | Export to Excel | Modify Columns | Modify Sort | Display Photos

Scientific Name	Common Name	Family	Lifeform	Blooming Period	CA Rare Plant Rank	State Rank	Global Rank
Acanthomintha lanceolata	Santa Clara thorn-mint	Lamiaceae	annual herb	Mar-Jun	4.2	S4	G4
Amsinckia lunaris	bent-flowered fiddleneck	Boraginaceae	annual herb	Mar-Jun	1B.2	S3	G3
Androsace elongata ssp. acuta	California androsace	Primulaceae	annual herb	Mar-Jun	4.2	S3S4	G5?T3T4
Balsamorhiza macrolepis	big-scale balsamroot	Asteraceae	perennial herb	Mar-Jun	1B.2	S2	G2
Calochortus umbellatus	Oakland star-tulip	Liliaceae	perennial bulbiferous herb	Mar-May	4.2	S3?	G3?
Calystegia collina ssp. venusta	South Coast Range morning-glory	Convolvulaceae	perennial rhizomatous herb	Apr-Jun	4.3	S4	G4T4
Campanula exigua	chaparral harebell	Campanulaceae	annual herb	May-Jun	1B.2	S2	G2
Castilleja affinis var. neglecta	Tiburon paintbrush	Orobanchaceae	perennial herb (hemiparasitic)	Apr-Jun	1B.2	S1S2	G4G5T1T2
Castilleja rubicundula var. rubicundula	pink creamsacs	Orobanchaceae	annual herb (hemiparasitic)	Apr-Jun	1B.2	S2	G5T2
Ceanothus ferrisiae	Coyote ceanothus	Rhamnaceae	perennial evergreen shrub	Jan-May	1B.1	S1	G1
Centromadia parryi ssp. congdonii	Congdon's tarplant	Asteraceae	annual herb	May-Oct(Nov)	1B.1	S1S2	G3T1T2
Chlorogalum pomeridianum var. minus	dwarf soaproot	Agavaceae	perennial bulbiferous herb	May-Aug	1B.2	S3	G5T3
Chorizanthe douglasii	Douglas' spineflower	Polygonaceae	annual herb	Apr-Jul	4.3	S4	G4
Cirsium fontinale var. campylon	Mt. Hamilton fountain thistle	Asteraceae	perennial herb	(Feb)Apr-Oct	1B.2	S2	G2T2
Clarkia breweri	Brewer's clarkia	Onagraceae	annual herb	Apr-Jun	4.2	S4	G4
	Santa Clara red	Onagraceae	annual herb	(Apr)May-	4.3	S3	G5?T3

Clarkia concinna ssp. automixa	ribbons			Jun(Jul)			
Collinsia multicolor	San Francisco collinsia	Plantaginaceae	annual herb	(Feb)Mar-May	1B.2	S2	G2
Dudleya abramsii ssp. setchellii	Santa Clara Valley dudleya	Crassulaceae	perennial herb	Apr-Oct	1B.1	S2	G4T2
Fritillaria liliacea	fragrant fritillary	Liliaceae	perennial bulbiferous herb	Feb-Apr	1B.2	S2	G2
Galium andrewsii ssp. gatense	phlox-leaf serpentine bedstraw	Rubiaceae	perennial herb	Apr-Jul	4.2	S3	G5T3
Hoita strobilina	Loma Prieta hoita	Fabaceae	perennial herb	May-Jul(Aug-Oct)	1B.1	S2?	G2?
Iris longipetala	coast iris	Iridaceae	perennial rhizomatous herb	Mar-May	4.2	S3	G3
Lasthenia conjugens	Contra Costa goldfields	Asteraceae	annual herb	Mar-Jun	1B.1	S1	G1
Leptosiphon acicularis	bristly leptosiphon	Polemoniaceae	annual herb	Apr-Jul	4.2	S4?	G4?
Leptosiphon ambiguus	serpentine leptosiphon	Polemoniaceae	annual herb	Mar-Jun	4.2	S4	G4
Leptosiphon grandiflorus	large-flowered leptosiphon	Polemoniaceae	annual herb	Apr-Aug	4.2	S3S4	G3G4
Leptosyne hamiltonii	Mt. Hamilton coreopsis	Asteraceae	annual herb	Mar-May	1B.2	S2	G2
Lessingia micradenia var. glabrata	smooth lessingia	Asteraceae	annual herb	(Apr-Jun)Jul-Nov	1B.2	S2	G2T2
Lomatium observatorium	Mt. Hamilton lomatium	Apiaceae	perennial herb	Mar-May	1B.2	S1	G1
Malacothamnus arcuatus	arcuate bush-mallow	Malvaceae	perennial evergreen shrub	Apr-Sep	1B.2	S2	G2Q
Malacothamnus hallii	Hall's bush-mallow	Malvaceae	perennial evergreen shrub	(Apr)May-Sep(Oct)	1B.2	S2	G2
Micropus amphibolus	Mt. Diablo cottonweed	Asteraceae	annual herb	Mar-May	3.2	S3S4	G3G4
Monolopia gracilens	woodland woolythreads	Asteraceae	annual herb	(Feb)Mar-Jul	1B.2	S3	G3
Phacelia phacelioides	Mt. Diablo phacelia	Hydrophyllaceae	annual herb	Apr-May	1B.2	S2	G2
Plagiobothrys glaber	hairless popcornflower	Boraginaceae	annual herb	Mar-May	1A	SH	GH
Sanicula saxatilis	rock sanicle	Apiaceae	perennial herb	Apr-May	1B.2	S2	G2
Senecio aphanactis	chaparral ragwort	Asteraceae	annual herb	Jan-Apr(May)	2B.2	S2	G3
Streptanthus albidus ssp. albidus	Metcalf Canyon jewelflower	Brassicaceae	annual herb	Apr-Jul	1B.1	S1	G2T1
Streptanthus albidus ssp. peramoenus	most beautiful jewelflower	Brassicaceae	annual herb	(Mar)Apr-Sep(Oct)	1B.2	S2	G2T2

Suggested Citation

California Native Plant Society, Rare Plant Program. 2020. Inventory of Rare and Endangered Plants of California (online edition, v8-03 0.39). Website http://www.rareplants.cnps.org [accessed 23 July 2020].

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Questions and Comments
rareplants@cnps.org

Appendix C
Geotechnical Investigation

Geotechnical Investigation

Evergreen Valley Community College
Addition of Multifunctional Athletics Area
3095 Yerba Buena Road
San Jose, CA 95135
Santa Clara County

Prepared for:

Mr. Daniel Powell
Gilbane

Prepared by:

Achievement Engineering Corp.
2455 Autumnvale Drive, Unit E
San Jose, California 95131

Project Number: 4161
Date: June 08 2020

ACHIEVEMENT ENGINEERING CORP.

Project Number: 4161
Date: June 08, 2020

Mr. Daniel Powell
Gilbane

Evergreen Valley Community College
3095 Yerba Buena Road
San Jose, CA 95135

Subject: Geotechnical Investigation
Evergreen Valley Community College Addition
of Multifunctional Athletics Area
3095 Yerba Buena Road
San Jose, CA 95135

Dear Mr. Powell:

Achievement Engineering Corp. (AEC) is pleased to submit this report on Geotechnical Investigation for the above-referenced project. The purpose of this study was to investigate and evaluate the subsurface soil conditions to develop recommendations for the design and construction of the structures foundations of the proposed college additions.

AEC sincerely appreciates the opportunity to be of professional service to you on this important project and would be happy to discuss our findings with you. We look forward to serving as your professional geotechnical/environmental engineer on your future projects.

Respectfully Submitted,
Achievement Engineering Corp.

Sadaf M. Safaai, PE
Project Engineer

Amir Zand, G.E.
Geotechnical Engineer

Copies: Gilbane, Mr. Daniel Powell

Table of Contents

1- Introduction

Achievement Engineering Corp. (AEC) has performed a geotechnical investigation for the proposed addition of multifunctional athletics area to Evergreen Valley Community College. Evergreen Valley Community College is located at 3095 Yerba Buena Road, San Jose, CA 95135, Santa Clara County with coordinates of 37° 18' 4.06" N and 121° 45' 54.28" W.

The purpose of this study is to evaluate the characteristics of the subsurface strata and to obtain geotechnical parameters for the design of the foundations of the proposed development. This study does not consider other issues relevant to the proposed construction such as seismic hazards (including historical seismicity, ground surface rupture, strong ground motion, liquefaction and strain softening, dynamic settlement, seismic slope stability and tsunamis and seiches), flood hazards, land sliding and slope stability, unstable materials, naturally occurring asbestos, settlement of compressible soil layers from static loading since these have been studied by Ninyo and Moore Geotechnical and Environmental Science Consultants in a report "Geotechnical Evaluation and Geologic Hazard Assessment, Evergreen Valley Community College Fieldhouse, 3095 Yerba Buena Road, San Jose, CA 95135", dated 12 April 2019 and reviewed by California Department of Conservation , CGS and received general approval (CGS- Application No. 01-CGS3966, dated 25 July 2019).

The issues regarding excavation characteristics, soil corrosivity, and expansive soils have been addressed in this report, in details, in Subsections 2.3. Other aspects that have been discussed include lighting foundation recommendation, utility trenches foundation and site drainage, seismic design and construction considerations.

This report highlights the significant findings and conclusions representing our best professional judgment based on information and data available to us during the course of this investigation.

1-1- Project Description

The proposed building addition to Evergreen Valley Community College area B consists of providing the campus a multifunctional athletics area. The scope of the project is to install (8) eight pickleball courts and (1) one combination futsal / basketball court. The pickleball nets will be fixed, but the futsal court will have mobile goals so that the court can also be used for basketball. Ancillary facilities will be installed to make the new courts an amenity for the college and larger community. These include a drinking fountain, bleachers, fencing, widescreens, court lighting for the evening play and planting/irrigation improvements around the perimeter of the project.

In addition a viewing patio will be added to the west of MS3 Building to provide a gathering place for students during classes, and for families observing the activities on the practice soccer field. A connecting walkway from the court area towards the campus will also be constructed.

The vicinity map of the project is illustrated in Exhibit III. The Site Location in Topographic Map has also been presented in Exhibit III of the report (Please refer to Sheets M01and M03 in Exhibit III).

2- Geologic Setting and Faults

2-1- Regional Geology

The geology of the area consists of Quaternary alluvial complexes in the Santa Clara and western San Joaquin Valleys, including several contrasting Cenozoic sedimentary sequences that of Miocene and Pliocene volcanic and the strongly deformed Plio-Pleistocene gravels, and different basement terranes. Located southwest of the San Andreas fault in the Santa Cruz Mountains are granitic and mafic crystalline rock basement, whereas northeast of the fault in the Santa Cruz Mountains, beneath the Santa Clara Valley, and in the Diablo Range, the basement consists of accreted Franciscan Complex which are overlain by Coast Range ophiolite and marine clastics of the Mesozoic Great Valley sequence. These rocks are transected by the active San Andreas Fault in the Santa Cruz Mountains and the active Calaveras and Hayward faults along the southwestern border of the Diablo Range, together with numerous other young faults of the San Andreas system.

The regional mapping shows that Montgomery Hill to the east is underlain by marine sedimentary rocks of Panoche (Cretaceous) and Knoxville Formations (Jurassic/ Cretaceous). Silver Creek Hills to the west expose metamorphic and igneous rocks of the Coast Range Ophiolite Complex (Jurassic/ Cretaceous).

The subject site is located on Qa geologic unit, surficial sediments, alluvial gravel sand and clay soil of valley areas, including low sloping alluvial fan gravel and sand near foothills. Four exploratory borings, B1 to B2, were advanced at the site with depths of 20.5 feet, encountering brown, medium dense Silty Clayey Sand and Clayey sand up to the depth of 12 ft., brown hard lean clay from 12 ft. up to the depth of 15 ft. and brown, very dense Silty Clayey Sand and Clayey sand up to the depth of 20.5 ft. No groundwater was encountered in either borings. The boring logs of B1 to B4 are presented in Exhibit I while boring location is shown on map M02, Exhibit III. Detailed discussion regarding the subsurface site investigation program is presented in Section 3 of this report.

The Site location on San Jose East quadrangle 7.5' Series Geologic Map by USGS is represented in Exhibit III of the report. The cross section showing the subsurface soil is also presented in Exhibit III, M04-1 and M04-2.

2-2- Faults and Alquist- Priolo Earthquake Fault Zone

Fault activity map of California (CGS, 2010; Map M07, Exhibit III) shows that there are seven faults around the site within a 10 miles radius, namely Hayward, Silver Creek, Coyote Creek, Arroyo Aguague, Calaveras, San Jose and Shannon Monte Vista faults. The nearest fault to the site is Hayward Fault with a distance of 0.33 mile that happens to be the most significant.

The project site is located on the southwest of Hayward Fault (0.33 mi.), northeast of Silver Creek Fault (1.69 mi.), northeast of Coyote Creek Fault (3.18 mi.), southwest of Arroyo Aguague Fault (3.46 mi.), southwest of Calaveras Fault (4.36 mi.), northeast of San Jose Fault (5.87 mi.) and northeast of Shannon Monte Vista Fault (9.02 mi.).

The Hayward Fault is a major geologic fault zone capable of generating destructive earthquakes. This fault is about 74 miles long, situated mainly along the western base of the hills on the east side of San Francisco Bay. It runs through densely populated areas, including Richmond, El Cerrito, Berkeley, Oakland, San Leandro, Hayward, Union City, Fremont, and San Jose. The largest earthquake on the Hayward Fault in recorded history occurred in 1868, with an estimated magnitude of Mw of 7.0. This fault is designated by the Alquist-Priolo Earthquake Fault Zoning Act as an active fault. Fault creep on the East Bay segment of the fault is estimated as 9 mm/year. The southeast extension of the Hayward Fault Zone consists of several named faults, including the Mission, Evergreen, Quimby, Crossley, and Clayton faults.

No historic activity of the Silver Creek Fault has been recorded. Studies in 2003 and 2004 for the Silicon Valley BART extension found that the northern segment of the Silver Creek Fault may be as shallow as 100 feet deep but found no evidence of surface rupture. A 2017 article suggests that the fault may have effectively become dormant or abandoned roughly 1.5 to 2.5 million years ago. The Coyote Creek- Piercy Faults are considered potentially active faults.

The Arroyo Aguague Fault, was previously considered active and was zoned under the Alquist-Priolo Act as potentially capable of surface rupture. However, studies over the past few decades have indicated that the Arroyo Aguague Fault is not active and does not pose a surface-faulting hazard. The fault is no longer zoned by the State of California as an earthquake fault zone under the Alquist-Priolo Act.

The 75-mile-long Calaveras fault represents a significant seismic source in the southern and eastern San Francisco Bay region. It extends from an intersection with the Paicines fault south of Hollister, through the Diablo Range east of San Jose, and along the Pleasanton Dublin-San Ramon urban corridor. The fault consists of three major sections: the southern Calaveras fault (from the Paicines fault to San Felipe Lake), the central Calaveras fault (from San Felipe Lake to Calaveras Reservoir),

and the northern Calaveras fault (from Calaveras Reservoir to Danville). The level of contemporary seismicity along the southern section is low to moderate, whereas the central section has generated numerous moderate earthquakes in historic time. The northern section has a relatively low level of seismicity. Paleoseismologic studies suggest a recurrence interval for large ruptures of between 250 and 850 years on the northern fault section. The timing of the most recent rupture on the northern Calaveras Fault is unknown, but is estimated to have occurred several hundred years ago. Seismologic evidence suggests that the southern and central sections may produce earthquakes with magnitude of Mw 6.2. Geologic and seismologic data suggest that the northern section may produce earthquakes as large as Mw 7.0.

The San Jose Fault dips steeply to the north. Type of faulting is left-lateral strike-slip; minor reverse component possible with a length of approximately 18.25 miles. It has a slip rate between 0.2 and 2.0 mm/yr. with a probable magnitude of ML 5 to 6.

The Shannon Monta Vista Shannon Fault is a potentially active fault. It is a relatively short fault that runs between and generally parallel to the much longer San Andreas Fault and Hayward Fault Zones, trending northwest along the eastern foothills of the Santa Cruz Mountains in the Coast Range Geomorphic Province. The most recent activity has been estimated to have been approximately 700,000 years ago. It has a slip rate of 0.4 mm/year.

The site is not located within an Alquist-Priolo Earthquake Fault Zone established by the state geologist (CGS, 2018) to delineate regions of potential ground surface rupture adjacent to active faults (Exhibit III, M08). As defined by the California Geological Survey (CGS), active faults are faults that have caused surface displacement within Holocene time, or within approximately the last 11,700 years (CGS, 2018). The closest fault rupture hazard zone is the one associated with the Hayward Fault (4.52 mi.).

2-3- Geologic Hazards and Considerations

2-3-1- Seismic Hazards

The seismic hazards include the potential for ground rupture due to faulting, seismic ground shaking, liquefaction, dynamic settlement, seismic slope stability, and tsunamis. As mentioned before these potential hazards, as well as flood hazards, land sliding and slope stability, unstable materials, naturally occurring asbestos, settlement of compressible soil layers from static loading were not within the scope of services for this report and were discussed by Ninyo and Moore Geotechnical and Environmental Science Consultants in a report “Geotechnical Evaluation and Geologic Hazard Assessment, Evergreen Valley Community College Fieldhouse, 3095 Yerba Buena Road, San Jose, CA 95135”, dated 12 April 2019 and reviewed by California Department of Conservation , CGS and received general approval (CGS- Application No. 01-CGS3966, dated 25 July 2019).

2-3-1-1- Liquefaction

Liquefaction is a phenomenon in which loss of shear strength happens during strong ground motions of granular soils of low plasticity (liquefaction) or wet, sensitive, cohesive soils (strain softening). Liquefaction and strain softening can result in a loss of foundation bearing capacity or lateral spreading of sloping or unconfined ground. Liquefaction can also generate sand boils leading to subsidence at the ground surface. Liquefaction (or strain softening) is generally not a concern at depths more than 50 feet below ground surface.

Primary factors controlling liquefaction include intensity and duration of ground motion, gradation characteristics of the subsurface soils, in-situ stress conditions, and the depth to the groundwater. Liquefaction is typified by a loss of shear strength in the liquefied layers due to rapid increases in pore water pressure generated by earthquake accelerations.

Liquefaction typically occurs in areas where the soils below the water table are composed of poorly consolidated, fine to medium-grained, primarily sandy soil. In addition to the requisite soil conditions, the ground acceleration and duration of the earthquake must also be of a sufficient level to induce liquefaction.

The project location on liquefaction map (Source CGS) site is NOT located within liquefaction hazard zone as shown in M05. Also the study performed by others (Reference 13), does not regard seismically induced strain behavior, liquefaction, lateral spreading, or sand boil induced ground subsidence due to liquefaction as design consideration.

2-4- Static Settlement

We understand that the proposed improvements will be relatively light and that significant changes to the site grade are not proposed. Therefore settlements due to sustained loading by the proposed improvements will be tolerable provided that those improvements are supported on shallow foundations designed in accordance with the recommendations set forth in this report.

2-5- Unsuitable Materials

Fill materials that were placed and compacted without the observations of soil or geotechnical engineer, or fill materials lacking documentation, are considered undocumented fill. Undocumented fill is unsuitable as a bearing material below foundations due to the potential for differential settlement resulting from variable support characteristics or the potential inclusion of deleterious materials.

Soil containing roots or other organic matter are not suitable as fill or subgrade material below foundations, pavements, or engineered fill. Recommendations for clearing and grubbing to remove

vegetative matter in soil during site preparation, as well as foundation subgrade preparation and embedment depths to control undesired impacts of uncontrolled fill are provided in this report.

2-6- Excavation Characteristics

Future development may involve excavations to remove undocumented fill materials and unsuitable surficial soils. Excavations in the fill may encounter obstructions consisting of debris, rubble, abandoned structures, or over-sized materials that may require special handling or demolition equipment for removal.

Near-vertical temporary cuts in the near surface deposits up to 4 feet in depth should remain stable for a limited period of time. However, sloughing of the materials exposed on the excavation sidewall may occur, particularly if the excavation extends near the groundwater level, encounters granular soil, is exposed to water, or if the sidewall is disturbed during construction operations. Excavation subgrade may become unstable if exposed to wet conditions. Recommendations for excavation stabilization are presented. Excavated materials may also be wet and need to be dried out before reuse as fill.

2-7- Soil Expansion Potential

Expansive soil was not encountered at the specific borehole locations. Based on the following correlations of swelling potential with common soil tests (Holtz, 1969), the swelling index is marginally low. The result of laboratory testing also indicates that the expansion index of the near-surface soil is 21 and 27, which is consistent with a low expansion characteristic.

However, the existence of expansive soil (medium potential) is not uncommon in this area. Due to their potential of damages to structures, care should be practiced during construction. We recommend that the subgrade be maintained in a relatively moist condition until the floor slab is constructed. If the subgrade should become desiccated prior to construction of the floor slab, the affected material should be removed or the materials scarified, moistened, and re-compacted. Upon completion of grading operations in the building areas, care should be taken to maintain the recommended subgrade moisture content and density prior to construction of the building floor slab.

Table 1 – Correlations of swelling potential with common soil tests (Holtz and Gibbs, 1969)

Percent Colloids	Plasticity Index	Shrinkage Limit	Liquid Limit	Swelling Potential
<15	<18	<15	<39	Low
13–23	15–28	10–16	39–50	Medium
20–31	25–41	7–12	50–63	High
>28	>35	>11	>63	Very high

2-8- Corrosive Soil

Evaluation of the corrosivity of the on-site material was performed to assess the impact to concrete and metals. The corrosion impact was evaluated using the results of limited laboratory testing on three samples obtained during our subsurface study. Laboratory testing to quantify pH, resistivity, chloride, and soluble sulfate contents was performed on three samples of the near-surface soil. The results of the corrosivity tests are presented in Exhibit II. California Department of Transportation (Caltrans) defines a corrosive environment as an area within 1,000 feet of brackish water or where the soil contains more than 500 parts per million (ppm) of chlorides, sulfates of 0.2 (2,000 ppm) percent or more, or pH of 5.5 or less (Caltrans, 2018). Based on these criteria, the soil at the subject site does not meet the definition of a corrosive environment. Ferrous metal will still undergo corrosion on the site, but special mitigation measures are not needed. The criteria used to evaluate the deleterious nature of soil on concrete and recommendations are from the American Concrete Institute (ACI) for sulfate exposure classes and as presented in Table 2. Based on these criteria, the soil on site is defined as Exposure Class S0. Please refer to Exhibit II for the test results.

Table 2- Soil Exposure Classification

Sulfate Content Percent by Weight	Exposure Class	Maximum Water to Cement Ratio	Minimum 28-day Compressive Strength
0.0 to 0.1	S0	N/A	2,500
0.1 to 0.2	S1	0.50	4,000
0.2 to 2.0	S2	0.45	4,500
> 2.0	S3	0.45	4,500

Reference: American Concrete Institute (ACI) Committee 318 Table 19.3.1.1 and Table 19.3.2.1 (ACI, 2014)

3- Project Investigation

A subsurface exploration program consisting of total of (4) four test borings were conducted on 05/13/2020 under the supervision of AEC.

3-1- Field Investigation and Exploratory Boreholes

The SPT borings were drilled to depth of 20.5 ft. below the ground surface. Borings were advanced using 3 ½" diameter hollow stem auger.

Table 3 shows the specifications of the boreholes; the boreholes locations are shown in Exhibit III. Boreholes logs are also presented in Exhibit I of the report.

Table 3 - Specifications of the borehole

Borehole Name	Depth (ft.)	Diameter (inch)
B1	20.5	3 ¼ "
B2	20.5	3 ¼ "
B3	20.5	3 ¼ "
B4	20.5	3 ¼ "

3-1-1- Ground Water Table

No groundwater was encountered in the four SPT borings advanced to depths 20.5 ft. bgs. The historic and recent depth-to-water measurements in groundwater elevation monitoring wells within 1 mile(s) radius of the subject site were studied (Source: Historic data of Santa Clara County database), indicating the depth to the water is 30 to 50 ft. bgs.

3-1-2- Standard Penetration Test (SPT) (ASTM: D1586)

Soil samples were typically recovered continuously at 1-2 ft. intervals by driving a standard split-spoon sampler ((1-3/8 in). I.D., (2 in.) O.D., a distance of 18 inches or 24 inches into the undisturbed soil under the impact of a 140 lb. hammer free-falling 30 inches. The number of blows required to advance the sampler through each 6 in. interval was recorded. The "N" value is taken as the number of blows required to advance the sampler the last 12 in. of the 18-in. sampling range. When the split-spoon sampler was advanced over 24-in. range, the "N" value is the number of blows required to drive the sampler the middle 12 in. making use of the energy corrected SPT blow count, denoted as N_{65}

where 65 is the percentage of the theoretical free-fall hammer energy. Variations of SPT versus depth, in different boreholes, are presented in Figure 1 and Table 4. SPT boring location plan has been presented in Exhibit III, M02.

Table 4- The value of SPT versus depth in different boreholes

	Depth (ft.)	$N_{spt,65}$
B1	2	29
	5	32
	10	>50
	15	>50
	20	49
B2	2	29
	5	24
	10	>50
	15	>50
	20	>50
B3	2	30
	5	28
	10	23
	15	>50
	20	>50
B4	2	29
	5	>50
	10	>50
	15	>50
	20	>50

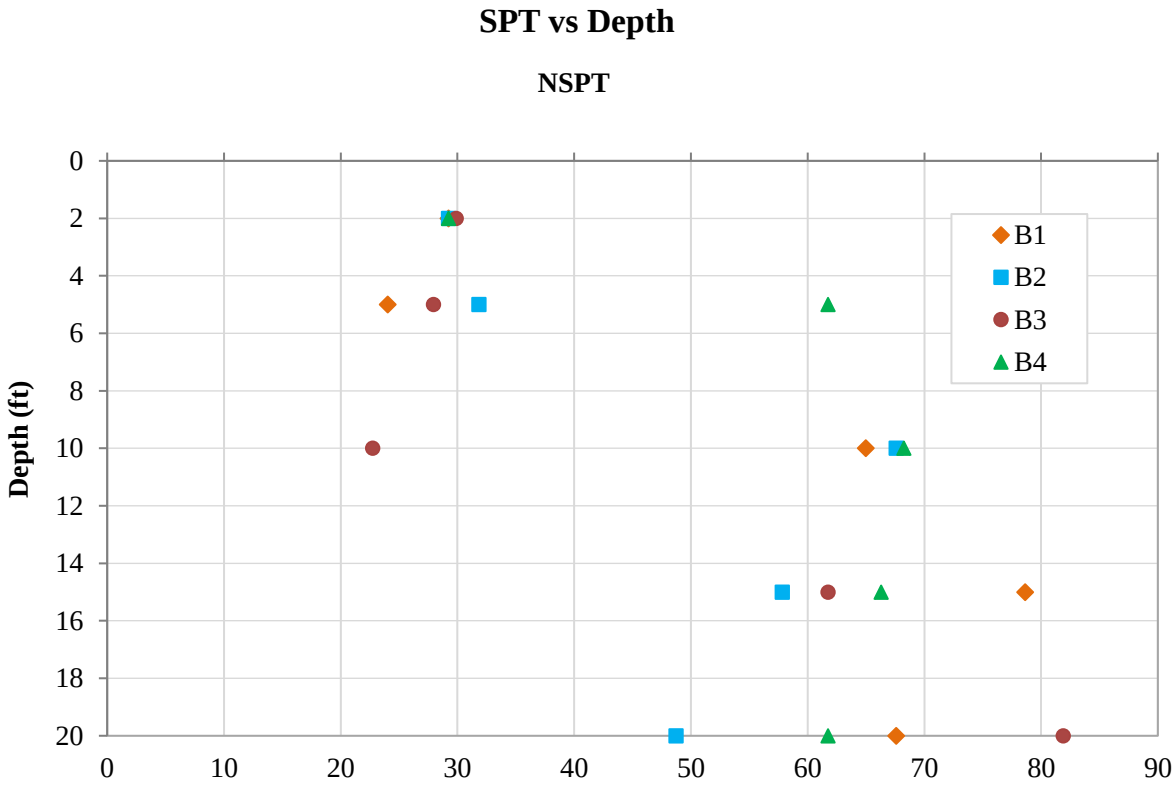

Figure 1 - Variation of SPT versus depth in different boreholes

According to SPT test results, all of SPT values are above 23 in the upper layer which is due to existence of a medium dense layer of sand.

According to the Table 5 and Table 6 (see US Army Corps of Engineers, ENGINEER MANUAL ENGINEERING AND DESIGN, Geotechnical Investigations), the density of coarse layer near the ground level is “Medium Dense” and in depths it can be classified as “very Dense”, the consistency of fine part of the soil may be classified as “Hard”.

Table 5- Granular soils classification based on SPT number (US Army Corps of Engineers Manual)

Density of Coarse-Grained Soils

Descriptive Term	Blows per Foot[1,2]	Field Test
Very loose	Less than 4	----------
Loose	4-10	Easily penetrated with a 13-mm- (1/2-in.-) diam reinforcing rod pushed by hand
Medium dense	10-30	Easily penetrated with a 13-mm- (1/2-in.-) diam reinforcing rod driven with a 2.3-kg (5-lb) hammer
Dense rod	30-50	Penetrated 0.3 m (1 ft) with a 13-mm- (1/2-in.-) diam reinforcing driven with a 2.3-kg (5-lb) hammer
Very dense	Greater than 50	Penetrated only a few centimeters with a 13-mm- (1/2-in.-) diam reinforcing rod driven with a 2.3-kg (5-lb) hammer

Table 6- Strength of fine-grained soils (US Army Corps of Engineers Manual)

Descriptive Term	Blows[1] per Foot[2]	Unconfined Compressive Strength kPa	(tsf)	Field Test
Very soft	< 2	<25	(< 0.25)	Core (height twice diameter) sags under its own weight while standing on end; squeezes between fingers when fist is closed
Soft	2-4	25-50	(0.25-0.5)	Easily molded by fingers
Medium	4-8	50-100	(0.5-1.0)	Molded by strong pressure of fingers
Firm	8-15	100-190	(1.0-2.0)	Imprinted very slightly by finger pressure
Very firm	15-30	190-380	(2.0-4.0)	Cannot be imprinted with finger pressure; can be penetrated with a pencil
Hard	> 30	> 380	(> 4.0)	Imprinted only slightly by pencil point

3-2- Laboratory and Field Test Results

A laboratory soil testing program was performed to determine soil classification and for correlation of engineering properties. Laboratory tests were performed on selected samples of the soils. Testing consisted of geotechnical index tests including water content determinations, grain size distributions, Atterberg Limits, density, swell index and corrosivity. The results of these tests have been used to estimate the main parameters required for designing of the foundation, such as internal friction angle and cohesion. The details of lab and field tests are presented in Exhibit II.

3-2-1- Grain Size Analysis

Particle size analysis ASTM (D421-85(02)), (D422-63(02))

Atterberg limits (AASHTO T89 and T90 – ASTM D4318)

The particle size analysis and Atterberg limits are conducted on the selected soil samples in accordance with the abovementioned standards.

According to particle distribution results, soil classification is determined in compliance with the Unified Soil Classification System (USCS) (ASTM D2487 and ASTM D2488) and is recorded on the borehole logs. Grain size distribution tests results are presented in Table 7. According to grain size distribution tests results, alluvial part of the site soil is categorized mainly as Clayey sand with gravel and lean clay.

Table 7- Grain size distribution and Atterberg limits tests results

Borehole No.	Sample Depth (ft.)	Graining (%)			Atterberg limits		Classification (USCS)
		Gravel	Sand	Clay and Silt	LL %	PI %	
B1	2.0	15.1	48.4	36.5	24	7.9	SC-SM
B2	2.0	22.4	56.9	20.7	32.5	15.7	SC
B2	10.0	3.2	38.0	58.8	30.8	13.8	CL
B3	2.0	20.4	46.5	33.1	22.3	8.3	SC-SM
B3	10.0	3.6	42.8	53.6	30.7	14.3	CL
B4	2.0	33.6	51.8	14.6	32.4	16.6	SC

3-2-2- Natural Moisture Content and Density Test

- Natural moisture content ASTM (D2216-98)
The natural moisture content of soil samples is measured for the selected samples, the value of each is indicated in borehole logs.

- Density Tests
Density of the selected soil samples has been determined by measuring the weight and volume of the samples obtained from sample liners.

Water content and dry density tests results of the soil samples are summarized in Table 8.

Table 8- Water content and dry unit weight

Borehole No.	Sample Depth (ft.)	Height of Sample	Dry Density (pcf)	W (%)
B1	1 - 2	Disturbed	-	14
B1	2 - 3.5	6.00	129.5	11
B1	4 - 5	Disturbed	-	9
B1	5 - 6.5	6.0	119.0	12
B1	8 - 9	Disturbed	-	10
B1	10 - 11.5	6.0	120.7	14
B1	13 - 14	Disturbed	-	14
B1	15 - 16.5	6.0	126.2	12
B1	18 - 19	Disturbed	-	7
B1	19 - 20.5	6.0	125.2	12
B2	1 - 2	Disturbed	-	11
B2	2 - 3.5	6.00	128.5	8
B2	4 - 5	Disturbed	-	14
B2	5 - 6.5	6.0	100.7	12
B2	8 - 9	Disturbed	-	8
B2	10 - 11.5	6.0	119.0	15
B2	13 - 14	Disturbed	-	10
B2	15 - 16.5	6.0	124.6	10
B2	18 - 19	Disturbed	-	11
B2	19 - 20.5	6.0	123.1	10
B3	1 - 2	Disturbed	-	8
B3	2 - 3.5	6.00	103.1	9
B3	4 - 5	Disturbed	-	11
B3	5 - 6.5	6.0	113.8	16
B3	8 - 9	Disturbed	-	14
B3	10 - 11.5	6.0	101.3	16
B3	13 - 14	Disturbed	-	14
B3	15 - 16.5	6.0	108.8	17
B3	18 - 19	Disturbed	-	11
B3	19 - 20.5	6.0	115.9	14
B4	1 - 2	Disturbed	-	9
B4	2 - 3.5	6.00	128.1	10
B4	4 - 5	Disturbed	-	11
B4	5 - 6.5	6.0	131.2	11
B4	8 - 9	Disturbed	-	14
B4	10 - 11.5	6.0	123.7	12
B4	13 - 14	Disturbed	-	18
B4	15 - 16.5	6.0	102.9	11
B4	18 - 19	Disturbed	-	9
B4	19 - 20.5	6.0	111.3	16

3-2-3- Expansion Index Test

Laboratory testing was performed on a selected sample of the near-surface soil to evaluate the expansion index. The test was performed in general accordance with the American Society of Testing and Materials (ASTM) Standard D 4829 (Expansion Index). The result of laboratory testing indicates that the expansion index of the near-surface soil is between 21 and 27, which is consistent with a low expansion characteristic. The test result is attached in Exhibit II.

3-2-4- Corrosivity Test

Evaluation of the corrosivity of the on-site material was performed to assess the impact to concrete and metals. The corrosion impact was evaluated using the result of limited laboratory testing on a sample obtained during our subsurface study. Two laboratory testings to quantify pH (ASTM G51), resistivity (ASTM G57), chloride, and soluble sulfate contents (ASTM D4327) were performed on two samples of the near-surface soil. One laboratory testing to quantify pH (Cal 643), resistivity (Cal 643), chloride (Cal 422-mod), and soluble sulfate contents (Cal 417-mod) were performed on a sample of the near-surface soil. The test results are attached in Exhibit II.

4- Description of Soil Layers

4-1- General Description of the Subsurface Soil Layers

Based on the visual observations during the drilling, in-situ test results and laboratory testings, the encountered soil is generally classified as:

- Brown lean clay (CL)
- Brown Clayey Sand (SC)/Silty Clayey Sand (SC-SM)

The soil up to 10.0 to 12.0 ft. bgs, is brown clayey sand/ silty clayey sand, damp to moist, medium dense. From this depth up to 15.0 ft., the soil is brown lean Clay, damp to moist, hard and then up to the end of boreholes, a layer of silty/ clayey sand exists which is brown, damp to moist, very dense. The soil profile based on the results of tests and borings logs were presented in Exhibit III- M04-1 and M04-2.

4-2- Geotechnical Parameters

The SPT has been used to correlate engineering parameters such as density and strength (Table 5 and Table 6), angle of internal friction and cohesion (Table 9 and Table 10) and the stress-strain modulus Es as shown in Table 11.

Table 9- Empirical values for φ, Dr and unit weight of granular soils based on the SPT (Bowles, 2002)

Description		Very loose	Loose	Medium	Dense	Very dense
Relative density D_r		0	0.15	0.35	0.65	0.85
SPT N'_{70}:	fine	1–2	3–6	7–15	16–30	?
	medium	2–3	4–7	8–20	21–40	> 40
	coarse	3–6	5–9	10–25	26–45	> 45
ϕ:	fine	26–28	28–30	30–34	33–38	
	medium	27–28	30–32	32–36	36–42	< 50
	coarse	28–30	30–34	33–40	40–50	
γ_{wet}, kN/m^3		11–16*	14–18	17–20	17–22	20–23

Table 10- Typical values of soil friction angle for different soils according to USCS

Description	USCS	Soil friction angle [°]		Reference
		min	max	
Inorganic clays, silty clays, sandy clays of low plasticity	CL	27	35	[1]
Silty clay	OL, CL, OH, CH	18	32	[2]
Clay	CL, CH, OH, OL	18	28	[2]

1. Swiss Standard SN 670 010b, Characteristic Coefficients of soils, Association of Swiss Road and Traffic Engineers
2. Minnesota Department of Transportation, Pavement Design, 2007

Table 11- Equations for stress-strain modulus Es by several test methods (Bowles, 2002)

E_s in kPa for SPT and units of q_c for CPT; divide kPa by 50 to obtain ksf.

Soil	SPT	CPT
Sand (normally consolidated)	$E_s = 500(N + 15)$ $= 7000\sqrt{N}$ $= 6000N$ — — — ‡$E_s = (15\,000 \text{ to } 22\,000) \cdot \ln N$	$E_s = (2 \text{ to } 4)q_u$ $= 8000\sqrt{q_c}$ — — — $E_s = 1.2(3D_r^2 + 2)q_c$ *$E_s = (1 + D_r^2)q_c$
Sand (saturated)	$E_s = 250(N + 15)$	$E_s = Fq_c$ $e = 1.0 \quad F = 3.5$ $e = 0.6 \quad F = 7.0$
Sands, all (norm. consol.)	¶$E_s = (2600 \text{ to } 2900)N$	
Sand (overconsolidated)	†$E_s = 40\,000 + 1050N$ $E_{s(\text{OCR})} \approx E_{s,\text{nc}}\sqrt{\text{OCR}}$	$E_s = (6 \text{ to } 30)q_c$
Gravelly sand	$E_s = 1200(N + 6)$ $= 600(N + 6) \quad N \le 15$ $= 600(N + 6) + 2000 \quad N > 15$	
Clayey sand	$E_s = 320(N + 15)$	$E_s = (3 \text{ to } 6)q_c$
Silts, sandy silt, or clayey silt	$E_s = 300(N + 6)$	$E_s = (1 \text{ to } 2)q_c$
	If $q_c < 2500$ kPa use $\quad$ $^{\$}E_s' = 2.5q_c$ $2500 < q_c < 5000$ use $\quad E_s' = 4q_c + 5000$ where E_s' = constrained modulus $= \dfrac{E_s(1-\mu)}{(1+\mu)(1-2\mu)} = \dfrac{1}{m_v}$	
Soft clay or clayey silt		$E_s = (3 \text{ to } 8)q_c$

Final values of geotechnical parameters for the subject site using the field observations, in-situ and laboratory tests are summarized in Table 12.

Table 12- Geotechnical Parameters Estimates

Material	γ_{wet} (pcf)	γ_{sat} (pcf)	c (ksf)	φ (degrees)	E_s (ksf)	ν	K_0	K_a	K_p
SC-SM	133.0	137.0	0.05	30	300	0.3	0.50	0.33	3.00
CL	131.0	134.0	0.4	24	500	0.4	0.59	0.42	2.37

Material	γ_{wet} (pcf)	γ_{sat} (pcf)	c (ksf)	φ (degrees)	E_s (ksf)	ν	K_0	K_a	K_p
SC-SM	132.0	135.0	0.1	32	700	0.3	0.47	0.31	3.25

γ_{wet} : wet unit weight in the field.

γ_{sat} : saturated unit weight.

c : cohesion.

φ : angle of internal friction

E_s : elasticity modulus

ν : poisson ratio

K_0 : at rest earth pressure

K_a , K_p: active and passive earth pressure

5- Foundation Design Recommendations

Recommendations presented herein are based on the proposed structure layout and site development plan as understood at this time. However, at the time of preparation of this report, loads were not available. As further information is developed by the architect and/or structural engineer concerning these items, the design criteria should be reviewed by AEC for continued applicability. As a general recommendation, foundation and below-grade elements of the building should be designed in accordance with the building code selected for design. The following sections provide specific geotechnical design recommendations for the foundation and below-grade structure, if any.

The foundation bearing soils are typically medium dense brown clayey sand and silty/ clayey sand and lean clay.

The proposed development is addition to Evergreen Valley Community College area B that consists of providing the campus a multifunctional athletics area. The scope of the project is to install (8) eight pickleball courts and (1) one combination futsal / basketball court. The pickleball nets will be fixed, but the futsal court will have mobile goals so that the court can also be used for basketball. Ancillary facilities will be installed to make the new courts an amenity for the college and larger community. These include a drinking fountain, bleachers, fencing, widescreens, court lighting for the evening play and planting/irrigation improvements around the perimeter of the project. In addition a viewing patio will be added to the west of MS3 Building to provide a gathering place for students during classes, and for families observing the activities on the practice soccer field. A connecting walkway from the court area towards the campus will also be constructed. The foundation bearing soil at this depth is typically clayey sand and silty /clayey sand.

It is necessary to build up the subgrade to achieve the proposed footing subgrade level, for this it is recommended that compacted structural fill be used. The compacted structural fill should be graded in accordance with the recommendations in Section 7.3 and 7.5.1.

Based on the loading conditions assumed by us and subsurface conditions as observed in the field investigations it is our opinion that direct soil bearing foundations such as reinforced concrete **strip**

foundation will likely provide the most technically-feasible and cost-effective foundation system for the proposed structure.

5-1- Allowable Bearing Capacity (for any storage, bathroom, showers, locker room etc.)

As noted above, the foundation bearing soils at the site consist of clayey sand and silty/ clayey sand and lean clay. The recommended maximum allowable gross bearing pressure for design of strip footing in these soils in undisturbed condition is 2.2 ksf for 15 in. width. This bearing pressure value applies to the total dead load plus permanently and/or frequently applied live loads including the weight of the foundation elements. This bearing pressure may however, be increased by one-third when considering transient loads such as earthquake forces.

The least lateral dimension of continuous footings should be 12 in. Exterior footings and footings in unheated areas should bear a minimum of 12 in. below the adjacent ground surface. The bottom of footings should be established below a 2 horizontal to 1 vertical (2H:1V) slope line drawn upward and outward from the bottom of any adjacent utility or structure.

The outputs of foundation bearing capacity analysis are presented in Exhibit V and can be consulted for other chosen footing widths.

5-2- Total Settlement

It is our opinion that for the maximum allowable bearing pressure recommended above, soil bearing foundations should experience a maximum post-construction settlement of less than 1 in. We anticipate that the majority of the settlements will occur during or soon after construction with the largest settlements occurring at the center of the structure.

5-3- Differential Settlement

Differential settlements are generally caused by variations in soil profile (including layer thickness), compressibility characteristics, applied load, bearing pressures, foundation dimension, and foundation stiffness. At this time, it is expected that the differential settlement should be on the order of ½ inch between adjacent columns. However, once the loads are calculated, this value should be re-evaluated.

5-4- Modulus of Subgrade Reaction

If a reinforced concrete strip is selected as the preferred option, the structural design of reinforced concrete strip foundations typically requires a modulus of subgrade reaction (Winkler spring) or a similar elastic analysis method to determine thickness and reinforcing requirements for the **strip**

foundation. We recommend that a modulus of subgrade reaction (k_s) of **80 kips per cubic foot (kcf)** be used.

5-5- Ground Floor Slabs

It is recommended that the ground floor slabs structures be designed as soil-supported slabs-on-grade, bearing on a minimum 6-inch thick layer of crushed stone that is graded in accordance with the recommendations in Section 7.5.1. We also recommend that a 10 mil-thick polyethylene vapor barrier be placed on top of the aggregate layer to reduce moisture condensation on the underside of the slab-on-grade. The slabs should be reinforced with deformed steel bars of at least 3/8". The positions of slab reinforcement should be maintained during concrete placement, in upper half of the slab and a 3" thick (as the minimum) concrete cover should be maintained over reinforcing steel where concrete is in contact with soil. Joints may be constructed at periodic intervals to mitigate potential of slab cracking (ACI, 2016 Recommendations).

5-6- Lateral Resistance

Shallow foundations bearing on a reinforced subgrade or on compacted structural fill may be designed to resist lateral forces using a friction coefficient of 0.4 along the bottom of the foundations and a passive resistance of 399 pounds per square foot per foot (pcf) of depth on the vertical sides of the foundations. This value does not include a safety factor; a safety factor of 1.5 should be used against sliding in the design. The frictional and passive pressure components of lateral resistance may be combined, provided that passive resistance does not exceed two-thirds of the total. The top 24-in of soil should be neglected when calculating passive lateral earth pressures unless the area around the foundation is covered with pavement.

Retaining walls (if in the first layer) will be subjected to lateral earth pressures. A wet soil unit weight and coefficient of active lateral earth pressure (k_a) of 130 pcf and 0.4, respectively, should be utilized for design of walls. For deeper walls, if any, proper values should be chosen from Table 12.

Additional active pressure should be added for a surcharge condition due to sloping ground, vehicular traffic or adjacent structures and should be designed for each condition as the project progresses.

5-7- Shade Structure, Lighting and Wide Screen Foundation Recommendations

Based on the loading conditions assumed by us, subsurface conditions as observed in the field investigations, the lab tests results and preventing any excess pore water pressure, it is our opinion that Drilled Straight-Shaft Concrete Piers will likely provide the most technically-feasible and cost effective foundation system for the proposed structures of this section. The advantages of the proposed foundation are as follow:

1. Quality control is simpler than drilled and under-reamed piers.

2. Shafts are typically larger diameter than drilled and under-reamed piers, and provide better lateral load resistance.

3. Easier to inspect than under-reamed piers.

4. A long, successful track record, more than a century of use.

5. Easier to install than displacement piles in sandstones and siltstones.

The bottom of the pier excavations should be reasonably free of loose cuttings and soil/mud debris prior to installing reinforcing steel and pouring concrete. If the pier excavations encounter water or if water has accumulated in the piers, the concrete may be tremied to the bottom of the excavations. All pier holes should be securely covered after drilling to minimize subsequent cleaning and for safety reasons.

Based on the result of investigation, the soil type is interchange layers of SC or CL. The recommended design values of concrete pier foundations with 15 ft. **length** and 24 inches **diameter** in site soil in undisturbed soil, assuming piles **spacing** is considered equal to 8 ft. are as follow:

Table 13- - Design values for 15 ft. length and 24 inches diameter piles

Allowable Lateral Bearing	280	psf/f
Allowable Skin Friction Up	300	psf
Allowable Skin Friction Down	200	psf
Allowable End Bearing	3500	psf
Minimum Embedment*	10	ft.

*Different from pile length

The bearing pressure values apply to the total dead load plus permanently and/or frequently applied live loads including the weight of the foundation elements. The bearing pressures may, however, be increased by one-third when considering transient loads such as earthquake forces. Other size piers can be analyzed, and recommendations will be provided immediately, if requested. Please request new design values if choosing different size and length piers before submitting the design to the regulatory and supervising agencies.

It should be noted that the pier depth must be below the local frost line penetration, which is equal to maximum 10 inches for California State (per recommendations of U.S. Department of Commerce).

5-8- Pedestrian Rigid Concrete Sidewalk Recommendations

The soil classification test shows the surface soil of the site is SC, in Unified Soil Classification System. No CBR test (per ASTM D1383) or MR (Resilient Modulus) evaluation has been performed in the site.

5-8-1- Subgrade Preparation

Remove all debris, large rocks, vegetation and topsoil from the area to be paved. These items either do not compact well or cause non-uniform compaction and mat thickness.

The subgrade should be compacted to a minimum of 95 percent of the maximum dry density as determined by ASTM D1557 to ensure the compacted subgrade is able to support construction traffic. If the subgrade ruts excessively under construction traffic, it should be repaired before being paved over. Left unrepaired, subgrade ruts may reflectively cause premature pavement rutting.

It is recommended that a representative from our firm be present at the site and observe the integrity of the subgrade during the construction and also the existence of expansive soils should be ruled out. In case the expansive soil is present or unsuitable materials are encountered, the subgrade may require stabilization (such as lime treatment), over-excavation (and replacing the unsuitable soil with gravel borrows) and adding a base course and perhaps a subbase course over the subgrade, that proper methods will be recommended if needed during construction observation.

After final grading (often called fine-grading), the subgrade elevation should generally conform closely to the construction plan subgrade elevation. Large elevation discrepancies should not be compensated for by varying pavement or base thickness because final pavement and aggregates are more expensive than subgrade.

5-8-2- Rigid Concrete Pavement Recommendation

Utilizing the reference 16, rigid pavement catalog decision tree, the site surface soil is classified as Type II of subgrade and the site is located in Caltrans Pavement Climate Region of Central Coast. Thus, the recommended rigid pavement structural depth for TI of up to 9, with lateral support is 0.70 ft. doweled JPCP (Jointed Plain Concrete Pavement) and for the case without lateral support is 0.75 ft. doweled JPCP and the (Table 623.1E, Reference 16). Please note that if CBR tests will be performed in other areas in the future, then these recommendations can be re-examined.

5-9- Utility Trenches

Utility trenches should be properly backfilled. The pipes should be bedded on clean sands (Sand Equivalent greater than 30) to a depth of at least 1 foot over the pipe, and the bedding material must be inspected and approved in writing by a representative from our firm. The use of gravel is not

acceptable unless used in conjunction with filter fabric to prevent the gravel from having direct contact with soil. The remainder of the trench backfill may be derived from onsite soil or approved import soil, compacted as necessary, until the required compaction is obtained as below:

Utility trenches should be backfilled with fill placed in lifts not exceeding 8 inches in uncompacted thickness. Native backfill materials should be compacted to at least 90 percent relative compaction and granular import material should be compacted to at least 95 percent relative compaction. These compaction recommendations assume a reasonable "cushion" layer around the pipes.

If imported granular soil is used, sufficient water should be added during the trench backfilling operations to prevent the soil from "bulking" during compaction.

5-10-Foundation and Site Drainage

As previously discussed, and as shown on the test boring logs, groundwater was not encountered up to 20.5 ft. bgs and is expected to be between 30 ft. to 50 ft. bgs. that is far from foundations depth. However, during periods of significant precipitation, there is a possibility that water could become trapped on the outside face of the foundation walls, where structures have below grade spaces. With no way to relieve the pressure head from the accumulated water, the water could exert excess pressure on the walls and leak into the finished below grade spaces. In these cases, and in areas where there are no below grade structures but the final exterior grade will be above than the entry-level floor slab, a perimeter foundation drain is recommended.

To drain such water, it is recommended that a perimeter wall drain be provided along the outside of the foundation wall. The foundation perimeter drain should consist of a 0.1 m (4-inch) diameter perforated pipe surrounded by 0.15 m (6 inches) of crushed stone, graded in accordance with the recommendations in Section 7.5.1, placed inside a non-woven geotextile filter fabric to limit silting. The perimeter drain trench should be backfilled with compacted structural fill. Pipe invert elevations should be kept below the bottom of the adjacent slab but above the footing bearing elevation. The perimeter drain should be pitched to drain by gravity to the site storm drain system or a sump to be pumped.

All grades must provide effective drainage away from the structures, during and after construction. Water ponding next to the structures can result in greater than calculated soil movement and differential floor slab settlement, cracked slab and wall movement or leaked roof. Effective drainage should be maintained during life time of the building.

Exposed ground should be sloped at a minimum 5 percent away from the structure for the at least 10 ft. beyond the perimeter of the structure. After the construction (building and landscape), we recommend final grades to be inspected for effective drainage. Grades of the around of the building should also be inspected periodically during life time of the building.

Planters located within 10 ft. of the structure should be self-contained to prevent water accessing the building and pavement subgrade soil (if any). Sprinkler main and spray heads should be located a minimum 5 ft. away from the building lines. Low volume, drip styled landscaped irrigation should not be used near the building. Roof run off should be located in the drains or gutters. Roof drain and downspouts should discharge onto pavements that slope away from building or the downspouts should extend a minimum of 10 ft. away from the structures.

6- Seismic Design Considerations

The details of USGS seismic design are presented in Exhibit IV (ASCE 7-16).

7- Construction Considerations

7-1- General

The primary purpose of this section of the report is to comment on items related to excavation, earthwork and related geotechnical aspects of the proposed foundation design. It is written primarily for the engineer having responsibility of preparation for the plans and specifications of the foundation, but it may also aid personnel who monitor the construction. Prospective contractors for this project must evaluate construction problems on the basis of their experience on similar projects, taking into account their own construction methods and procedures.

7-2- Pre-Construction Meeting

We recommend that a pre-construction kick-off meeting be held to discuss the grading recommendations presented in the report. The owner and/or their representative, the architect, the engineer, AEC, and the contractor should be in attendance to discuss project schedule and earthwork requirements.

7-3- Clearing, Site and Subgrade Preparation

The area of the proposed development should initially be cleared of selected surface and subsurface obstructions including existing foundations, if any. Underground utilities that interfere with the proposed construction should be re-routed or abandoned. Holes resulting from the removal of underground obstructions extending below the proposed finished grade should be cleared and backfilled with suitable materials compacted in accordance with our recommendations presented in "Section 7.5".

Following the site preparation and completion of the proposed excavations, a representative of our firm should observe the base of the excavations to determine if problematic areas exist. The exposed soils in those areas to receive structural fill, slabs-on-grade, or foundation should be firm, unyielding, and compacted to the requirements for structural fill. Soft or yielding subgrade soils should be excavated to expose firm, non-yielding materials. Proof–rolling may be helpful in identifying soft or yielding subgrade areas. The subgrade soils should be scarified to a depth of 6 inches. The scarified soils should then be moisture conditioned to at least 3 percent above optimum water content and compacted to the specified relative compaction. It is possible that exposed subgrade soils may be excessively wet or dry depending on the moisture content at the time of construction. If the subgrade soils are too wet, they may be dried by aeration, mixing with drier materials, or lime/cement treatment.

7-4- Excavation

Excavations, including foundation and utility excavations, should be stabilized by shoring sidewalls or laying slopes back in accordance with the Excavation Rules and Regulations (29 Code of Federal Regulations [CFR], Part 1926) stipulated by the Occupational Safety and Health Administration (OSHA).

Table 14 presents the OSHA material type classifications and corresponding allowable temporary slope layback inclinations for soil deposits that may be encountered on site. Alternatively, a shoring system conforming to the OSHA Excavation Rules and Regulations (29 CFR Part 1926) may be used to stabilize excavation sidewalls during construction.

The lateral earth pressures indicated in Table 14 may be used to design or select an internally-braced shoring system or trench shield conforming to the OSHA guidelines. Excavation stability, material classifications, allowable slopes, and shoring pressures should be re-evaluated and revised, as-needed, during construction. Excavations, shoring systems and the surrounding areas should be evaluated daily by a competent person for indications of possible instability or collapse. Dewatering pits or sumps, if any, should be used to depress the groundwater level (if encountered) below the bottom of the excavation.

Table 14- Material Classifications and Allowable Slopes (OSHA)

Formation	OSHA Classification	Allowable Temporary Slope[1,2,3]	Lateral Earth Pressure on Shoring[4] (psf)
Surficial sediments & Alluvium (above groundwater)	Type B	1 h:1v (45°)	45 ×D + 72

Notes:

1 Allowable slope for excavations less than 20 feet deep. Excavation sidewalls in cohesive soil may be benched to meet the allowable slope criteria (measured from the bottom edge of the excavation). The allowable bench height is 4 feet. The bench at the bottom of the excavation may protrude above the allowable slope criteria.

2 In layered soil, layers shall not be sloped steeper than the layer below.

3 Temporary excavations less than 5 feet deep may be made with vertical side slopes and remain unshored if judged to be stable by a competent person (29 CFR, Part 1926.650).

4 'D' is depth of excavation for excavations up to 20 feet deep. Includes a surface surcharge equivalent to two feet of soil.

The shoring system should be designed by a suitably qualified individual or specialty subcontractor. The shoring parameters presented in this report are preliminary design criteria, and the designer should evaluate the adequacy of these parameters and make appropriate modifications for their design. We recommend that the contractor take appropriate measures to protect workers per OSHA requirements.

Excavations made in close proximity to existing structures may undermine the foundation of those structures and/or cause soil movement related distress to the existing structures. Stabilization techniques for excavations in close proximity to existing structures will need to account for the additional loads imposed on the shoring system and appropriate setback distances for temporary slopes.

The geotechnical engineer should be consulted for additional recommendations if the proposed excavations cross below a plane extending down and away from the foundation bearing surfaces of the adjacent structure at an angle of 2:1 (horizontal to vertical) from the bottom edge of the footing or if the proposed excavation is less than 18 inches from the face of the footing.

The excavation bottoms may become unstable and subject to pumping under heavy equipment loads if the excavation subgrade is exposed to water. The contractor should be prepared to stabilize the bottom of the excavations. In general, unstable bottom conditions may be mitigated by scarifying the subgrade and aerating the soil to achieve a moisture content near the optimum, dewatering to depress groundwater levels below the bottom of the excavation, over-excavating to a suitable depth and replacing the wet material with suitable fill, compacting a layer of crushed rock fill into the subgrade, or using geogrid to stabilize additional fill.

Water intrusion into the excavations may occur as a result of groundwater seepage or surface runoff. The contractor should be prepared to take appropriate dewatering measures in such event. Sump pits, trenches, or similar measures should be used to depress the water level below the bottom of the excavation. Considerations for construction dewatering should include anticipated drawdown, volume of pumping, potential for settlement, and groundwater discharge. Disposal of groundwater should be conducted per the guidelines of the Regional Water Quality Control Board.

7-5- Fill Materials

7-5-1- Compacted Structural Fill

The structural fill should be a well-graded granular material. Caltrans AB Class II is recommended to be used for this purpose with the following specifications.

Table 15- CALTRANS AB Class II recommended parameters

Material	γ_d (pcf)	γ_{sat} (pcf)	c (ksf)	φ (degrees)
CALTRANS AB CLASS II (92% compacted)	125	130	0.1	38

Minimum 5 feet of the compacted backfill behind any wall (if any) is required for wall of 10' tall, shorter wall can have narrower backfill zone.

Imported structural fill should be used if the on-site excavated soils cannot meet the gradation requirements indicated above.

In addition to the above requirements, structural fill to be placed in the upper 3 ft. of filled areas during periods of wet and/or freezing weather should contain less than 5 percent passing the No. 200 sieve. Material proposed as structural fill should be tested and approved by a qualified geotechnical engineer prior to its use.

To evaluate the suitability and the quality of the fill source, we recommend that the laboratory testing of fill material be performed in accordance with the ASTM Test Methods indicated below.

Table 16- Summary of ASTM Test Methods

Summary of ASTM Test Methods	
Test	ASTM Designation
Moisture Content	D 2216
Modified Proctor	D 1557
Sieve Analysis	D 422
Atterberg Limits	D 4318

Structural fill in unconfined areas should be placed in horizontal lifts not exceeding 9-in. in loose thickness and compacted to at least 95 percent of the laboratory maximum dry density, as determined by ASTM Test D 1557 (Modified Proctor). Structural fill should be moisture conditioned to within ±2 percentage points of the optimum moisture content.

Structural fill should be compacted by self-propelled vibratory rollers or other approved compaction equipment. Where compaction occurs in confined areas, the loose lift thickness should be reduced to a maximum of 6 in. and compaction performed by hand-guided vibratory compactors or tampers.

Before placing fill materials, the exposed natural soil should be observed and proof rolled to identify any soft compressible layers. At the end of each day's operations, the last lift should be rolled by a smooth-wheel roller to eliminate ridges of un-compacted soil to aid runoff and drainage. No layer of fill should be placed until the underlying materials have been approved.

7-5-2- Common Fill

Common (non-structural) fill should consist of sandy or gravelly soil with a maximum particle size of 3 inches, with less than 35 percent passing the No. 200 sieve, and with a plasticity index of 20 or less.

7-6- Construction Observation

The analyses and recommendations submitted in this report are based upon the data obtained from the four SPT Borings and investigation by others. The nature and extent of variations across the site may not become apparent until construction. If variations then become evident, it will be necessary to re-evaluate the recommendations of this report. We recommend our firm be retained to provide geotechnical engineering services during the earthwork, foundation construction, and drainage phases of the work. This is to observe compliance with the design assumptions, specifications, and recommendations and to allow design changes in the event that subsurface conditions differ from those anticipated prior to the start of construction.

It should be noted that earthwork and foundation observations by our firm, as the project geotechnical engineer of record, are required by most cities and counties. Drainage observations by our firm are not typically required, but in our experience, we have often discovered adverse drainage installations that otherwise would have created problems following construction, and this is why we recommend our services be utilized.

7-7- Wet Season Construction

It is possible for construction to proceed during or immediately following the wet winter months, but a number of geotechnical problems may occur which may increase project costs and cause delays. The water content of on-site soils may increase during the winter and rise significantly above optimum moisture content for compaction of subgrade or backfill materials. If this occurs, the contractor may be unable to achieve the recommended percentage of compaction without using special measures and would likely have to:

- Wait until the soils are dry enough to become workable;
- Dispose of the wet soils and import dry soils; or
- Use lime or cement on the native materials to absorb water and achieve workability.

If utility trenches or excavations are open during winter rains, then caving of the trenches or excavations may occur. Also, it the trenches fill with water during construction, or if saturated soils are encountered at the anticipated bottom of the excavations, excavations may need to be extended to greater depths to reach adequate support capacity than would be necessary if dry weather construction took place.

It should be noted that increased clean-up costs will occur, and greater safety hazards will exist, if the work proceeds during the wet winter months. Furthermore, engineering costs to observe construction are increased because of project delays, modifications, and rework.

7-8- Quality Control

Placement and compaction of all fill materials should be monitored and tested by a qualified technician under supervision of a professional geotechnical engineer. We recommend that all structural fill placements be tested in accordance with ASTM D2922 and D3017 (Nuclear Density Method) to verify the density, degree of compaction, and moisture content of the fill. The specifications should call for frequent testing on each lift. In the event where any portion of the fill fails to meet the compaction requirements, the area should be reworked, re-compacted, and retested until the specified compaction is achieved.

8- Summary of Design recommendation

The site soil parameters need to be chosen from Table 12.

All the design methods and parameters including factor of safety need to be followed per requirements of the engineer designing the structure. All the construction details are required to be per direction of the engineer designing the structure.

Drainage for the shallow foundation is required per detail and specs of 5.11

All the deviations from this report needs to be brought to the attention of AEC as will be discussed in section 9.

Section 7.8 of this report, other recommended construction supervision and all the special inspection requirements mentioned in the report are required to be performed by AEC and needs to be identified on the cover sheet of the construction documents before being submitted to the authority having jurisdiction. The plans are required to be reviewed by AEC and be verified to be in compliance with the requirements of this report before being submitted to jurisdiction having authority.

9- Limitations

This Report was prepared pursuant to an Agreement dated 11 February 2020 between Mr. Daniel Powell (Gilbane) and AEC. All uses of this Report are subject to, and deemed acceptance of, the conditions and restrictions contained in the Agreement. The observations and conclusions described in this Report are based solely on the Scope of Services provided pursuant to the Agreement. AEC has not performed any additional observations, investigations, studies or other testing not specified in the Agreement and the Report. AEC shall not be liable for the existence of any condition the discovery of which would have required the performance of services not authorized under the Agreement.

This Report is prepared for the exclusive use of Gilbane in connection with the design and construction of the mentioned development. There are no intended beneficiaries other than Gilbane. AEC shall owe no duty, whatsoever, to any other person or entity on account of the Agreement or the Report. Use of this Report by any person or entity other than Gilbane for any purpose whatsoever is expressly forbidden unless such other person or entity obtains written authorization from Gilbane and from AEC. Use of this Report by such other person or entity without the written authorization of Gilbane and AEC shall be at such other person's or entities sole risk, and shall be without legal exposure or liability to AEC.

Use of this Report by any person or entity, including by Gilbane, for a purpose other than for the design and construction of the proposed development is expressly prohibited unless such person or entity obtains written authorization from AEC indicating that the Report is adequate for such other use. Use of this Report by any person or entity for such other purpose without written authorization by AEC shall be at such person's or entities sole risk and shall be without legal exposure or liability to AEC.

This report reflects site conditions observed and described by records available to AEC as of the date of report preparation. The passage of time may result in significant changes in site conditions, technology, or economic conditions which could alter the findings and/or recommendations of the report. Accordingly, Gilbane and any other party to whom the report is provided recognize and agree that AEC shall bear no liability for deviations from observed conditions or available records after the time of report preparation.

Use of this Report by any person or entity in violation of the restrictions expressed in this Report shall be deemed and accepted by the user as conclusive evidence that such use and the reliance placed on this Report, or any portions thereof, is unreasonable, and that the user accepts full and exclusive responsibility and liability for any losses, damages or other liability which may result.

10- Reference

1- 7.5' Series Geologic Map by USGS.

2- 7.5' Series Topographic Map, USGS.

3- ASTM test methods.

4- Department of the U.S. army corps of engineers Washington, DC 20314-1000, Engineering and design geotechnical investigations, Manual No. 1110-1-1804.

5- Fault activity map of California, CGS, 2010.

6- Foundation analysis and design, Joseph E. Bowles, McGraw-Hill, fifth edition.

7- Liquefaction map, USGS.

8- Landslide map, USGS.

9- Minnesota Department of Transportation, Pavement Design, 2007.

10- Swiss Standard SN 670 010b, Characteristic Coefficients of soils, Association of Swiss Road and Traffic Engineers.

11- Quaternary Fault and Fold Database of the United States.

12- California Building Code (CBC), 2019

13- Geotechnical Evaluation and Geologic Hazard Assessment, Evergreen Valley Community College Fieldhouse, 3095 Yerba Buena Road, San Jose, CA 95135, by Ninyo and Moore Geotechnical and Environmental Science Consultants dated 12 April 2019.

14- Preliminary Geologic Description of the San Jose 30 X 60 Minute Quadrangle. California by Carl M. Wentworth, M. Clark Blake, Jr., Robert J. McLaughlin, and Russell W. Graymer, USGS 1999.

15- FHWA, Geotechnical Aspects of Pavements Reference Manual / Participant Workbook, Publication No. FHWA NHI-05-037, May 2006.

16- California Department of Transportation, Highway Design Manual, Sixth Edition, 2017.

17- Implementation of Resilient Modulus - CBR relationship in Mechanistic-Empirical (M. -E) Pavement Design, Adama Dione1, Meissa Fall1, Yves, Berthaud, Farid Benboudjema, Alexandre Michou, 2014

Exhibit I
Boring Log

EXPLORATORY BORING LOG				Project No : 4161						Borehole No. : B 1				
Address: San Jose				Test Date : 5/13/2020						Logged By : Nami				
Company Drilling: AEC Drilling Corp.				BORING DIA.: SPT						BORING ELEV.: ---				
LOACATION OF BOREHOLE : Specified on Plan				SAMPLER: SPT SPT C2 :cal. 2" C2.5 :cal. 2.5"						Weather: Sunny				
Notes:	USCS SOIL TYPE	DEPTH (feet)	SAMPLE	BLOWS PER FOOT	N-SPT	POCKET PEN. (tsf)	DRY DENSITY (pcf)	MOIST. CONT. (%)	FINES (%)	SANDS (%)	GRAVELS (%)	LIQUID LIMIT	PLASTICITY INDEX	
Description:														
0.0 - 1 ft		1												
Brown sandy lean clay (CL)								14.0						
1 - 2 ft		2		15										
Light gray fine sand (fill material)			C2.5	20	29	4.5	129.5	11	36.5	48.4	15.1	24.0	7.9	
2 - 10 ft		3		25										
Brown silty, clayey sand with gravel (SC - SM)-Damp to moist-None reaction with HCL - No odor - Rock fragment is angular with maximum size is cobble - Flat shape - Hard consistency - Weak cementation - Blocky structure - None dry strength - Non plastic to low plasticity		4												
								9.0						
		5		17										
			C2.5	19	32	4.5	119.0	12.0						
		6		30										
		7												
		8												
								10.0						
		9												
		10		35										
10 - 14 ft			C2.5	50	68.0	4	120.7	14.0						
Same as 0.0 to 1 ft but very dense		11		54										
		12												
		13												
								14.0						
		14												
14 - 20.5 ft														
Same as 2 to 10 ft		15		45										
			C2.5	48	58	2.0	126.2	12.0						
		16		41										
		17												
		18												
								7.0						
		19												
				30										
		20	C2.5	35	49.0	4	125.2	12.0						
				40										
Terminated at 20.5 ft		21												
No underground water encountered		22												
		23												
		24												
		25												
		26												

FORM#: S-10 REV.2 DATE PREPARED: 10/20/2014 DATE REVISED: 11/25/2014

EXPLORATORY BORING LOG				Project No : 4161						Borehole No. : B 2			
Address: San Jose				Test Date : 5/13/2020						Logged By : Nami			
Company Drilling: AEC Drilling Corp.				BORING DIA.: SPT						BORING ELEV.: ---			
LOACATION OF BOREHOLE : Specified on Plan				SAMPLER: SPT SPT C2 :cal. 2" C2.5 :cal. 2.5"						Weather: Sunny			
Notes:	USCS SOIL TYPE	DEPTH (feet)	SAMPLE	BLOWS PER FOOT	N-SPT	POCKET PEN. (tsf)	DRY DENSITY (pcf)	MOIST. CONT. (%)	FINES (%)	SANDS (%)	GRAVELS (%)	LIQUID LIMIT	PLASTICITY INDEX
Description:													
0.0 - 1 ft **Light gray fine sand (fill materaial)** **1 - 10 ft** **Brown clayey sand with gravel (SC)-Damp to moist - None reaction with HCL - No odor - Rock fragment is angular with maximum size gravel - Flat and elongated - Hard to very hard consistency - Weak cementation - Blocky structure - None dry strength - None dilatancy - High toughness Non plastic to low plasticity.**		1						11.0					
		2		13									
		3	C2.5	20 25	29	>4.5	128.5	8	20.7	56.9	22.4	32.5	15.7
		4						14.0					
		5		14									
		6	C2.5	15 22	24	4	100.7	12.0					
		7											
		8											
		9						8.0					
		10		30									
10 - 14 ft **Brown sandy lean clay (CL) - Damp to moist-No odor-Soft Consistency-Moderate cementation - Homogeneous structure - None dilatancy - Medium dry strength - Low toughness - Medium to high plasticity**		11	C2.5	45 55	65.0	>4.5	119.0	15.0	58.8	38.0	3.2	30.8	13.8
		12											
		13						10.0					
		14											
14 - 20 ft **Same as 1 to 10 ft**		15		50									
		16	C2.5	61 60	79	>4.5	124.6	10.0					
		17											
		18											
		19						11.0					
		20		55									
Terminated at 20.5 ft **No underground water encountered**			C2.5	54 50	68.0	>4.5	123.1	10.0					
		21											
		22											
		23											
		24											
		25											
		26											

EXPLORATORY BORING LOG				Project No : 4161						Borehole No. : B 3			
Address: San Jose				Test Date : 5/14/2020						Logged By : Nami			
Company Drilling: AEC Drilling Corp.				BORING DIA.: SPT						BORING ELEV.: ---			
LOACATION OF BOREHOLE : Specified on Plan				SAMPLER: SPT SPT C2 :cal. 2" C2.5 :cal. 2.5"						Weather: Sunny			
Notes:	USCS SOIL TYPE	DEPTH (feet)	SAMPLE	BLOWS PER FOOT	N-SPT	POCKET PEN. (tsf)	DRY DENSITY (pcf)	MOIST. CONT. (%)	FINES (%)	SANDS (%)	GRAVELS (%)	LIQUID LIMIT	PLASTICITY INDEX
Description:													
0.0 -8 ft **Silty, clayey sand with gravel (SC - SM) - Damp - None reaction with HCL - No odor Rock fragment is subagular - Maximum size is gravel - elongated shape - Hard consistency - Weak cementation - Blocky structure - None dry strength - None dilatancy - High toughness - Non plastic to low plasticity.**		1 2 3 4 5 6 7 8	C2.5 C2.5	18 21 25 19 20 23	30 28	4 3.25	103.0 113.8	8.0 9 11.0 16.0	33.1	46.5	20.4	22.3	8.3
8 - 14 ft **Brown sandy lean clay (CL) - Damp No odor - Soft consistency - Moderate cementation - Blocky structure - None dilatancy - Medium dry strength - Low toughness-Medium to high plasticity-Hard**		9 10 11 12 13 14	C2.5	17 17 18	23.0	2	101.3	14.0 16.0 14.0	53.6	42.8	3.6	30.7	14.3
14 - 20.5 ft **Same as 0.0 to 8 ft**		15 16 17 18 19 20	C2.5 C2.5	35 45 50 55 58 68	62 82.0	2.8 4.25	108.8 115.9	17.0 11.0 14.0					
Terminated at 20.5 ft **No underground water encountered**		21 22 23 24 25 26											

EXPLORATORY BORING LOG																	Project No : 4161		Borehole No. : B 4
Address: San Jose																	Test Date : 5/14/2020		Logged By : Nami
Company Drilling: AEC Drilling Corp.																	BORING DIA.: SPT		BORING ELEV.: ---
LOACATION OF BOREHOLE : Specified on Plan																	SAMPLER: SPT SPT C2 :cal. 2" C2.5 :cal. 2.5"		Weather: Sunny

Notes: / Description:	USCS SOIL TYPE	DEPTH (feet)	SAMPLE	BLOWS PER FOOT	N-SPT	POCKET PEN. (tsf)	DRY DENSITY (pcf)	MOIST. CONT. (%)	FINES (%)	SANDS (%)	GRAVELS (%)	LIQUID LIMIT	PLASTICITY INDEX
0.0 - 1 ft		1											
Light gray fine sand (fill material)													
1 - 12 ft								9.0					
Brown clayey sand with gravel (SC) -		2		13									
Damp to moist - None reaction with HCL -			C2.5	20	29	>4.5	128.1	10	14.6	51.8	33.6	32.4	16.6
No odor - Rock fragment is angular with		3		25									
maximum size gravel - Flat and elongated -													
Hard to very hard consistency - Weak		4											
cementation - Blocky structure - None								11.0					
dry strength - None dilatancy - High		5		40									
toughness - Non plastic to low plasticity			C2.5	45	62	>4.5	131.2	11.0					
		6		50									
		7											
		8											
								14.0					
		9											
		10		50									
			C2.5	50	68.0	2	123.7	12.0					
		11		55									
		12											
12 - 15 ft													
Brown sandy lean clay (CL) - Damp -		13											
No odor - Soft consistency - Moderate								18.0					
cementation - Homogeneous structure -		14											
None dilatancy - Medium dry strength -													
Low toughness - Medium to high plasticity		15		53									
15 - 20.5 ft			C2.5	50	66	>4.5	102.9	11.0					
Same as 1 - 12 ft		16		52									
		17											
		18											
								9.0					
		19											
				40									
		20	C2.5	45	62.0	>4.5	111.3	16.0					
Terminated at 20.5 ft				50									
No underground water encountered		21											
		22											
		23											
		24											
		25											
		26											

Exhibit II
Lab Results

ACHIEVEMENT ENGINEERING CORP.

Moisture Density
(AASHTO T265 - ASTM D2216)

Report Date: 5/25/2020
Project No: 4161
Project Name: Evergreen College
Project Address: San Jose
Technician: Nami

Type of Material:	Soil	Sample Description:	
Source:	Field		
Sampled by:	Nami	Sample Date:	5/14/2020

Sample No:	B1 1'- 2'	B1 2' - 3.5'	B1 4' - 5'	B1 5' - 6.5'	B1 8' - 9'	B1 10'-11.5'	B1 13'-14'
Ht. of Sample:	Disturbed	6.00	Disturbed	6.00	Disturbed	6.00	Disturbed
Tare No:	CA - 12	CA - 5	CA - 10	CA - 9	CA - 3	CA - 18	CA - 1
Gross Wet Wt:	1222.38	1314.54	958.25	1248.45	897.46	1273.41	1292.81
Gross Dry Wt:	1114.06	1216.34	906.32	1145.21	843.35	1154.19	1174.52
Tare Wt:	314.29	313.22	315.26	315.34	311.70	312.33	309.35
Net Dry Wt:	799.77	903.12	591.06	829.87	531.65	841.86	865.17
Wt. of Water:	108.32	98.20	51.93	103.24	54.11	119.22	118.29
% Moisture	14%	11%	9%	12%	10%	14%	14%
Liners Dia		2.5"		2.5"		2.5"	
Density Factors		0.860		0.860		0.860	
Dry Density		129.45		118.95		120.67	

Tested By: Nami
Reviewed E A.F

Signature:
Signature:

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ACHIEVEMENT ENGINEERING CORP.

Moisture Density
(AASHTO T265 - ASTM D2216)

Report Date:	5/25/2020
Project No:	4161
Project Name:	Evergreen College
Project Address:	San Jose
Technician:	Nami

Type of Material:	Soil	Sample Description:	
Source:	Field		
Sampled by:	Nami	Sample Date:	5/14/2020

Sample No:	B1 15'-16.5'	B1 18'-19'	B1 19'-20.5'				
Ht. of Sample:	5.50	Disturbed	6.00				
Tare No:	CA - 8	CA - 7	CA - 6				
Gross Wet Wt:	1212.74	919.27	1288.04				
Gross Dry Wt:	1116.12	881.92	1185.26				
Tare Wt:	309.04	314.32	311.80				
Net Dry Wt:	807.08	567.60	873.46				
Wt. of Water:	96.62	37.35	102.78				
% Moisture	12%	7%	12%				
Liners Dia	2.5"		2.5"				
Density Factors	0.860		0.860				
Dry Density	126.20		125.20				

Tested By: Nami

Signature:

Reviewed E A.F

Signature:

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SIEVE ANALYSIS SHEET
(AASHTO T27-ASTM C136 and D6913)

Date:	5/20/2020
Project No.:	4161
Project Name:	Evergreen College
Project Address:	San Jose
Tested By:	Nami
Material:	Soil

Borehole Number and Depth: **B1 2'-3.5'**
Nominal Max. Size in sample = ½"
Min. Test Sample size in kg [lb] = 2 [4]
Nominal Dimension of seive = 8"

	Sieve Size	Sieve Size	Wt. Ret. (gr)	% Ret.	% Passing	Retained Limit (kg)
4	100mm	4"	0	0.00%	100.00%	
3	75mm	3"	0	0.00%	100.00%	
2	50mm	2"	0	0.00%	100.00%	
1	37.5mm	1 ½"	0	0.00%	100.00%	
1	25mm	1"	0	0.00%	100.00%	
1	19mm	¾"	0	0.00%	100.00%	
0	12.5mm	½"	8.97	2.94%	97.06%	
0	9.5mm	3/8"	2.51	0.82%	96.23%	
0	4.75mm	#4	34.75	11.41%	84.82%	
0	2.36mm	#8	31.34	10.29%	74.54%	
0	1.18mm	#16	25.63	8.41%	66.12%	
0	600µm	#30	20.25	6.65%	59.47%	
0	300µm	#50	24.81	8.14%	51.33%	
0	150µm	#100	24.63	8.09%	43.24%	
0	75µm	#200	20.7	6.80%	36.45%	

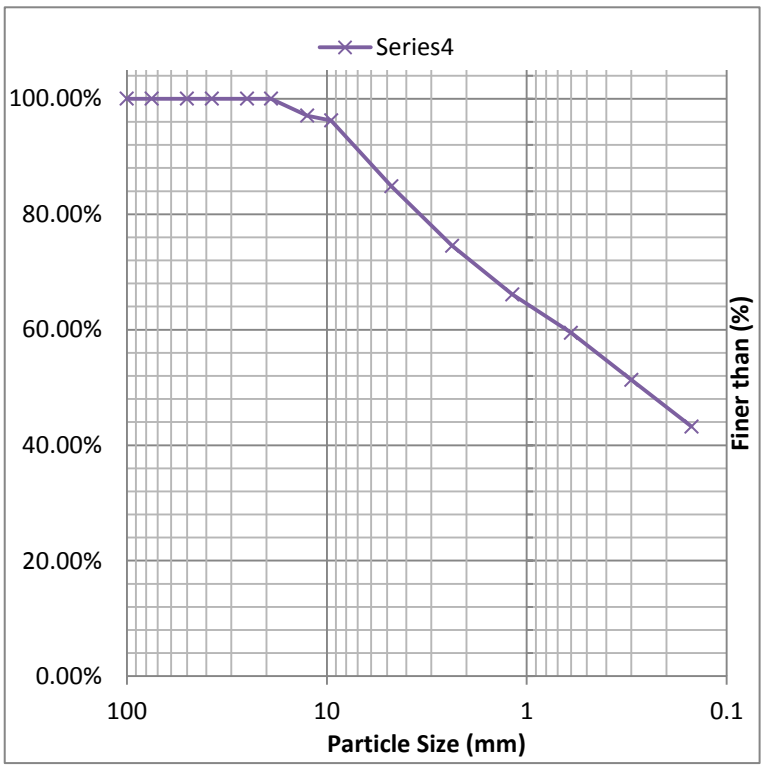
Pan #: CA - 5
Pan weight (gr): 313.22
Mass of pan & dried sample before wash (gr): 617.84
Original mass before wash (gr): **304.62**
Min. readability of scale (gr) = 0.30
Mass of pan & dried sample after wash (gr): 507.35
Mass of sample after wash & being dried (gr): **194.13**
Mass after mechanical shake (gr): **193.59**

Percent of Gravel = **15.18%**
Fine Content = **36.45%**
Percent of Sand = **48.38%**

D_{10} (mm)= **0.0750**
D_{30} (mm)= **0.0750**
D_{60} (mm)= **0.6459**
D_{50} (mm)= **0.2753**

Cc= **8.6**
Cu= **0.1**

Check for waste limt (0.3%) : 0.28%



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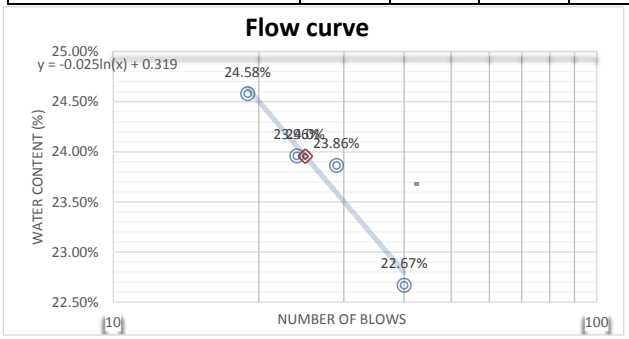
Atterberg Limits
(AASHTO T89 and T90 - ASTM D4318)

Sample Description:	SOIL	Report Date:	5/25/2020
Boring No:	B 1	Project No:	4161
Sample ID:	052520-4161	Project Name:	Evergreen College
Sample Depth:	2' - 3.5'	Project Address:	San Jose
Material:	SOIL	Technician:	Nami

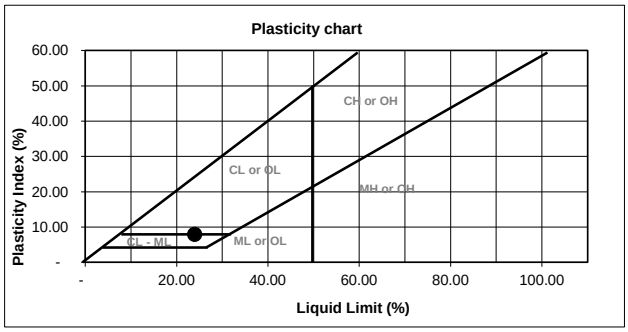
	Liquid Limit				Plastic Limit		
	1	2	3	4	1	2	3
No. of blows	40	29	24	19			
Tare No.	LB - 9	AB - 3	AE - 2	AE - 3	AD - 3	AE - 1	AD - 1
Gross Wet Weight (gr)	23.45	24.26	23.49	24.53	4.92	5.39	5.34
Gross Dry Weight (gr)	21.19	21.74	21.13	21.90	4.82	5.25	5.20
Tare Weight (gr)	11.22	11.18	11.28	11.20	4.25	4.37	4.24
Net Dry Weight (gr)	9.97	10.56	9.85	10.7	0.57	0.88	0.96
Weight of Water (gr)	2.26	2.52	2.36	2.63	0.1	0.14	0.14
Water Content (%)	22.67%	23.86%	23.96%	24.58%	17.54%	15.91%	14.58%



Group Symbol CL - ML

Shrinkage Limit Results

Liquid Limit %	23.95
Plastic Limit %	16.01
Plasticity Index	7.94
Shrinkage Limit %	
B – Value	
Toughness Index	



Tested By: Nami Reviewed By: A.F

Signature: Signature:

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ACHIEVEMENT ENGINEERING CORP.

Moisture Density
(AASHTO T265 - ASTM D2216)

Report Date: 5/25/2020
Project No: 4161
Project Name: Evergreen College
Project Address: San Jose
Technician: Nami

Type of Material:	Soil	Sample Description:	
Source:	Field		
Sampled by:	Nami	Sample Date:	5/14/2020

Sample No:	B2 1'- 2'	B2 2' - 3.5'	B2 4' - 5'	B2 5' - 6.5'	B2 8' - 9'	B2 10'-11.5'	B2 13'-14'
Ht. of Sample:	Disturbed	6.00	Disturbed	6.00	Disturbed	6.00	Disturbed
Tare No:	CA - 11	CA - 14	CA - 15	CA - 2	CA - 17	CA - 4	CA - 13
Gross Wet Wt:	1005.58	1278.61	1176.66	1097.61	972.97	1264.41	1024.26
Gross Dry Wt:	936.68	1206.63	1069.22	1013.67	924.91	1141.02	959.33
Tare Wt:	310.31	310.06	309.88	311.49	309.91	311.09	309.36
Net Dry Wt:	626.37	896.57	759.34	702.18	615.00	829.93	649.97
Wt. of Water:	68.90	71.98	107.44	83.94	48.06	123.39	64.93
% Moisture	11%	8%	14%	12%	8%	15%	10%
Liners Dia		2.5"		2.5"		2.5"	
Density Factors		0.860		0.860		0.860	
Dry Density		128.51		100.65		118.96	

Tested By: Nami
Signature:

Reviewed E A.F
Signature:

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ACHIEVEMENT ENGINEERING CORP.

Moisture Density
(AASHTO T265 - ASTM D2216)

Report Date:	5/25/2020
Project No:	4161
Project Name:	Evergreen College
Project Address:	San Jose
Technician:	Nami

Type of Material:	Soil	Sample Description:	
Source:	Field		
Sampled by:	Nami	Sample Date:	5/14/2020

Sample No:	B2 15'-16.5'	B2 18'-19'	B2 19'-20.5'				
Ht. of Sample:	6.00	Disturbed	6.00				
Tare No:	CA - 16	CA - 21	CA - 22				
Gross Wet Wt:	1268.13	1117.62	1310.92				
Gross Dry Wt:	1180.80	1042.27	1228.32				
Tare Wt:	311.38	370.18	369.79				
Net Dry Wt:	869.42	672.09	858.53				
Wt. of Water:	87.33	75.35	82.60				
% Moisture	10%	11%	10%				
Liners Dia	2.5"		2.5"				
Density Factors	0.860		0.860				
Dry Density	124.62		123.06				

Tested By: Nami

Signature:

Reviewed E A.F

Signature:

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SIEVE ANALYSIS SHEET
(AASHTO T27-ASTM C136 and D6913)

Date:	5/20/2020
Project No.:	4161
Project Name:	Evergreen College
Project Address:	San Jose
Tested By:	Nami
Material:	Soil

Borehole Number and Depth: **B2 2'-3.5'**
Nominal Max. Size in sample = ½"
Min. Test Sample size in kg [lb] = 2 [4]
Nominal Dimension of seive = 8"

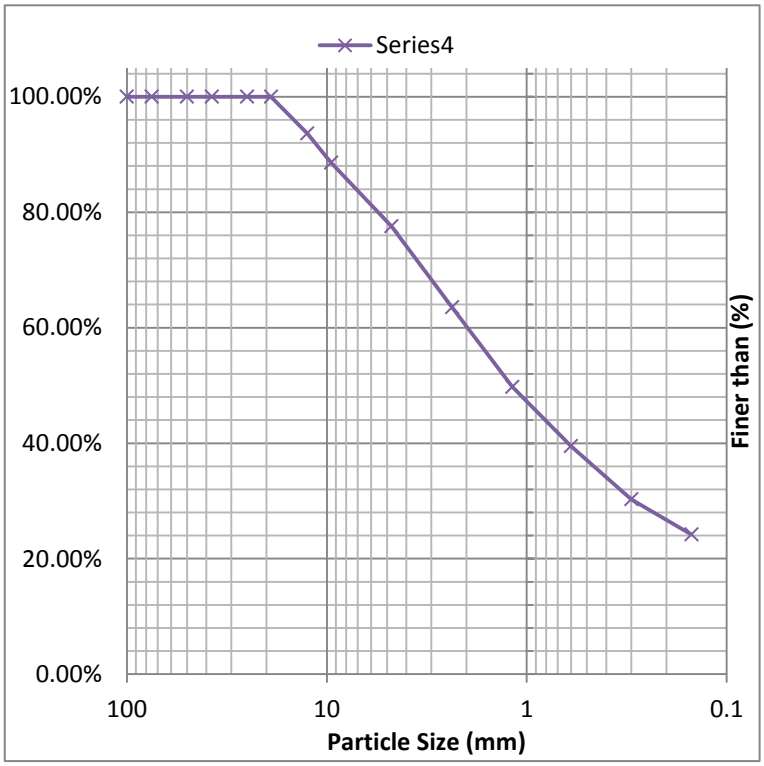
	Sieve Size	Sieve Size	Wt. Ret. (gr)	% Ret.	% Passing	Retained Limit (kg)
4	100mm	4"	0	0.00%	100.00%	
3	75mm	3"	0	0.00%	100.00%	
2	50mm	2"	0	0.00%	100.00%	
1	37.5mm	1 ½"	0	0.00%	100.00%	
1	25mm	1"	0	0.00%	100.00%	
1	19mm	¾"	0	0.00%	100.00%	
0	12.5mm	½"	25.11	6.37%	93.63%	
0	9.5mm	3/8"	19.83	5.03%	88.60%	
0	4.75mm	#4	43.51	11.04%	77.56%	
0	2.36mm	#8	55.25	14.02%	63.54%	
0	1.18mm	#16	54.3	13.78%	49.77%	
0	600µm	#30	40.53	10.28%	39.49%	
0	300µm	#50	36.25	9.20%	30.29%	
0	150µm	#100	24.03	6.10%	24.19%	
0	75µm	#200	13.98	3.55%	20.65%	

Pan #: CA - 14
Pan weight (gr): 310.06
Mass of pan & dried sample before wash (gr): 704.24
Original mass before wash (gr): **394.18**
Min. readability of scale (gr) = 0.39
Mass of pan & dried sample after wash (gr): 623.58
Mass of sample after wash & being dried (gr): **313.52**
Mass after mechanical shake (gr): **312.79**
Percent of Gravel = **22.44%**
Fine Content = **20.65%**
Percent of Sand = **56.91%**

D_{10} (mm)= **0.0750**
D_{30} (mm)= **0.2928**
D_{60} (mm)= **2.0564**
D_{50} (mm)= **1.1998**

Cc= **27.4**
Cu= **0.6**

Check for waste limt (0.3%) : 0.23%



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SIEVE ANALYSIS SHEET
(AASHTO T27-ASTM C136 and D6913)

Date:	5/20/2020
Project No.:	4161
Project Name:	Evergreen College
Project Address:	San Jose
Tested By:	Nami
Material:	Soil

Borehole Number and Depth: **B2 10'-11.5'**
Nominal Max. Size in sample = 3/8"
Min. Test Sample size in kg [lb] = 1 [2]
Nominal Dimension of seive = 8"

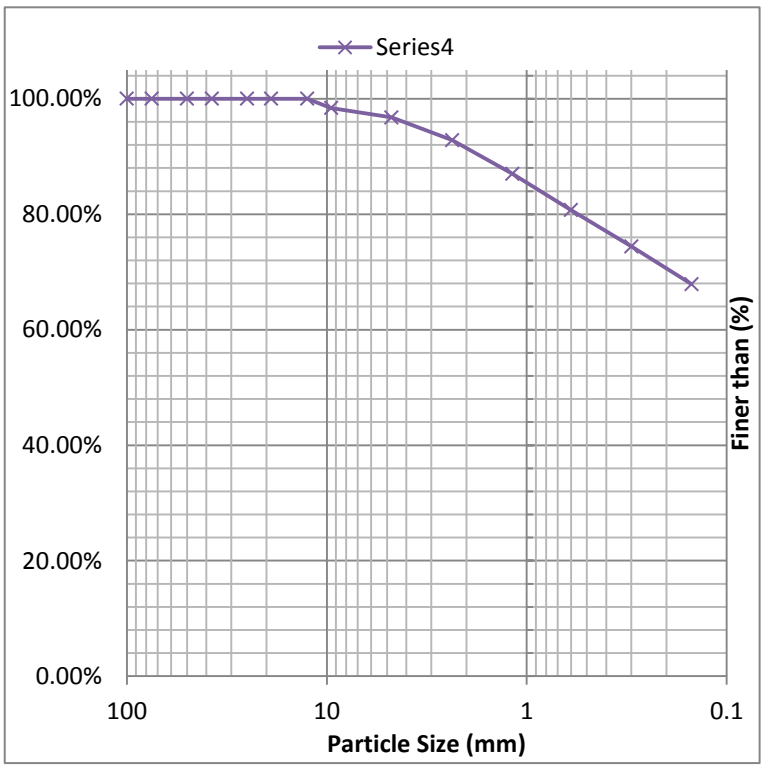
	Sieve Size	Sieve Size	Wt. Ret. (gr)	% Ret.	% Passing	Retained Limit (kg)
4	100mm	4"	0	0.00%	100.00%	
3	75mm	3"	0	0.00%	100.00%	
2	50mm	2"	0	0.00%	100.00%	
1	37.5mm	1 ½"	0	0.00%	100.00%	
1	25mm	1"	0	0.00%	100.00%	
1	19mm	¾"	0	0.00%	100.00%	
0	12.5mm	½"	0	0.00%	100.00%	
0	9.5mm	3/8"	5.49	1.60%	98.40%	
0	4.75mm	#4	5.57	1.63%	96.77%	
0	2.36mm	#8	13.47	3.93%	92.84%	
0	1.18mm	#16	19.95	5.82%	87.02%	
0	600µm	#30	21.6	6.30%	80.72%	
0	300µm	#50	21.55	6.29%	74.43%	
0	150µm	#100	22.4	6.54%	67.89%	
0	75µm	#200	31.12	9.08%	58.81%	

Pan #: CA - 4
Pan weight (gr): 311.09
Mass of pan & dried sample before wash (gr): 653.75
Original mass before wash (gr): **342.66**
Min. readability of scale (gr) = 0.34
Mass of pan & dried sample after wash (gr): 452.63
Mass of sample after wash & being dried (gr): **141.54**
Mass after mechanical shake (gr): **141.15**
Percent of Gravel = **3.23%**
Fine Content = **58.81%**
Percent of Sand = **37.96%**

D_{10} (mm)= **0.0750**
D_{30} (mm)= **0.0750**
D_{60} (mm)= **0.0848**
D_{50} (mm)= **0.0750**

Cc= **1.1**
Cu= **0.9**

Check for waste limt (0.3%) : 0.28%



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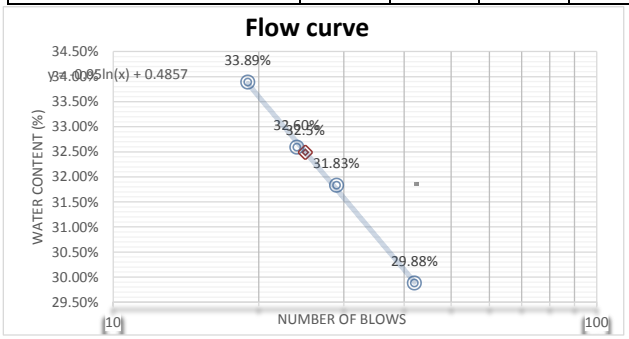
Atterberg Limits
(AASHTO T89 and T90 - ASTM D4318)

Sample Description:	SOIL	Report Date:	5/25/2020
Boring No:	B 2	Project No:	4161
Sample ID:	052520-4161	Project Name:	Evergreen College
Sample Depth:	2' - 3.5'	Project Address:	San Jose
Material:	SOIL	Technician:	Nami

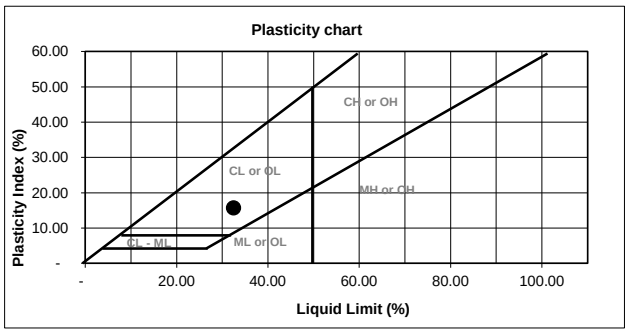
	Liquid Limit				Plastic Limit		
	1	2	3	4	1	2	3
No. of blows	42	29	24	19			
Tare No.	LB - 6	AB - 2	AE - 1	AL - 2	L - 3	AD - 2	AC - 3
Gross Wet Weight (gr)	21.29	23.16	22.00	21.52	5.34	5.63	5.53
Gross Dry Weight (gr)	18.98	20.26	19.35	18.89	5.19	5.44	5.36
Tare Weight (gr)	11.25	11.15	11.22	11.13	4.30	4.33	4.32
Net Dry Weight (gr)	**7.73**	**9.11**	**8.13**	**7.76**	**0.89**	**1.11**	**1.04**
Weight of Water (gr)	**2.31**	**2.9**	**2.65**	**2.63**	**0.15**	**0.19**	**0.17**
Water Content (%)	**29.88%**	**31.83%**	**32.60%**	**33.89%**	**16.85%**	**17.12%**	**16.35%**



Group Symbol CL

Shrinkage Limit Results

Liquid Limit %	32.49
Plastic Limit %	16.77
Plasticity Index	15.72
Shrinkage Limit %	
B – Value	
Toughness Index	



Tested By: Nami Reviewed By: A.F

Signature: Signature:

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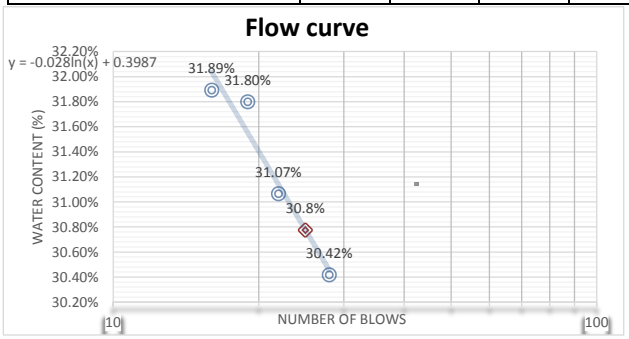
Atterberg Limits
(AASHTO T89 and T90 - ASTM D4318)

Sample Description:	SOIL	Report Date:	5/25/2020
Boring No:	B 2	Project No:	4161
Sample ID:	052520-4161	Project Name:	Evergreen College
Sample Depth:	10' -11.5'	Project Address:	San Jose
Material:	SOIL	Technician:	Nami

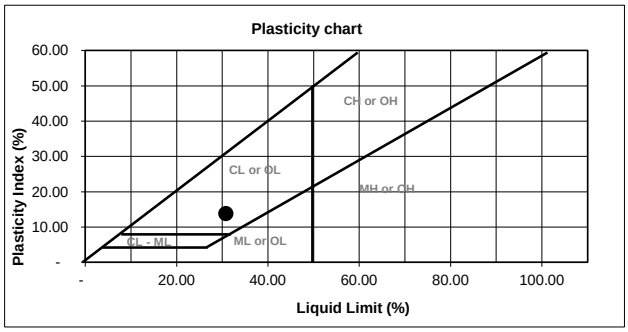
	Liquid Limit				Plastic Limit		
	1	2	3	4	1	2	3
No. of blows	28	22	19	16			
Tare No.	LB - 3	LB - 2	AB - 1	AD - 2	AE - 5	AE - 8	AC - 1
Gross Wet Weight (gr)	21.38	21.52	20.97	21.62	5.34	5.39	5.44
Gross Dry Weight (gr)	19.05	19.10	18.62	19.11	5.17	5.25	5.27
Tare Weight (gr)	11.39	11.31	11.23	11.24	4.28	4.35	4.22
Net Dry Weight (gr)	**7.66**	**7.79**	**7.39**	**7.87**	**0.89**	**0.9**	**1.05**
Weight of Water (gr)	**2.33**	**2.42**	**2.35**	**2.51**	**0.17**	**0.14**	**0.17**
Water Content (%)	**30.42%**	**31.07%**	**31.80%**	**31.89%**	**19.10%**	**15.56%**	**16.19%**



Group Symbol CL

Shrinkage Limit Results

Liquid Limit %	30.77
Plastic Limit %	16.95
Plasticity Index	13.83
Shrinkage Limit %	
B – Value	
Toughness Index	



Tested By: Nami Reviewed By: A.F

Signature: Signature:

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ACHIEVEMENT ENGINEERING CORP.

Moisture Density
(AASHTO T265 - ASTM D2216)

Report Date: 5/25/2020
Project No: 4161
Project Name: Evergreen College
Project Address: San Jose
Technician: Nami

Type of Material:	Soil	Sample Description:	
Source:	Field		
Sampled by:	Nami	Sample Date:	5/14/2020

Sample No:	B3 1'- 2'	B3 2' - 3.5'	B3 4' - 5'	B3 5' - 6.5'	B3 8' - 9'	B3 10'-11.5'	B3 13'-14'
Ht. of Sample:	Disturbed	6.00	Disturbed	6.00	Disturbed	6.00	Disturbed
Tare No:	H - 23	AE - 7	AE - 2	H - 11	AE - 6	AE - 21	H - 7
Gross Wet Wt:	659.69	911.48	1040.29	1047.42	988.86	943.62	1040.52
Gross Dry Wt:	618.33	845.20	948.38	922.19	880.18	832.91	930.44
Tare Wt:	128.03	125.79	125.96	128.02	125.16	126.36	128.12
Net Dry Wt:	490.30	719.41	822.42	794.17	755.02	706.55	802.32
Wt. of Water:	41.36	66.28	91.91	125.23	108.68	110.71	110.08
% Moisture	8%	9%	11%	16%	14%	16%	14%
Liners Dia		2.5"		2.5"		2.5"	
Density Factors		0.860		0.860		0.860	
Dry Density		103.12		113.83		101.27	

Tested By: Nami
Reviewed E A.F

Signature:
Signature:

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ACHIEVEMENT ENGINEERING CORP.

Moisture Density
(AASHTO T265 - ASTM D2216)

Report Date:	5/25/2020
Project No:	4161
Project Name:	Evergreen College
Project Address:	San Jose
Technician:	Nami

Type of Material:	Soil	Sample Description:	
Source:	Field		
Sampled by:	Nami	Sample Date:	5/14/2020

Sample No:	B3 15'-16.5'	B3 18'-19'	B3 19'-20.5'				
Ht. of Sample:	6.00	Disturbed	6.00				
Tare No:	AH - 1	CA - 20	CA - 19				
Gross Wet Wt:	1019.73	1010.83	1289.92				
Gross Dry Wt:	893.68	948.52	1178.28				
Tare Wt:	134.65	370.97	369.85				
Net Dry Wt:	759.03	577.55	808.43				
Wt. of Water:	126.05	62.31	111.64				
% Moisture	17%	11%	14%				
Liners Dia	2.5"		2.5"				
Density Factors	0.860		0.860				
Dry Density	108.79		115.87				

Tested By: Nami

Signature:

Reviewed E A.F

Signature:

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SIEVE ANALYSIS SHEET
(AASHTO T27-ASTM C136 and D6913)

Date:	5/20/2020
Project No.:	4161
Project Name:	Evergreen College
Project Address:	San Jose
Tested By:	Nami
Material:	Soil

Borehole Number and Depth: **B3 2'-3.5'**
Nominal Max. Size in sample = ½"
Min. Test Sample size in kg [lb] = 2 [4]
Nominal Dimension of seive = 8"

	Sieve Size	Sieve Size	Wt. Ret. (gr)	% Ret.	% Passing	Retained Limit (kg)
4	100mm	4"	0	0.00%	100.00%	
3	75mm	3"	0	0.00%	100.00%	
2	50mm	2"	0	0.00%	100.00%	
1	37.5mm	1 ½"	0	0.00%	100.00%	
1	25mm	1"	0	0.00%	100.00%	
1	19mm	¾"	0	0.00%	100.00%	
0	12.5mm	½"	20.64	6.89%	93.11%	
0	9.5mm	3/8"	8.06	2.69%	90.43%	
0	4.75mm	#4	32.41	10.81%	79.61%	
0	2.36mm	#8	27.64	9.22%	70.39%	
0	1.18mm	#16	23.59	7.87%	62.52%	
0	600µm	#30	20.04	6.69%	55.84%	
0	300µm	#50	24.18	8.07%	47.77%	
0	150µm	#100	23.12	7.71%	40.06%	
0	75µm	#200	20.93	6.98%	33.07%	

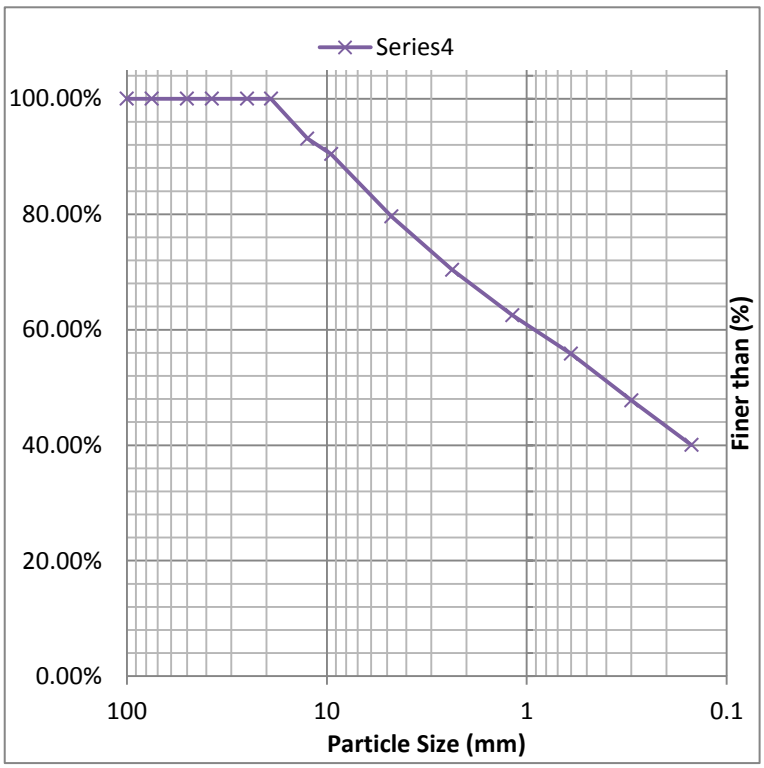
Pan #: AE - 7
Pan weight (gr): 125.79
Mass of pan & dried sample before wash (gr): 425.54
Original mass before wash (gr): **299.75**
Min. readability of scale (gr) = 0.30
Mass of pan & dried sample after wash (gr): 326.85
Mass of sample after wash & being dried (gr): **201.06**
Mass after mechanical shake (gr): **200.61**

Percent of Gravel = **20.39%**
Fine Content = **33.07%**
Percent of Sand = **46.54%**

D_{10} (mm)= **0.0750**
D_{30} (mm)= **0.0750**
D_{60} (mm)= **0.9612**
D_{50} (mm)= **0.3829**

Cc= **12.8**
Cu= **0.1**

Check for waste limt (0.3%) : 0.22%



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SIEVE ANALYSIS SHEET
(AASHTO T27-ASTM C136 and D6913)

Date:	5/20/2020
Project No.:	4161
Project Name:	Evergreen College
Project Address:	San Jose
Tested By:	Nami
Material:	Soil

Borehole Number and Depth: **B3 10'-11.5'**
Nominal Max. Size in sample = #4
Min. Test Sample size in kg [lb] = n/a
Nominal Dimension of seive = 8"

	Sieve Size	Sieve Size	Wt. Ret. (gr)	% Ret.	% Passing	Retained Limit (kg)
4	100mm	4"	0	0.00%	100.00%	
3	75mm	3"	0	0.00%	100.00%	
2	50mm	2"	0	0.00%	100.00%	
1	37.5mm	1 ½"	0	0.00%	100.00%	
1	25mm	1"	0	0.00%	100.00%	
1	19mm	¾"	0	0.00%	100.00%	
0	12.5mm	½"	0	0.00%	100.00%	
0	9.5mm	3/8"	0	0.00%	100.00%	
0	4.75mm	#4	11.87	3.63%	96.37%	
0	2.36mm	#8	20.42	6.25%	90.12%	
0	1.18mm	#16	21.73	6.65%	83.47%	
0	600µm	#30	18.61	5.70%	77.77%	
0	300µm	#50	20.84	6.38%	71.39%	
0	150µm	#100	24.7	7.56%	63.83%	
0	75µm	#200	33.57	10.27%	53.56%	

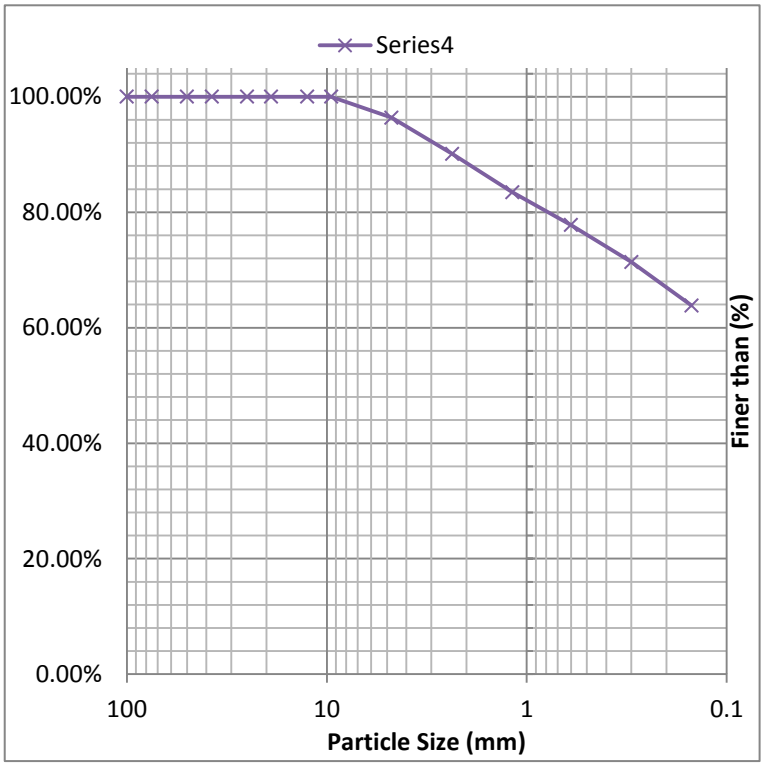
Pan #: AE - 21
Pan weight (gr): 126.36
Mass of pan & dried sample before wash (gr): 453.1
Original mass before wash (gr): **326.74**
Min. readability of scale (gr) = 0.33
Mass of pan & dried sample after wash (gr): 278.19
Mass of sample after wash & being dried (gr): **151.83**
Mass after mechanical shake (gr): **151.74**

Percent of Gravel = **3.63%**
Fine Content = **53.56%**
Percent of Sand = **42.81%**

D_{10} (mm)= **0.0750**
D_{30} (mm)= **0.0750**
D_{60} (mm)= **0.1220**
D_{50} (mm)= **0.0750**

Cc= **1.6**
Cu= **0.6**

Check for waste limt (0.3%) : 0.06%



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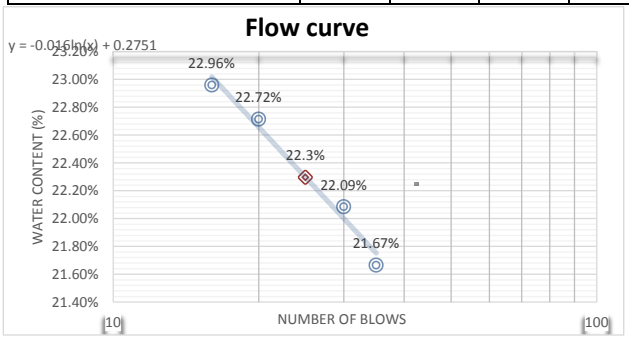
Atterberg Limits
(AASHTO T89 and T90 - ASTM D4318)

Sample Description:	SOIL	Report Date:	5/25/2020
Boring No:	B 3	Project No:	4161
Sample ID:	052520-4161	Project Name:	Evergreen College
Sample Depth:	2' - 3.5'	Project Address:	San Jose
Material:	SOIL	Technician:	Nami

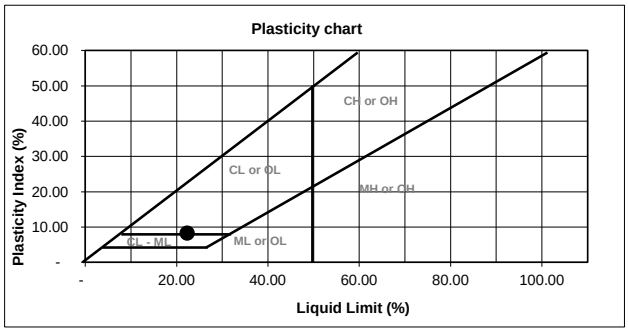
	Liquid Limit				Plastic Limit		
	1	2	3	4	1	2	3
No. of blows	35	30	20	16			
Tare No.	LB - 1	LB - 7	AD - 1	AL - 1	AC - 2	LB - 8	AL - 5
Gross Wet Weight (gr)	20.73	21.32	21.15	21.06	5.94	5.36	5.66
Gross Dry Weight (gr)	19.04	19.52	19.31	19.23	5.72	5.23	5.50
Tare Weight (gr)	11.24	11.37	11.21	11.26	4.25	4.33	4.22
Net Dry Weight (gr)	7.8	8.15	8.1	7.97	1.47	0.9	1.28
Weight of Water (gr)	1.69	1.8	1.84	1.83	0.22	0.13	0.16
Water Content (%)	21.67%	22.09%	22.72%	22.96%	14.97%	14.44%	12.50%



Group Symbol CL - ML

Shrinkage Limit Results

Liquid Limit %	22.30
Plastic Limit %	13.97
Plasticity Index	8.33
Shrinkage Limit %	
B – Value	
Toughness Index	



Tested By: Nami Reviewed By: A.F

Signature: Signature:

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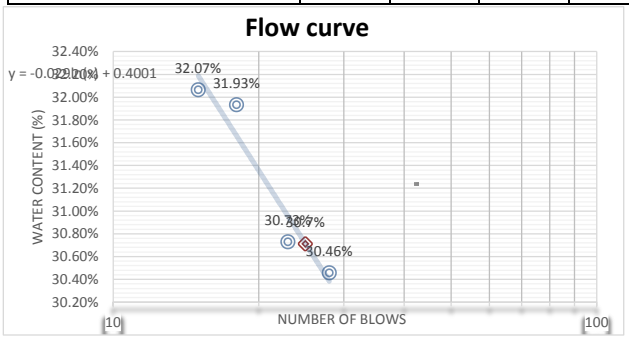
Atterberg Limits
(AASHTO T89 and T90 - ASTM D4318)

Sample Description:	SOIL	Report Date:	5/25/2020
Boring No:	B 3	Project No:	4161
Sample ID:	052520-4161	Project Name:	Evergreen College
Sample Depth:	10' -11.5'	Project Address:	San Jose
Material:	SOIL	Technician:	Nami

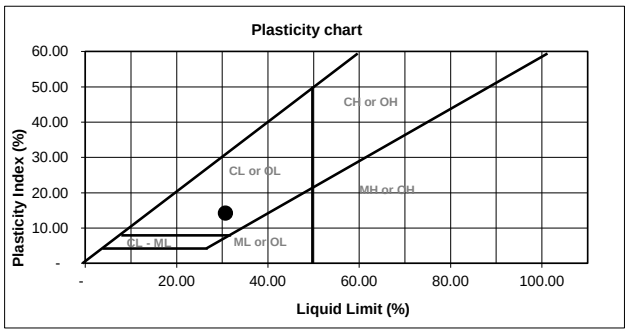
	Liquid Limit				Plastic Limit		
	1	2	3	4	1	2	3
No. of blows	28	23	18	15			
Tare No.	LB - 2	LB - 1	LB - 9	LB - 10	AE - 1	AE - 5	AC - 7
Gross Wet Weight (gr)	21.37	21.51	21.62	20.97	5.35	5.38	5.42
Gross Dry Weight (gr)	19.04	19.11	19.11	18.61	5.20	5.23	5.25
Tare Weight (gr)	11.39	11.30	11.25	11.25	4.27	4.34	4.21
Net Dry Weight (gr)	**7.65**	**7.81**	**7.86**	**7.36**	**0.93**	**0.89**	**1.04**
Weight of Water (gr)	**2.33**	**2.4**	**2.51**	**2.36**	**0.15**	**0.15**	**0.17**
Water Content (%)	**30.46%**	**30.73%**	**31.93%**	**32.07%**	**16.13%**	**16.85%**	**16.35%**



Group Symbol CL

Shrinkage Limit Results

Liquid Limit %	30.71
Plastic Limit %	16.44
Plasticity Index	14.27
Shrinkage Limit %	
B – Value	
Toughness Index	



Tested By: Nami Reviewed By: A.F

Signature: Signature:

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ACHIEVEMENT ENGINEERING CORP.

Moisture Density
(AASHTO T265 - ASTM D2216)

Report Date:	5/25/2020
Project No:	4161
Project Name:	Evergreen College
Project Address:	San Jose
Technician:	Nami

Type of Material:	Soil	Sample Description:	
Source:	Field		
Sampled by:	Nami	Sample Date:	5/14/2020

Sample No:	B4 1'- 2'	B4 2' - 3.5'	B4 4' - 5'	B4 5' - 6.5'	B4 8' - 9'	B4 10'-11.5'	B4 13'-14'
Ht. of Sample:	Disturbed	6.00	Disturbed	6.00	Disturbed	5.00	Disturbed
Tare No:	H - 6	H - 35	H - 18	H - 1	H - 10	H - 24	H - 20
Gross Wet Wt:	781.94	1105.39	936.28	1137.12	820.57	930.20	1070.40
Gross Dry Wt:	728.42	1020.48	855.61	1040.58	737.71	845.88	924.58
Tare Wt:	130.00	127.42	126.44	125.55	126.79	126.54	127.68
Net Dry Wt:	598.42	893.06	729.17	915.03	610.92	719.34	796.90
Wt. of Water:	53.52	84.91	80.67	96.54	82.86	84.32	145.82
% Moisture	9%	10%	11%	11%	14%	12%	18%
Liners Dia		2.5"		2.5"		2.5"	
Density Factors		0.860		0.860		0.860	
Dry Density		128.01		131.15		123.73	

Tested By: Nami

Signature: _____

Reviewed E A.F

Signature: _____

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SIEVE ANALYSIS SHEET
(AASHTO T27-ASTM C136 and D6913)

Date:	5/20/2020
Project No.:	4161
Project Name:	Evergreen College
Project Address:	San Jose
Tested By:	Nami
Material:	Soil

Borehole Number and Depth: **B4 2'-3.5'**
Nominal Max. Size in sample = ½"
Min. Test Sample size in kg [lb] = 2 [4]
Nominal Dimension of seive = 8"

	Sieve Size	Sieve Size	Wt. Ret. (gr)	% Ret.	% Passing	Retained Limit (kg)
4	100mm	4"	0	0.00%	100.00%	
3	75mm	3"	0	0.00%	100.00%	
2	50mm	2"	0	0.00%	100.00%	
1	37.5mm	1 ½"	0	0.00%	100.00%	
1	25mm	1"	0	0.00%	100.00%	
1	19mm	¾"	0	0.00%	100.00%	
0	12.5mm	½"	42.74	12.50%	87.50%	
0	9.5mm	3/8"	19.76	5.78%	81.72%	
0	4.75mm	#4	52.41	15.33%	66.40%	
0	2.36mm	#8	43.09	12.60%	53.80%	
0	1.18mm	#16	35.43	10.36%	43.44%	
0	600µm	#30	27.96	8.18%	35.26%	
0	300µm	#50	30.17	8.82%	26.44%	
0	150µm	#100	24.52	7.17%	19.27%	
0	75µm	#200	15.92	4.66%	14.61%	

Pan #: H - 35
Pan weight (gr): 127.42

Mass of pan & dried sample before wash (gr): 469.4

Original mass before wash (gr): **341.98**

Min. readability of scale (gr) = 0.34

Mass of pan & dried sample after wash (gr): 419.56

Mass of sample after wash & being dried (gr): **292.14**

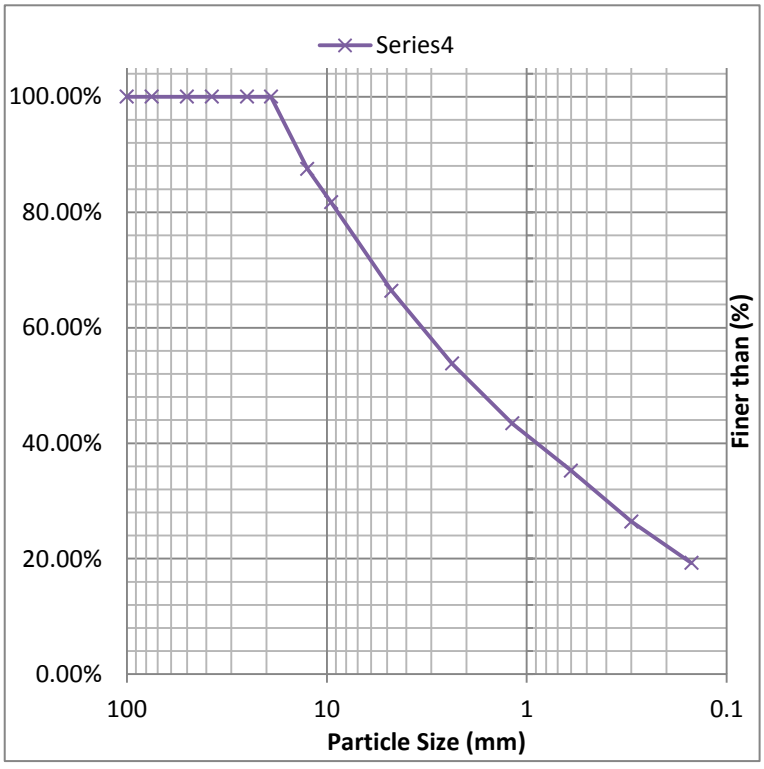
Mass after mechanical shake (gr): **292**

Percent of Gravel = **33.60%**
Fine Content = **14.61%**
Percent of Sand = **51.78%**

D_{10} (mm)= **0.0750**
D_{30} (mm)= **0.4211**
D_{60} (mm)= **3.5363**
D_{50} (mm)= **1.9274**

Cc= **47.2**
Cu= **0.7**

Check for waste limt (0.3%) : 0.05%



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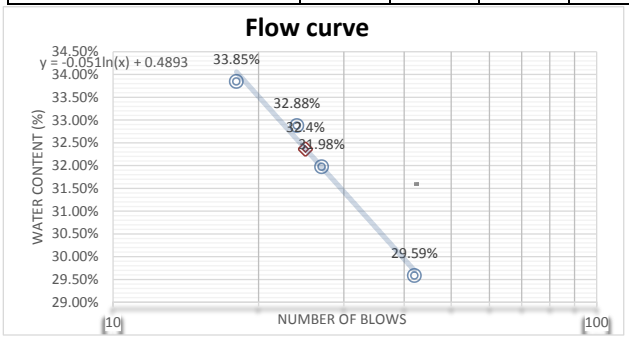
Atterberg Limits
(AASHTO T89 and T90 - ASTM D4318)

Sample Description:	SOIL	Report Date:	5/25/2020
Boring No:	B 4	Project No:	4161
Sample ID:	052520-4161	Project Name:	Evergreen College
Sample Depth:	2' - 3.5'	Project Address:	San Jose
Material:	SOIL	Technician:	Nami

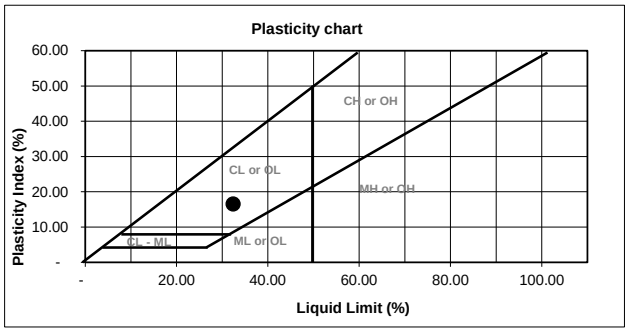
	Liquid Limit				Plastic Limit		
	1	2	3	4	1	2	3
No. of blows	42	27	24	18			
Tare No.	LB - 3	AB - 5	AE - 5	AL - 9	L - 3	AE - 2	AC - 4
Gross Wet Weight (gr)	21.28	23.16	22.01	21.53	5.35	5.62	5.51
Gross Dry Weight (gr)	18.99	20.25	19.34	18.90	5.20	5.42	5.38
Tare Weight (gr)	11.25	11.15	11.22	11.13	4.30	4.33	4.32
Net Dry Weight (gr)	**7.74**	**9.1**	**8.12**	**7.77**	**0.9**	**1.09**	**1.06**
Weight of Water (gr)	**2.29**	**2.91**	**2.67**	**2.63**	**0.15**	**0.2**	**0.13**
Water Content (%)	**29.59%**	**31.98%**	**32.88%**	**33.85%**	**16.67%**	**18.35%**	**12.26%**



Group Symbol CL

Shrinkage Limit Results

Liquid Limit %	32.36
Plastic Limit %	15.76
Plasticity Index	16.61
Shrinkage Limit %	
B – Value	
Toughness Index	



Tested By: Nami Reviewed By: A.F

Signature: Signature:

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Corrosivity Tests Summary

CTL # 726-018 **Date:** 5/20/2020 **Tested By:** PJ **Checked:** PJ
Client: Achievement **Project:** Evergreen College **Proj. No:** 4161
Remarks:

Sample Location or ID			Resistivity @ 15.5 °C (Ohm-cm)			Chloride	Sulfate		pH	ORP (Redox)		Sulfide	Moisture	Soil Visual Description
			As Rec.	Min	Sat.	mg/kg	mg/kg	%				Qualitative	At Test	
						Dry Wt.	Dry Wt.	Dry Wt.		E_H (mv)	At Test	by Lead	%	
Boring	Sample, No.	Depth, ft.	ASTM G57	Cal 643	ASTM G57	ASTM D4327	ASTM D4327	ASTM D4327	ASTM G51	ASTM G200	Temp °C	Acetate Paper	ASTM D2216	
B2	1	0.0-1	-	-	2,668	277	121	0.0121	6.9	-	-	-	16.7	Dark Gray Silty SAND w/ Clay pockets

Corrosivity Tests Summary

CTL # 726-020 **Date:** 5/29/2020 **Tested By:** PJ **Checked:** PJ
Client: Achievement **Project:** Evergreen College **Proj. No:** 4161
Remarks:

Sample Location or ID			Resistivity @ 15.5 °C (Ohm-cm)			Chloride	Sulfate		pH	ORP (Redox)		Sulfide	Moisture	Soil Visual Description
			As Rec.	Min	Sat.	mg/kg	mg/kg	%		E_H (mv)	At Test	Qualitative by Lead	At Test %	
						Dry Wt.	Dry Wt.	Dry Wt.						
Boring	**Sample, No.**	**Depth, ft.**	ASTM G57	Cal 643	ASTM G57	ASTM D4327	ASTM D4327	ASTM D4327	ASTM G51	ASTM G200	Temp °C	Acetate Paper	ASTM D2216	
B3	1	8-9	-	-	2,321	20	113	0.0113	6.1	-	-	-	16.2	Dark Yellowish Brown Sandy CLAY w/ Gravel

Corrosivity Test Summary

COOPER TESTING LABORATORY

CTL # 726-019 **Date:** 5/22/2020 **Tested By:** PJ **Checked:** PJ
Client: Achievement **Project:** Evergreen College **Proj. No:** 4161
Remarks:

Sample Location or ID			Resistivity @ 15.5 °C (Ohm-cm)			Chloride	Sulfate		pH	ORP	Moisture	Soil Visual Description
Boring	Sample, No.	Depth, ft.	As Rec.	Minimum	Saturated	mg/kg	mg/kg	%		(Redox)	At Test	
						Dry Wt.	Dry Wt.	Dry Wt.		mv	%	
			ASTM G57	Cal 643	ASTM G57	Cal 422-mod.	Cal 417-mod.	Cal 417-mod.	Cal 643	SM 2580B	ASTM D2216	
B4	1	2-3.5	-	1972	-	79	85	0.0085	6.8	-	6.2	Yellowish Brown Sandy CLAY w/ Gravel

Expansion Index

ASTM D-4829-07 _X

CTL Job No.:	726-021	**Boring:**	B1	**Date:**	6/1/2020
Client:	Achievement	**Sample:**	1	**By:**	PJ
Project Name:	Evergreen College	**Depth:**	0-1'		
Project No:	4161				

Visual Description: Reddish Brown Sandy CLAY w/ Gravel

Processing:

Percent Passing #4 Sieve

Total Air Dry Weight:	N/A
Wt. Retained on #4 Sieve:	N/A
% Retained	N/A
% Passing #4 Sieve:	N/A

Sample Dimensions

Height (in.)= 1.001 **Diameter (in.) =** 4.017

Moisture Calcs

	Initial	Final
Tare #		
Wet Wt. + Tare, (gm)	711.2	748.0
Dry Wt. + Tare, (gm)	674.0	674.0
Tare Wt., (gm)	112.0	112.0
Wt. Of Water, (gm)	37.2	73.9
% Water	10.2	20.2

Remolding:

Tamp two lifts, 15 blows/lift @ slightly below optimum moisture content

	Initial	Final	
Ring & Sample:	599.3	636.0	grams
Ring:	196.4	196.4	grams
Remolded Wet Wt.:	402.8	439.6	grams
Wet Density	121.0	128.5	pcf
Dry Density	109.8	106.9	pcf
% Sat. = (2.7)(dry dens.)(m/c) / 168.48 - (dry dens.)	51.4	94.7	UBC Saturation range 49-51% / ASTM Saturation range 48-52%

Expansion Test:

Date	Time	Dial	Delta h, %
5/27/2020	12:45	0.0000	0.000
5/27/2020	13:21	-0.0155	1.548
5/28/2020	7:53	-0.0273	2.727
5/28/2020	10:11	-0.0273	2.727
		Total Dial	2.7

Tested with 1 psi Surcharge

Remarks:

Expansion Index

initial dial - final dial / initial sample height x 1000

Results

EI =	**27**

This test is a simplified index test and may not show the full potential for expansion and/or shrinkage. Use result with caution! See ASTM D 3877 or D4546

Expansion Index

ASTM D-4829-07 _X

CTL Job No.:	726-020	**Boring:**	B3	**Date:**	6/1/2020
Client:	Achievement	**Sample:**	1	**By:**	PJ
Project Name:	Evergreen College	**Depth:**	2-3.5'		
Project No:	4161				

Visual Description: Dark Yellowish Brown Sandy CLAY w/ Gravel

Processing:

Percent Passing #4 Sieve

Total Air Dry Weight:	N/A
Wt. Retained on #4 Sieve:	N/A
% Retained	N/A
% Passing #4 Sieve:	N/A

Sample Dimensions

Height (in.)= 1.001 **Diameter (in.) =** 4.017

Moisture Calcs

	Initial	Final
Tare #		
Wet Wt. + Tare, (gm)	725.9	755.9
Dry Wt. + Tare, (gm)	690.4	690.4
Tare Wt., (gm)	115.5	115.5
Wt. Of Water, (gm)	35.5	65.5
% Water	9.5	17.5

Remolding:

Tamp two lifts, 15 blows/lift @ slightly below optimum moisture content

	Initial	Final	
Ring & Sample:	610.4	640.4	grams
Ring:	199.5	199.5	grams
Remolded Wet Wt.:	410.9	440.9	grams
Wet Density	123.4	129.7	pcf
Dry Density	112.7	110.4	pcf
% Sat. = (2.7)(dry dens.)(m/c) / 168.48 - (dry dens.)	51.6	89.6	UBC Saturation range 49-51% ASTM Saturation range 48-52%

Expansion Test:

Date	Time	Dial	Delta h, %
5/27/2020	14:03	0.0000	0.000
5/28/2020	7:52	-0.0208	2.078
5/28/2020	10:12	-0.0209	2.088
5/28/2020	11:26	-0.0209	2.088
		Total Dial	2.1

Tested with 1 psi Surcharge

Remarks:

Expansion Index

initial dial - final dial / initial sample height x 1000

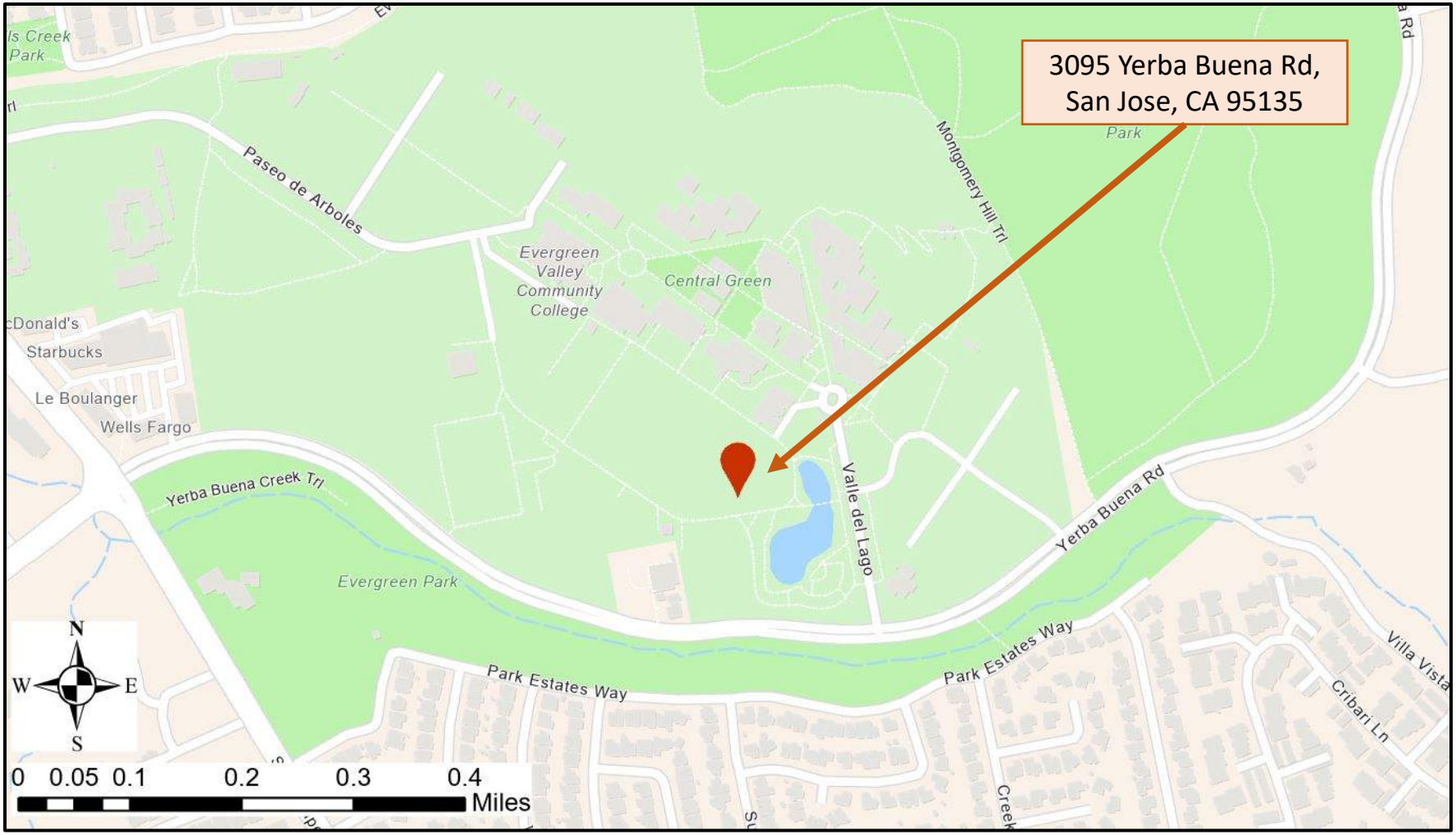
Results

EI = 21

This test is a simplified index test and may not show the full potential for expansion and/or shrinkage. Use result with caution! See ASTM D 3877 or D4546

Exhibit III

Maps



ACHIEVEMENT ENGINEERING CORP.	Project Number: 4161	Project Title: SJECCD - 3095 Yerba Buena Rd - Exhibit III	
		Vicinity Map	

REVISIONS

	MM/DD/YYYY	REMARKS
0	05/16/2020	
1	___/___/___	
2	___/___/___	
3	___/___/___	
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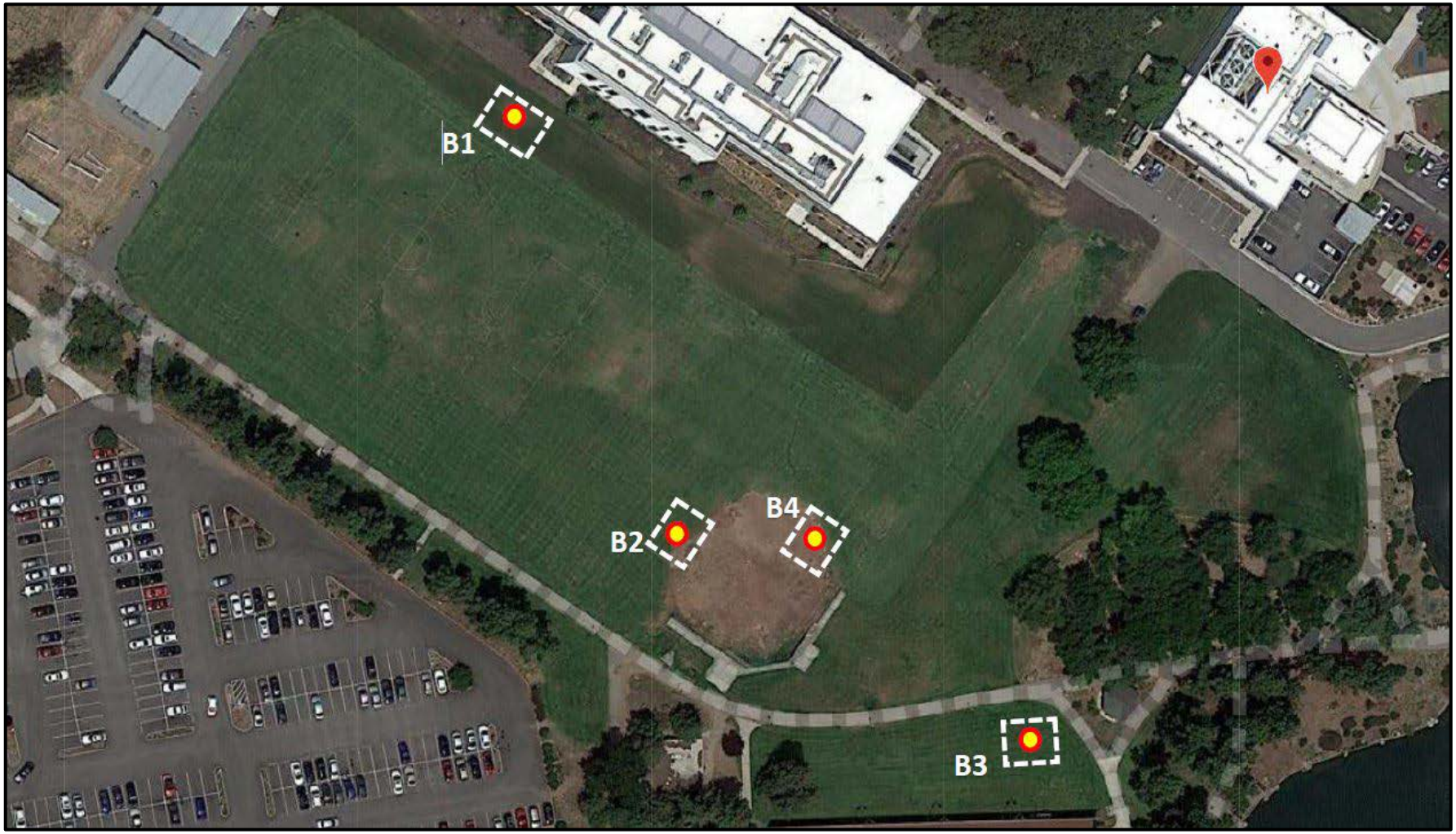
01



ACHIEVEMENT ENGINEERING CORP.

Project Number: 4161	Project Title: SJECCD - 3095 Yerba Buena Rd - Exhibit III
Boring Location Map	

REVISIONS

	MM/DD/YYYY	REMARKS
0	05/16/2020	
1	___/___/___	
2	___/___/___	
3	___/___/___	
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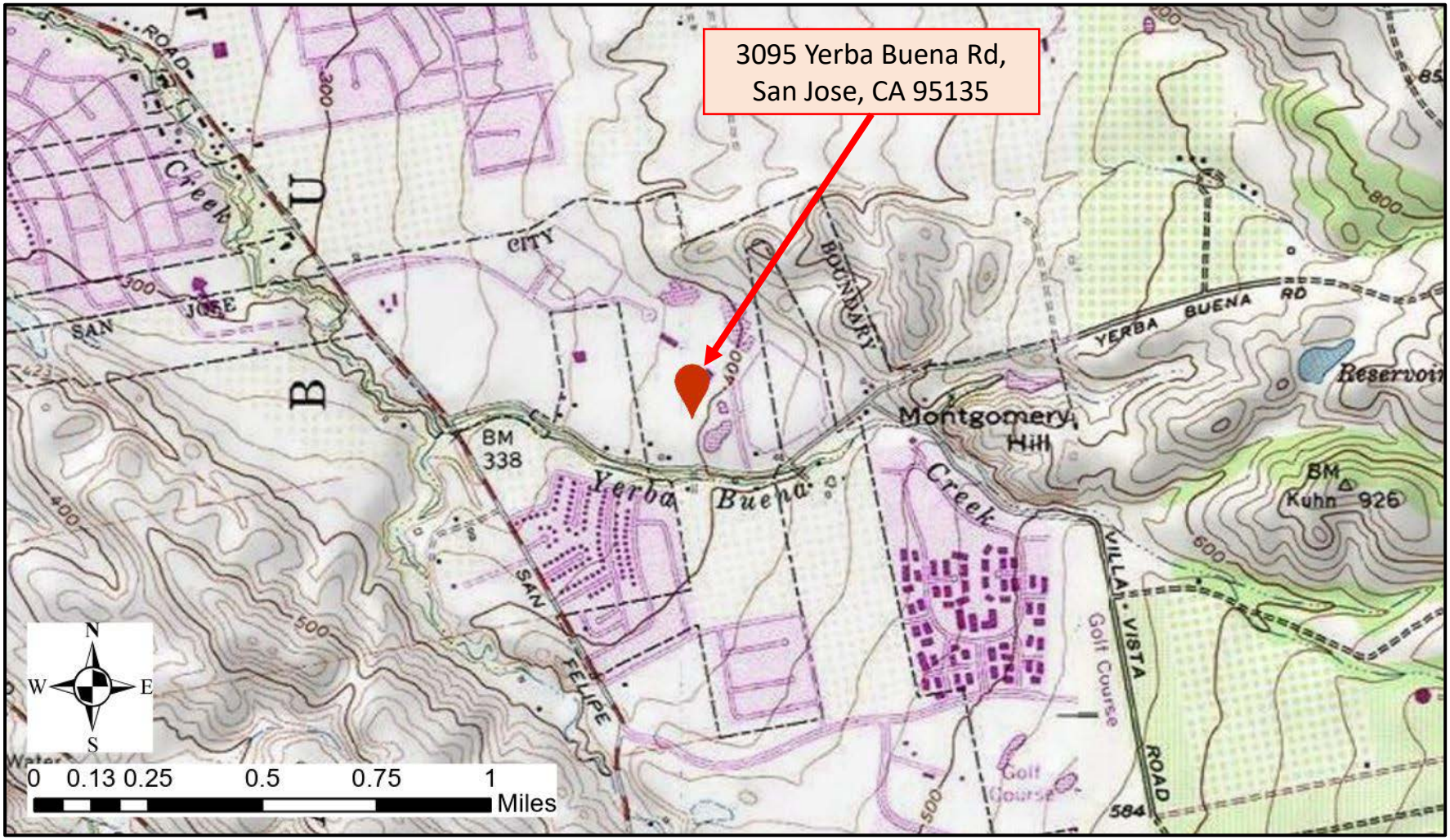
02



ACHIEVEMENT ENGINEERING CORP.	Project Number: 4161	Project Title: SJECCD - 3095 Yerba Buena Rd - Exhibit III
	Site Location on 7.5' quadrangle Series Topographical Map by USGS	

REVISIONS		
	MM/DD/YYYY	REMARKS
0	05/16/2020	
1	___/___/___	
2	___/___/___	
3	___/___/___	
4	___/___/___	

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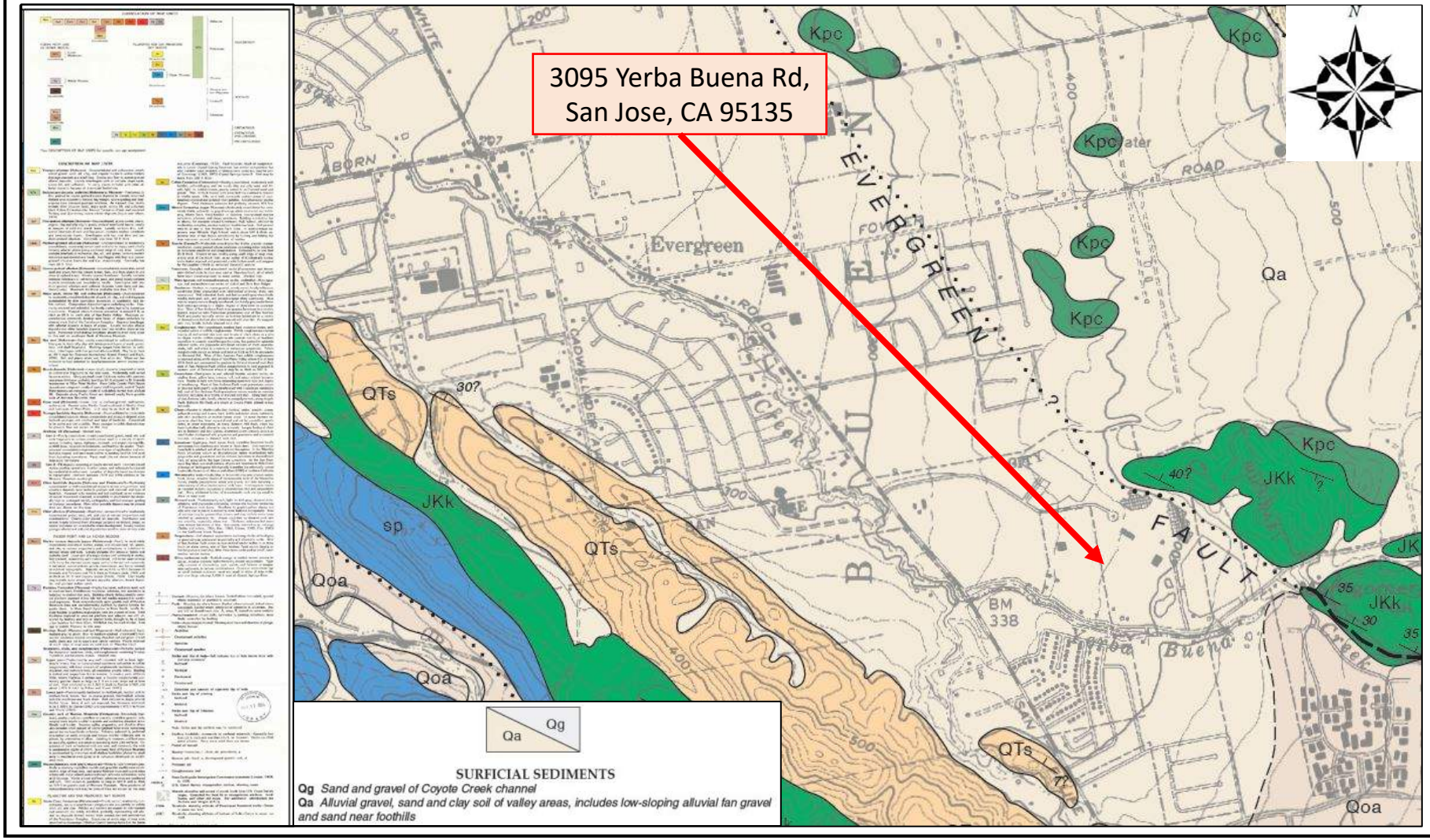
03



ACHIEVEMENT ENGINEERING CORP.

Project Number:	Project Title:
4161	SJECCD - 3095 Yerba Buena Rd - Exhibit III

Site Location on 7.5' quadrangle Series
Geological Map by USGS

REVISIONS

	MM/DD/YYYY	REMARKS
0	05/16/2020	
1	___/___/___	
2	___/___/___	
3	___/___/___	
4	___/___/___	

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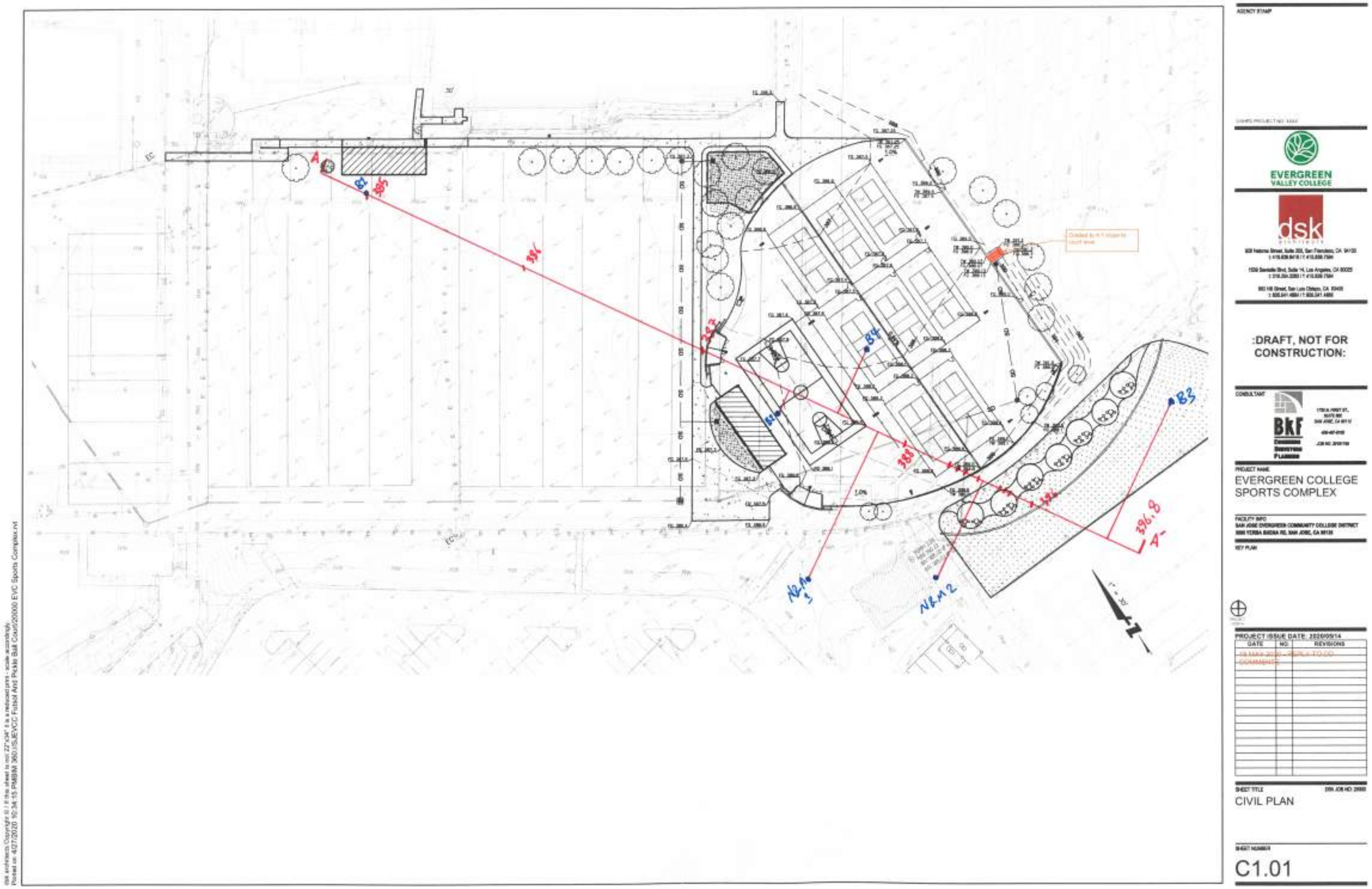
04



ACHIEVEMENT ENGINEERING CORP.

Project Number: 4161	Project Title: SJECCD - 3095 Yerba Buena Rd - Exhibit III
Cross Section 1	

REVISIONS		
	MM/DD/YYYY	REMARKS
0	05/16/2020	
1	__/__/__	
2	__/__/__	
3	__/__/__	
4	__/__/__	

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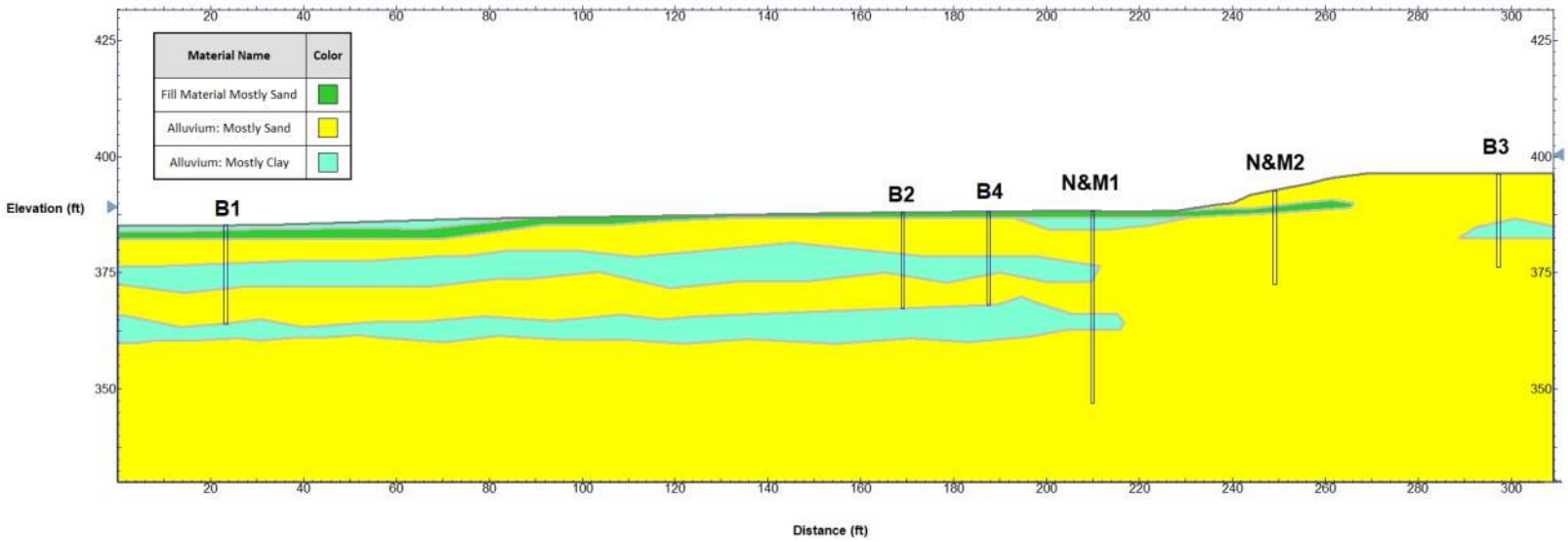
04-1



ACHIEVEMENT ENGINEERING CORP.	Project Number: 4161	Project Title: SJECCD - 3095 Yerba Buena Rd - Exhibit III
	Cross Section 2	

REVISIONS

	MM/DD/YYYY	REMARKS
0	05/16/2020	
1	___ / ___/___	
2	___ / ___/___	
3	___ / ___/___	
4	___ / ___/___	

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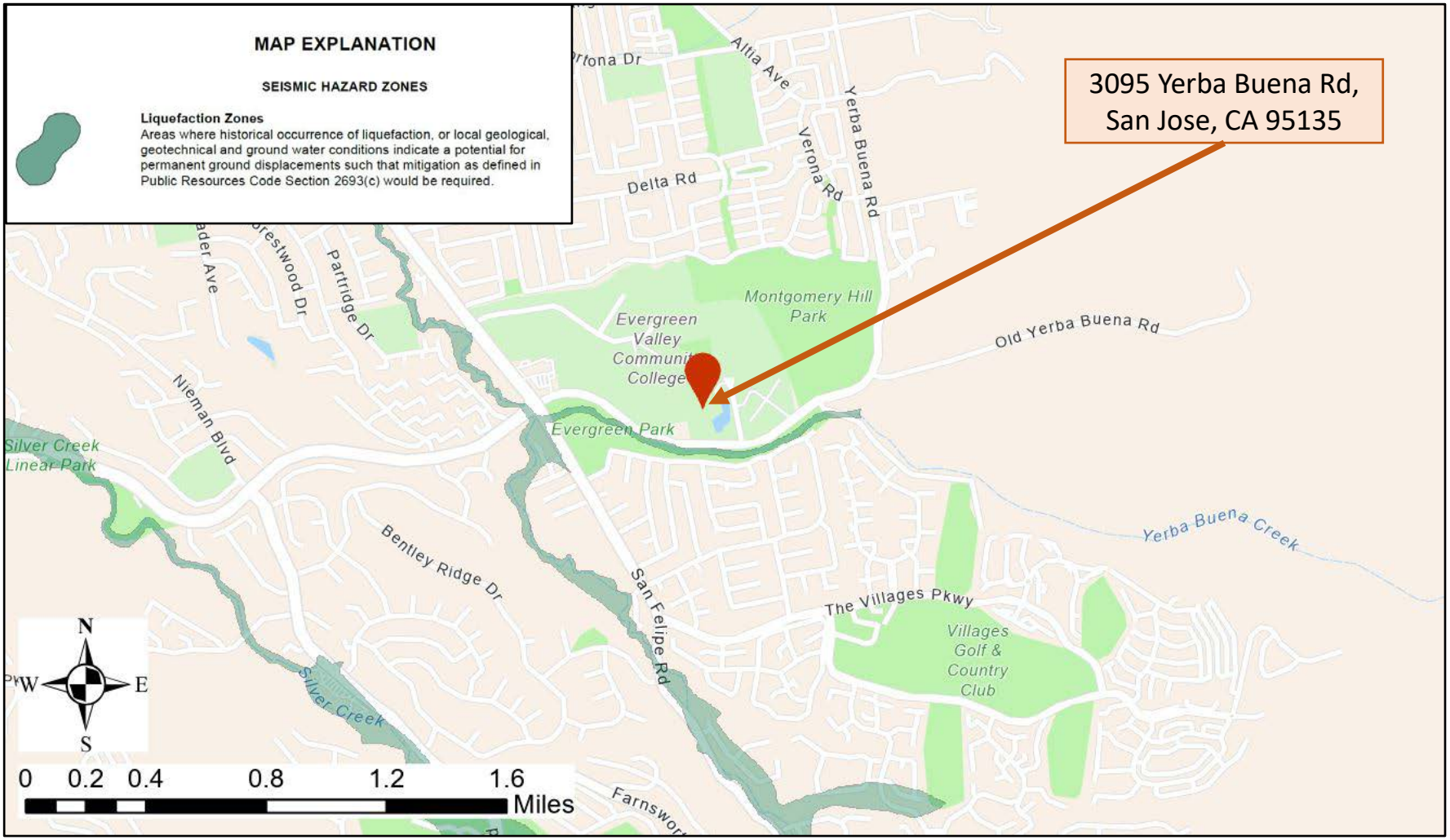
04-2



ACHIEVEMENT ENGINEERING CORP.	Project Number: 4161	Project Title: SJECCD - 3095 Yerba Buena Rd - Exhibit III
	Site Location on State Map for Earthquake Zone of required investigation by CGS (site is **NOT** located within hazard zone)	

REVISIONS		
	MM/DD/YYYY	REMARKS
0	05/16/2020	
1	___/___/___	
2	___/___/___	
3	___/___/___	
4	___/___/___	

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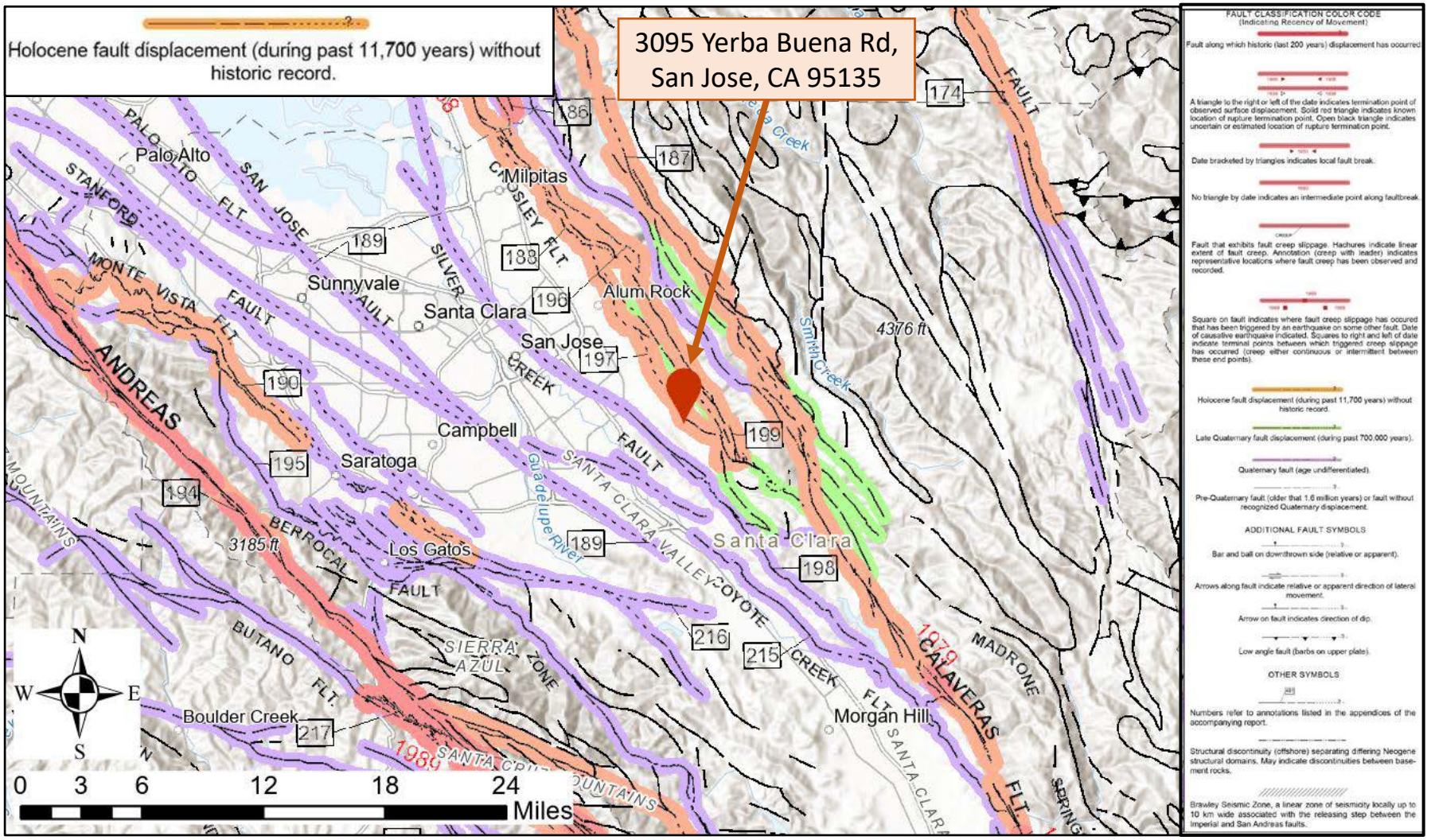
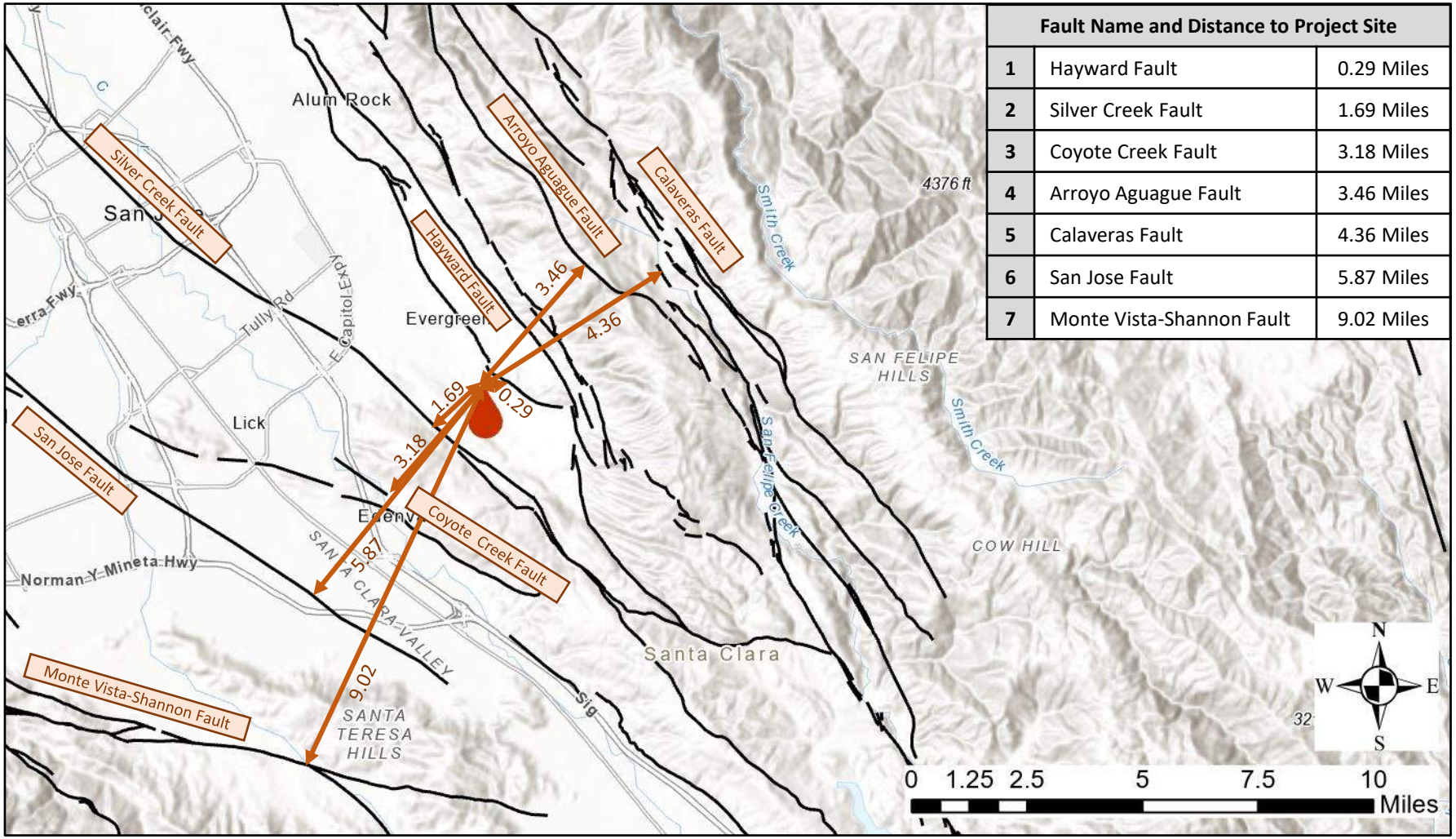
05



ACHIEVEMENT ENGINEERING CORP.	Project Number: 4161	Project Title: SJECCD - 3095 Yerba Buena Rd - Exhibit III	M
	Site Location on Fault Activity Map of California (2010) by CGS		06

REVISIONS

	MM/DD/YYYY	REMARKS
0	05/16/2020	
1	___/___/___	
2	___/___/___	
3	___/___/___	
4	___/___/___	



Fault Name and Distance to Project Site		
1	Hayward Fault	0.29 Miles
2	Silver Creek Fault	1.69 Miles
3	Coyote Creek Fault	3.18 Miles
4	Arroyo Aguague Fault	3.46 Miles
5	Calaveras Fault	4.36 Miles
6	San Jose Fault	5.87 Miles
7	Monte Vista-Shannon Fault	9.02 Miles

ACHIEVEMENT ENGINEERING CORP.

Project Number: 4161

Project Title: SJECCD - 3095 Yerba Buena Rd - Exhibit III

Site Location distance to Nears Faults (10-mile Radius)

REVISIONS

	MM/DD/YYYY	REMARKS
0	05/16/2020	
1	___/___/___	
2	___/___/___	
3	___/___/___	
4	___/___/___	

M

07

ACHIEVEMENT ENGINEERING CORP.

Project Number: 4161	Project Title: SJECCD - 3095 Yerba Buena Rd - Exhibit III
Alquist-Priolo Earthquake Fault Zones (Santa Clara County Hazard Zone for Hayward Fault)	

REVISIONS

	MM/DD/YYYY	REMARKS
0	05/16/2020	
1	___/___/___	
2	___/___/___	
3	___/___/___	
4	___/___/___	

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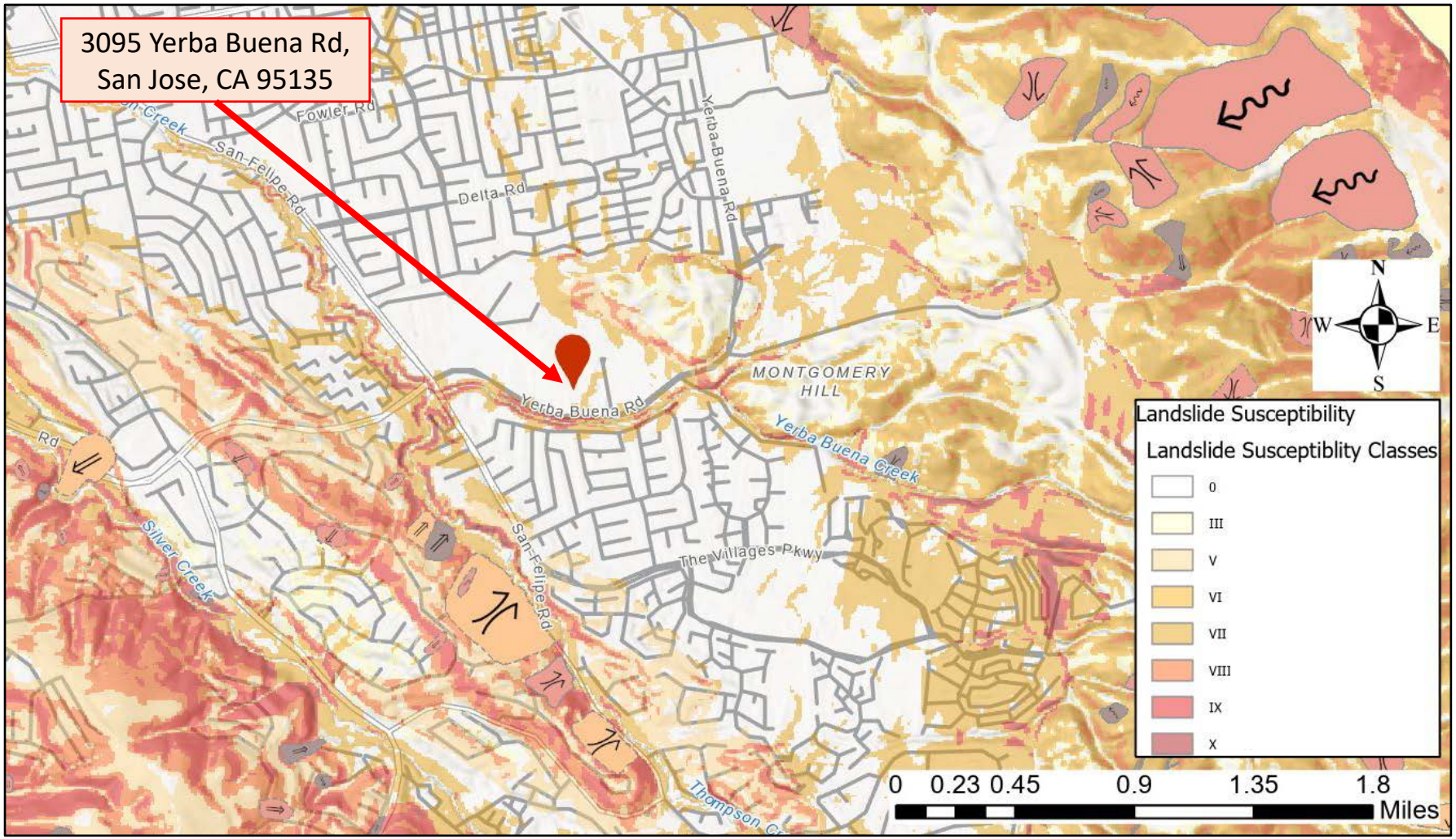
08



ACHIEVEMENT ENGINEERING CORP.	Project Number: 4161	Project Title: SJECCD - 3095 Yerba Buena Rd - Exhibit III	REVISIONS
	Project Location on Landslide Susceptibility Map (Source USGS) site is within **Class 0 – No Susceptibility**		

	MM/DD/YYYY	REMARKS
0	05/16/2020	
1	___/___/___	
2	___/___/___	
3	___/___/___	
4	___/___/___	

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09

Exhibit IV
USGS Seismic Design

4161

3095 Yerba Buena Rd, San Jose, CA 95135, USA

Latitude, Longitude: 37.3001189, -121.7627821

Date	5/29/2020, 9:44:25 AM
Design Code Reference Document	ASCE7-16
Risk Category	III
Site Class	D - Default (See Section 11.4.3)

Type	Value	Description
S_S	1.981	MCE_R ground motion. (for 0.2 second period)
S_1	0.759	MCE_R ground motion. (for 1.0s period)
S_{MS}	2.377	Site-modified spectral acceleration value
S_{M1}	null -See Section 11.4.8	Site-modified spectral acceleration value
S_{DS}	1.585	Numeric seismic design value at 0.2 second SA
S_{D1}	null -See Section 11.4.8	Numeric seismic design value at 1.0 second SA

Type	Value	Description
SDC	null -See Section 11.4.8	Seismic design category
F_a	1.2	Site amplification factor at 0.2 second
F_v	null -See Section 11.4.8	Site amplification factor at 1.0 second
PGA	0.832	MCE_G peak ground acceleration
F_{PGA}	1.2	Site amplification factor at PGA
PGA_M	0.999	Site modified peak ground acceleration
T_L	12	Long-period transition period in seconds
SsRT	2.95	Probabilistic risk-targeted ground motion. (0.2 second)
SsUH	3.145	Factored uniform-hazard (2% probability of exceedance in 50 years) spectral acceleration
SsD	1.981	Factored deterministic acceleration value. (0.2 second)
S1RT	1.049	Probabilistic risk-targeted ground motion. (1.0 second)
S1UH	1.142	Factored uniform-hazard (2% probability of exceedance in 50 years) spectral acceleration.
S1D	0.759	Factored deterministic acceleration value. (1.0 second)
PGAd	0.832	Factored deterministic acceleration value. (Peak Ground Acceleration)
C_{RS}	0.938	Mapped value of the risk coefficient at short periods

Type	Value	Description
C_{R1}	0.919	Mapped value of the risk coefficient at a period of 1 s

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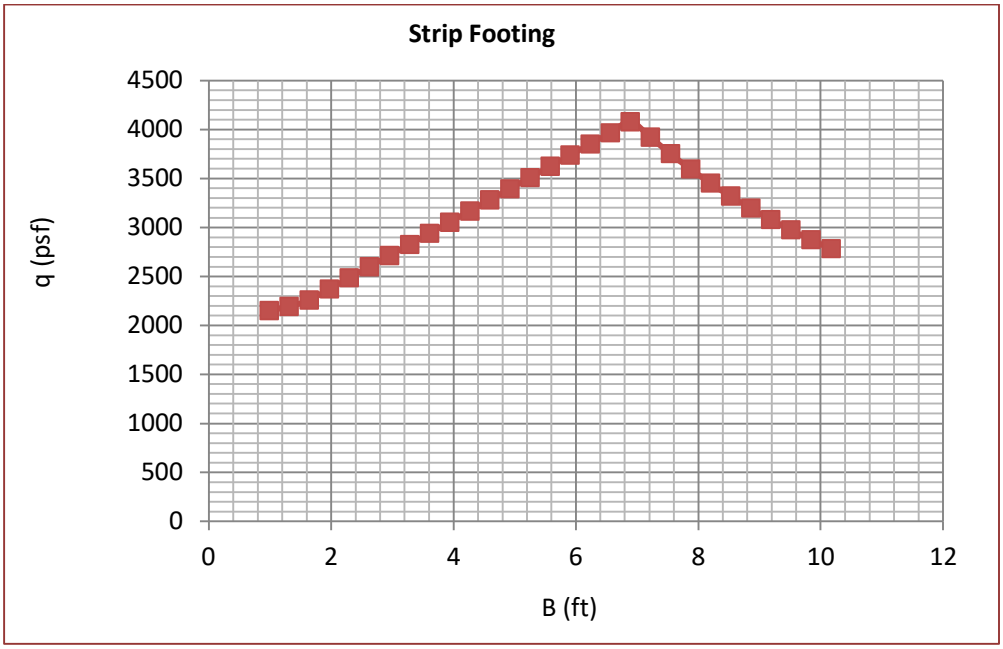
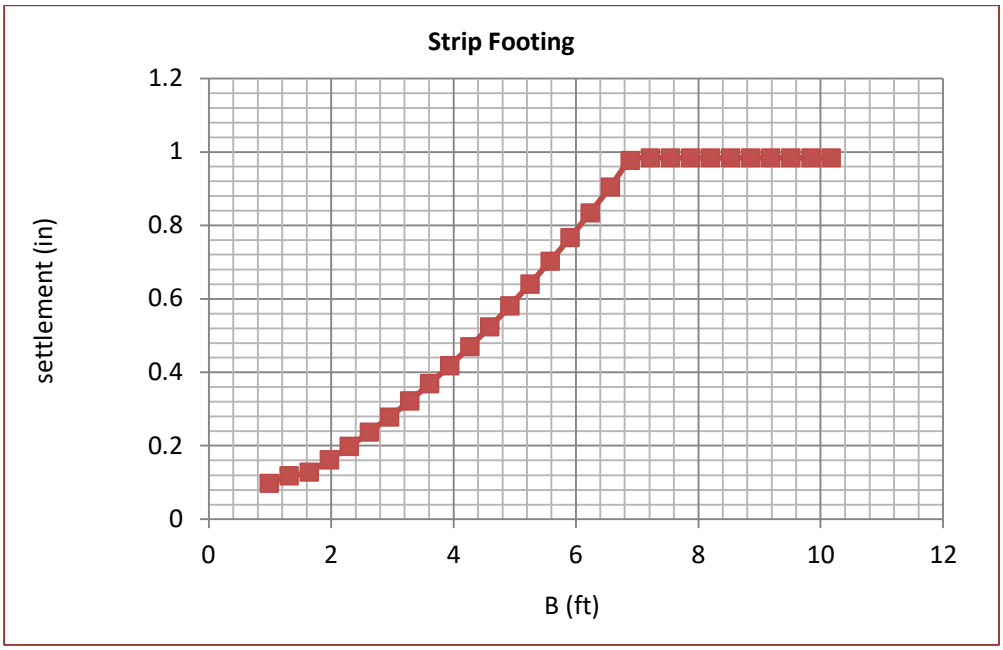
Exhibit V
Shallow Footing Design


Strip Footing
q (psf)
4500
4000
3500
3000
2500
2000
1500
1000
500
0
0
2
4
6
8
10
12
B (ft)


Strip Footing
settlement (in)
1.2
1
0.8
0.6
0.4
0.2
0
0
2
4
6
8
10
12
B (ft)

Appendix D
Traffic Study

Hexagon Transportation Consultants, Inc.

Memorandum

Date: July 13, 2020

To: Mr. Paul Stephenson, Environmental Science Associates

From: Gary Black
Jocelyn Lee

Subject: Trip Generation Study, VMT Analysis, and Site Plan Review for the Evergreen Valley College Sports Complex Project in San Jose, California

Hexagon Transportation Consultants, Inc. has completed a traffic study for the proposed Evergreen Valley College (EVC) Sports Complex project in San Jose, California. The project would build 8 pickleball courts and one futsal/basketball court to replace the existing softball field in the western portion of the campus (see Figure 1). The facilities would serve students during the day and would be available to the public outside of school hours. Access to the site would be provided by the existing driveways on Yerba Buena Road to the existing adjacent parking lot.

Project Trip Generation

Trip generation rates resulting from new development proposed within the City of San Jose typically are estimated using trip rates published in the Institute of Transportation Engineers' (ITE) *Trip Generation Manual*, 10th Edition. Trips that would be generated by the proposed development were estimated using the ITE trip rates for "Tennis Courts" (Land use 490) and "Soccer Complex" (Land Use 488). Pickleball is a paddleball sport that combines elements of tennis, badminton, and table tennis. Thus, the "Tennis Courts" ITE land use category is the most similar. The "Soccer Complex" ITE land use is an acceptable land use for the futsal/basketball court because it refers to an outdoor facility that is used for non-professional soccer games. Futsal is described as a ball sport, played on a hard court, between two teams of five players each.. Futsal teams have fewer players than soccer teams; thus, the trip generation presented provides a more conservative number of trips.

As shown in the Table 1, the project is estimated to generate approximately 311 daily trips and 50 PM peak hour trips. Because the new fields are closed to the public during school hours, trips would not be generated during the AM peak hour. Daily trips were estimated using the Urban Land Institute (ULI) Shared Parking Calculation Model (Version 1.1, March 2020). The land use "Health Club" was used to determine typical sports facility usage throughout the day. The pattern was used to determine the proportion of daily trips that would occur between 3:00 PM and 10:00 PM. This proportion was used to determine the number of daily trips.

With the trips spread throughout the afternoon and evening periods and on weekends, the project is not expected to affect the traffic operations at the nearby intersections.

Figure 1
Site Location

Table 1
Project Trip Generation Estimates

Land Use	Size	Daily[1] Trips	PM Peak Hour[2] Rate	PM Peak Hour[2] Trips
Pickleball Court	8 courts	210	4.210	34
Futsal Court	1 court	101	16.430	16
Total Project Trips		**311**		**50**

Notes:
1. Urban Land Institute (ULI) Shared Parking Calculation Model (Version 1.1, March 2020) used to factor ITE daily trips to represent 3-10 PM.
2. Average rates from the ITE Trip Generation Manual, 10th Edition 2017 used for PM peak hour trips. Land Use 490 used for Pickleball courts and Land Use 488 used for Futsal courts.

VMT Analysis

The new courts would not cause an increase in regional trips but rather result in a change in trip making because some people would come to the proposed courts instead of other nearby courts. There are various pickleball and futsal courts within the south Bay Area region (see Figure 2). The addition of the proposed pickleball and futsal courts would potentially result in a change in travel patterns for players attending these existing courts. It was assumed that some players would utilize the new courts, rather than the existing courts. Therefore, shorter trips would result as players who live closer to the Evergreen Valley College courts would choose to travel the shorter distance compared to the next closest court.

Site Access

The site access and on-site circulation evaluation is based on the June 24, 2020 site plan prepared by DSK Architects. Vehicle access to the parking lot would be provided via two existing full-access driveways on Yerba Buena Road. The driveways provide access to an existing surface parking lot, located next to the proposed courts. The existing parking lot generally has vacant parking spaces during the evenings, once student activities begin winding down at 3 PM, and during the weekends. The project would create a new pedestrian walkway between the existing surface parking lot and the proposed courts (see Figure 3). The project would also create a new pedestrian walkway surrounding the western and northern edges of the court.

Conclusions

The project is expected to generate 311 daily trips, 50 PM peak hour trips, and no AM peak hour trips, as the courts would be closed to the public during peak school hours. The daily trips would be spread out throughout the afternoon, beginning at 3:00 PM, and into the evening. The project is not expected to increase VMT as the new courts would allow users to make shorter trips by visiting the proposed courts as opposed to existing courts farther away. Users would be able to access the courts via the existing driveways on Yerba Buena Road and park at the existing surface lot.

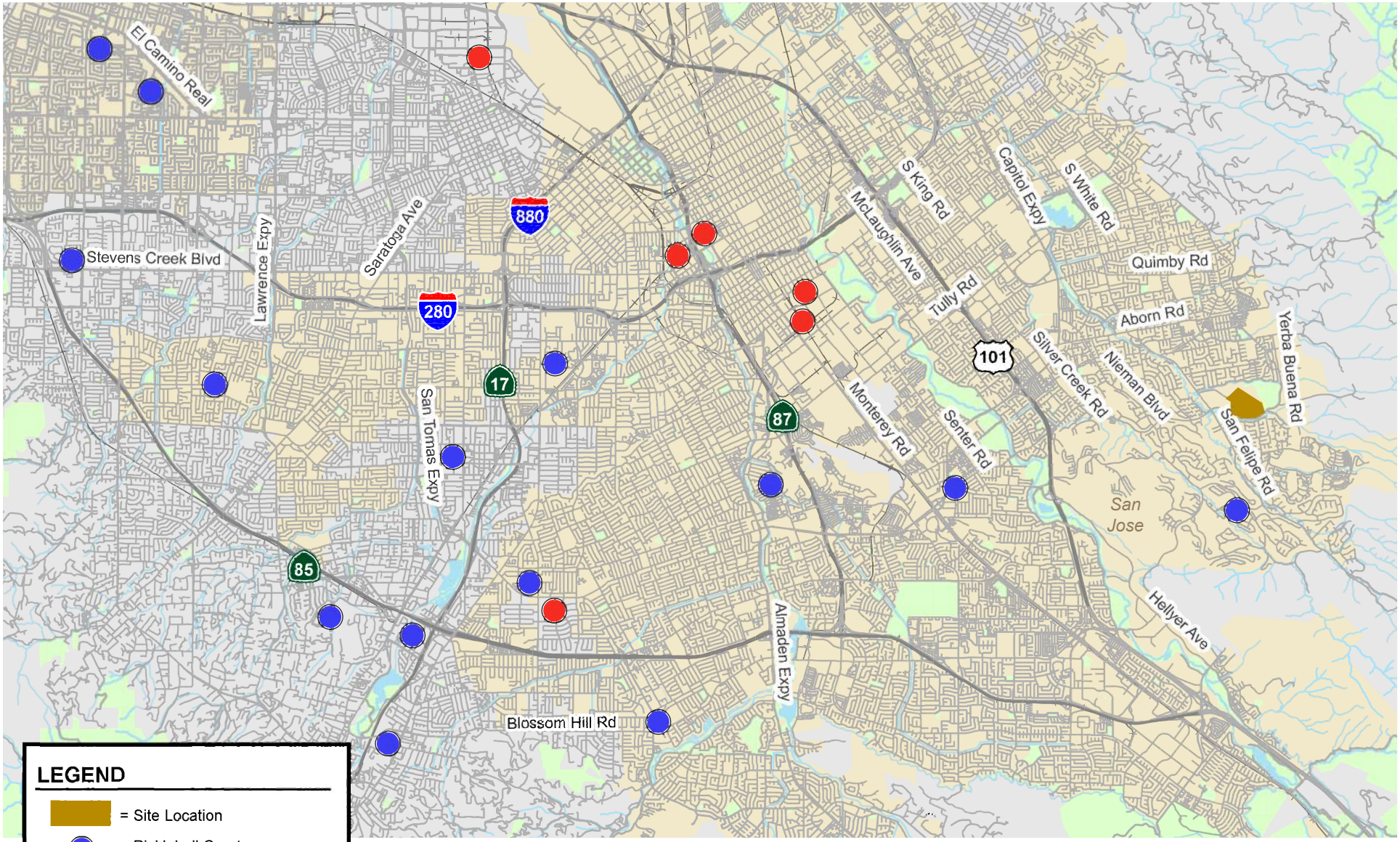


Figure 2
Nearby Pickleball and Futsal Courts

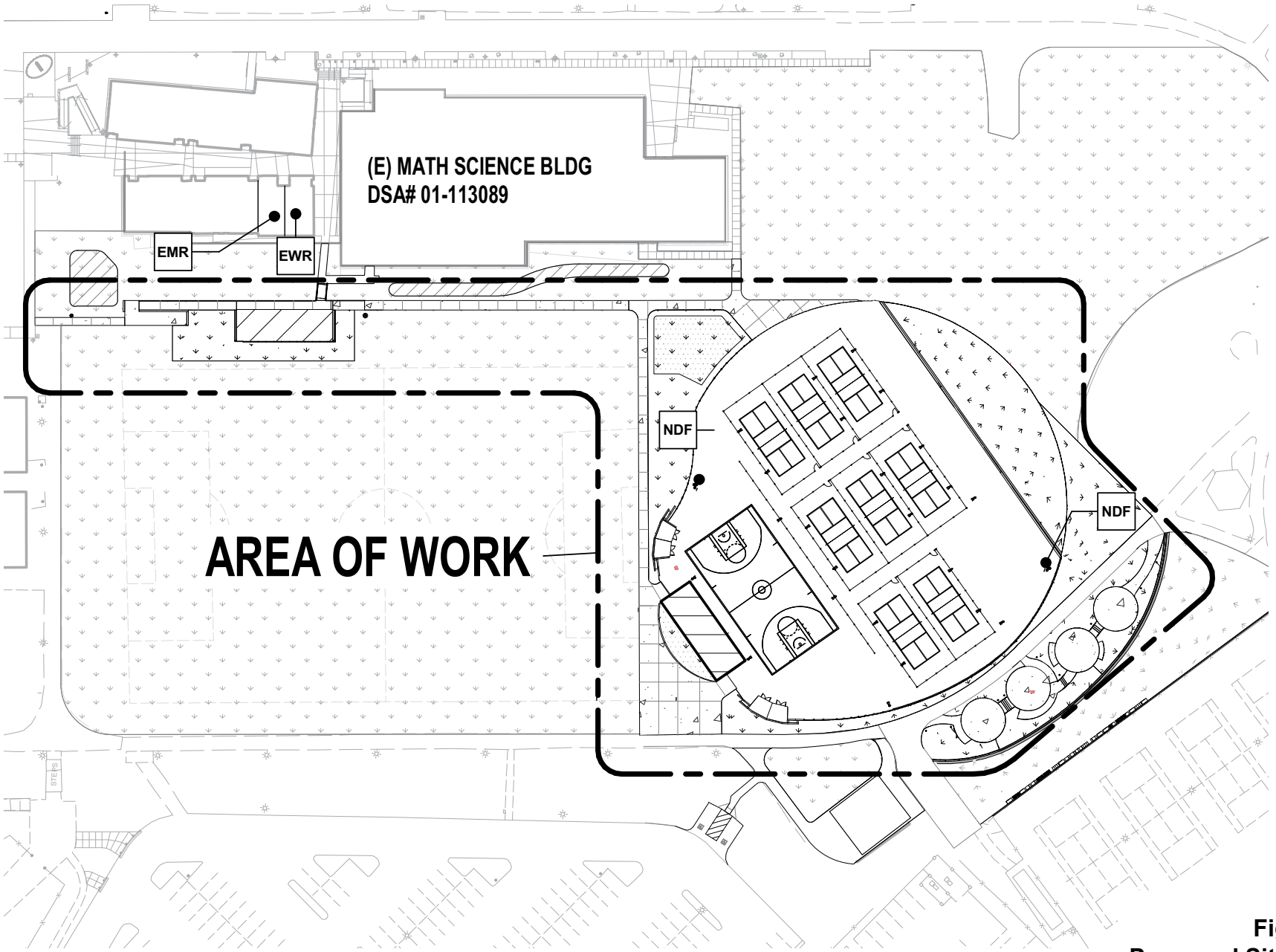


Figure 3
Proposed Site Plan